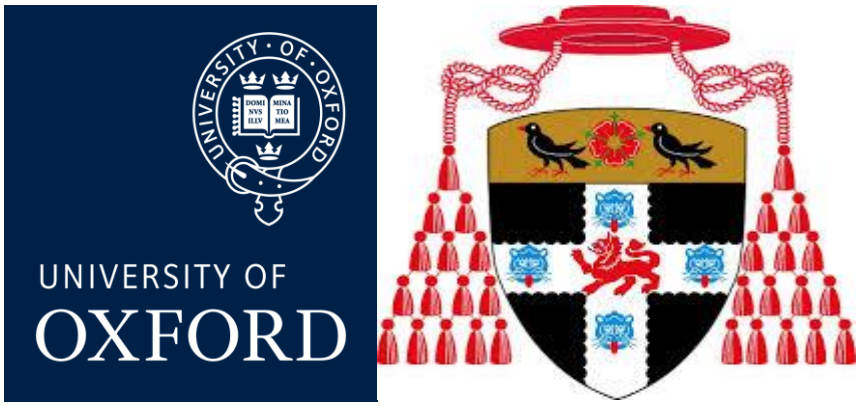
Spatial Knowledge, Language, and Cognitive Adaptation to Landscape among Siberian Ewenki

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Abstract

This thesis examines the relationships between spatial knowledge, adaptation, and mobility through the analysis of landscape terminology and place names among Ewenki, one of the hunting and reindeer herding Indigenous communities of Siberia. Ewenki have the biggest area of distribution in Eurasia among hunter-gatherers. It studies how this knowledge is linked to and reflected in people's patterns and understanding of mobility, the ontology of geospatial domain, and cognitive adaptation to new environments in a broader cultural and geographic portrayal of the interactions between humans, animals, spirits, particular places, and landscapes. This thesis argues that mobility, which is linked to the precise knowledge of hydrological systems, has played a key role in spreading the system of landscape terminology and Ewenki place names over a huge territory of Siberia. Mobility is considered not only as the physical movement of people but also includes an understanding of landscape perception from a mobility perspective. This perspective corresponds to Ewenki's understanding of the landscape as constantly changing or fluid. In contrast to sedentarist communities, Ewenki tend to perceive landscape objects as primarily fluid and their geospatial categories demonstrate a great deal of variation in meaning across communities.

In order to examine this phenomenon of variation and change in geospatial terms and place names, this thesis addresses three broad objectives. First, to examine the key terms and concepts Ewenki use to mark and relate landscape features across the Ewenki ethnolinguistic and ethnogeographic continuum. Second, to analyse the phenomenology and semiotics of Ewenki place names and examine how the names are produced, modified, and used within a broader cultural context of human geographic experience, especially in negotiating the relationships between humans and other beings and in their relations with mobility. Third, to study the structure and distribution of Ewenki place names cross-regionally in order to establish the general patterns of place naming across Ewenki communities, as well as to examine the variations and changes in place names over time. These objectives are addressed in three papers.

The results show that in Ewenki the same landscape terms can be linked to completely different landscape features and objects, remaining semantically linked to all of these objects. This variation in meaning, which is linguistically defined as the semantic variation of cognates, is especially evident in terms for 'plains', as this type of landscape is particularly prone to transformations in their Siberia homeland. These variations reflect not only the Ewenki people's flexible cognitive adaptation to new ecosystems and their perception of landscapes as being fluid, but also the fact that landscape objects are relational and have to be considered in the context in which they function. This finding challenges the essentialist nature of landscape terms, which are

traditionally considered as being linked to salient and well-defined features of landscape, and their universality within a single language.

This research further demonstrates that similar variation in meaning occurs in Ewenki place names derived from landscape terms. These names, which are also highly variable in meaning across Ewenki communities, follow the same type of variation as the corresponding geographical terms. In addition, Ewenki place names are not only passed from one generation to the next, as in most Indigenous communities, but also transformed and created through numerous contacts and engagements among humans, places and other beings encountered in travel to fit the constantly changing landscapes and environments. This variation is analysed over both space (in different Ewenki communities) and time (the same community in different periods). The change of a place name may happen as a result of the transformation of the environment, personal experiences or relations between participants, including humans, animals and other beings.

This thesis intends to contribute to the fields of ethnophysiography and place and space studies by introducing a novel approach to the study of landscape terms and place names in nomadic societies whose understanding of the landscape and environment and the relationships with non-human beings significantly differ from sedentarist communities, which have been better examined so far.

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List of abbreviations

A Ayan dialect

Ald Aldan dialect

Bnt Baunt dialect of the Vitim-Nerch group of dialects

Brg Barguz dialect

Chum Chumikan dialect

E Erbogachen dialect

FM Field material

I Ilimpii dialect

IEA RAS Institute of Ethnology and Anthropology, Russian Academy of Sciences

Khng Khingan dialect of the Upper Aldan-Zeya group of dialects

M Maya dialect

MAE RAS Museum of Anthropology and Ethnology, Russian Academy of Sciences

N Nepa dialect

NB North Baikal dialect

Nerch Nerch dialect

Olkm Olekma dialect of the Vitim-Olekma group of dialects

PT Podkamennaya-(Stony) Tunguska group of dialects

Rus Russian

S Sym dialect

Sak Sakhalin dialect

Tmt Tommot dialect

Tng Tungir dialect of the Tungir-Olekma group of dialects

Tt Totta dialect

Uchur Uchur-Zeya dialect

UL Upper Lena dialect of the Tokma-Upper Lena group of dialects

Urmi Urmii dialect of the Burein-Urmiy-Amgun group of dialects

Vit Vitim Nerch dialect

Z Zeya dialect of the Upper Aldan-Zeya group of dialects

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Note on transliteration, quotation and references

Transliteration

The Ewenki language is based on Cyrillic alphabet. In this thesis, I use Latin symbols employed in Igor Nedjalkov's (1997: xv-xvi) Ewenki grammar throughout the text except for the paper entitled '"The Track is Never the Same": The Fluidity of Geographic Terminology and Conceptualization of Space among Ewenki' in which the International Phonetic Alphabet (IPA) is utilised. The symbols have the following phonetic meanings:

a /a/ open front unrounded vowel

b /b/ bilabial voiced plosive

ch /tʃ/ dorso-palatal voiceless plosive

d /d/ lamino-dental voiced plosive

d' /d '/ dorso-palatal voiced affricate

e /Ɛ/ mid-back unrounded neutral vowel

g /g / dorso-velar voiced plosive

h /x/I dorso-velar voiceless fricative

i /ɪ/ close front unrounded vowel

j /j/ dorso-palatal voiced fricative

je /je/ middle front unrounded vowel

k /k/ dorso-velar voiceless plosive

I /l/ lamino-alveolar voiced lateral

m /m/ labio-labial voiced nasal

n /n/ lamino-alveolar voiced nasal

ng /ŋ/ dorso-velar voiced nasal

n' /ɲ/ dorso-palatal voiced nasal

o /o/ middle back rounded vowel

p /p/ labio-labial voiceless plosive

r /r/ apico-alveolar voiced trill

s /s/ lamino-alveolar voiceless fricative

sh /ʃ/ lamino-postalveolar voiceless fricative

t /t/ lamino-dental voiceless plosive

u /ʊ/ close back rounded vowel

v /v/ labiodental voiced fricative

y /ɯ/ close back unrounded vowel

zh /ʒ/ lamino-postalveolar voiced fricative

Long vowels are indicated by the symbol ‘:’, as in mo:ha ‘forest’

Quotation

I use single quotation marks for English glosses of Ewenki terms as in d’u ‘tipi’ and double quotation marks for direct citations.

References

Each paper of this thesis has separate references which are not included in the overall list of references.

1. Introduction

> *One day a man — a hunter — got completely lost while hunting for sable in a snowstorm and couldn't find his way back to his tipi. He walked and walked in the direction of his d'u 'tipi', but he got completely lost. He was walking around in vain. While he was wandering around like this in the dark, he fell into some kind of pit. He fell deep down, all the way down to the very bottom. "How did this happen?" he wondered. The man was surprised; he was completely frightened. At some point in the pit he fell, maybe he fell asleep, or maybe not. At some point he came to his senses and walked and walked; there was some kind of world down below. And he went toward that world. He walked and walked, and then he saw tipis; there are big tipis standing there. He approached them. People are walking around; dogs are sitting in the street, completely sated. They're just sitting there, not barking — they don't see him. And those people also don't see him* [narrated by Valentina Yoldogir, recorded in Ewenki and transcribed by N. Mamontova, translated into English by B. Donahoe, Chirinda, 2011].

This fragment is a part of a story I recorded in 2011 in Central Siberia among the Ewenki people (also Evenk), a set of Indigenous hunting and reindeer herding communities, who are the focus of this research (see Appendix 1). The story narrates a compelled journey into 'the lower world' and contains a lot of practical information about how one should behave in such an unpredictable situation of disembodiment and geographical displacement in terms of time and space. As in similar stories, a hunter gets lost while hunting in a snowstorm, when recognisable landmarks are not visible. Being lost (*miche: / hokorivche:*) in space or not being able to recognise a certain place is regarded among Ewenki as something anomalous, not corresponding to the normal course of life. Ewenki hunters say that even if a person travels in discovery of new places, he or she would still be able to find a way back through the ability to understand, compare and memorise landscape features and untangle a network of trails left by humans and animals. Hence, there is no chance that an Ewenki loses "his power of orientation", as the specialist on Tungusic languages and cultures Sergey Shirokogoroff (1935) defined it, without a particular reason. He writes, "[T]he cases of a Tungus [a prerevolutionary

name for Ewenki, Ewen and Negidal communities – N.M.] lost in an unknown region are extremely rare. These cases do occur but only where the Tungus is 'attacked by the spirits', and loses his power of orientation and of critical analysis of a new situation" (Ibid.: 67).

Disorientation causes a feeling of disturbance and is associated with death among Ewenki (Ermolova 2007). "This man has been lost" is a common phrase when someone needs to say that somebody has recently died. In most of the traditional stories, people die after losing their sense of orientation. In some of them, it happens as a result of breaking taboos or not following someone's advice concerning the choice of the right way (cf. Brucks and Lovick 2018). Hence, orientation skills and the knowledge of the local surroundings are crucial for the Ewenki, as well as for other Indigenous communities inhabiting the North (Fortescue 2011). The Ewenki language embraces a rich and diverse vocabulary describing different types of movement, directions and the nuances of landscape and the environment (Vasilevich 1940; Grenoble 2011; cf. with Nenets in Adaev 2018 and Selkup in Polyakova and Persidskaya 2018). Along with place names, this vocabulary helps people to make sense, conceptualise and communicate knowledge of the local surroundings (see Basso 1996; Thornton 2008). Yet to date, the patterns of naming and the structure, function and ontology of geographic terms and place names have scarcely been examined in relation to Ewenki (Sirina 2012; Gabyshev and Lavrillier 2017) and to other Arctic and Siberian communities (see, for example, research on Inuit by Aporta 2004, 2005, 2010; Komi and Nenets by Istomin 2011).

In this thesis, I argue that geographic orientation and disorientation are not only cultural processes but relational ones, such that we cannot understand spatial terminology and reckoning without understanding the cognitive, material, and social dimensions of space and place, including the nature of the geospatial ontology and human experience (phenomenology) within it. In particular, this thesis investigates the relationships between Ewenki spatial knowledge, adaptation, and mobility through the analysis of landscape terminology and place names. It studies how this knowledge is linked to and reflected in the people's patterns and understanding of mobility, ontology, and adaptation to new environments in a broader cultural and geographic portrayal of the interactions

between humans, animals, spirits, particular places, and landscapes. I posit that mobility has played a key role in spreading the system of landscape terminology and place names and that mobility has always been linked to the precise knowledge of hydrological systems.

The Ewenki people are one of the Tungus-speaking (Altaic) Indigenous communities of Russia, with a total population of approximately 38,000 people (Census 2010). Their numerous communities are traditionally characterised by their subsistence orientations toward hunting, reindeer herding, horse breeding, fishing, and gathering (see Vasilevich 1969; Sirina 2012). This is one of the most widely spread and previously highly nomadic communities in Eurasia. The area of their settlement in Russia comprises 7 million square km. Besides Russia, Ewenki-speaking communities also live in Mongolia and China. The uniqueness of the Ewenki people lies in the fact that they live in such expansive and diverse environmental surroundings as mountainous taiga, semi-tundra, coasts and steppes.

Traditionally, people nomadised in small groups, consisting of a few extended families. It appears Ewenki have never had a true clan-based social organisation, only an imputed one, as the term ‘clan’ has been widely utilised in ethnographic literature (Shirokogoroff 1929; Anisimov 1936; Stepanov 1939; Dolgikh 1960; Vasilevich 1969; Sirina 2012; Fondahl 2018). The Soviet ethnologist Vladilen Tugolukov (1985: 97) wrote that the main mistake of Boris Dolgikh and his followers, who studied Ewenki social organisation, was that they all believed that ethnonymic diversity was the result of “natural social development”, overlooking political and other factors behind that process. Among other things, Dolgikh posited that administrative or *yasak* (tributary) clans were formed on the basis of ‘real’ clan-based system of land use. In contrast, Tugolukov argued that the reason for the formation of *yasak* clans was not a real social organisation but the territorial proximity of separate migrating families which were artificially united by the administrative bodies (Ibid.: 170). He suggested that the basic Ewenki social unit was a small band of patronymic kin who migrated together.

In addition, common surnames ending with a *-gir* affix were considered as 'clan' names in the ethnographic literature. Yet as Viktor Karlov (1982: 80) demonstrates, not all the namesakes were relatives or regarded themselves as members of the same 'clan'. In the Soviet period, the names of the largest communities were often transferred to the entire local population, which led to even more confusion when the same names were also used for various territorial groups (on the complexity of Ewenki social organisation vs. administrative reforms see Ssorin-Chaikov 2003; Mamontova 2013, 2016a). Moreover, the Ewenki language does not have a term for 'clan'. The word *tege*, which researchers sometimes translate as 'clan', has a multiplicity of meanings, incuding 'people', 'person', 'own community', and 'people speaking a different language' (Vasilevich 1969: 150). The meaning differs among Ewenki groups (see Vasilevich 1958a: 417–418; Karlov 1982: 80; Ssorin-Chaikov 1994: 204 and 2003: 37; Anderson 2000: 104; Lavrillier 2010: 130; Mamontova 2016a). Therefore, due to the ambiguity of the concept of 'clan' in Ewenki, I do not use it in this thesis in relation to Ewenki social organisation.

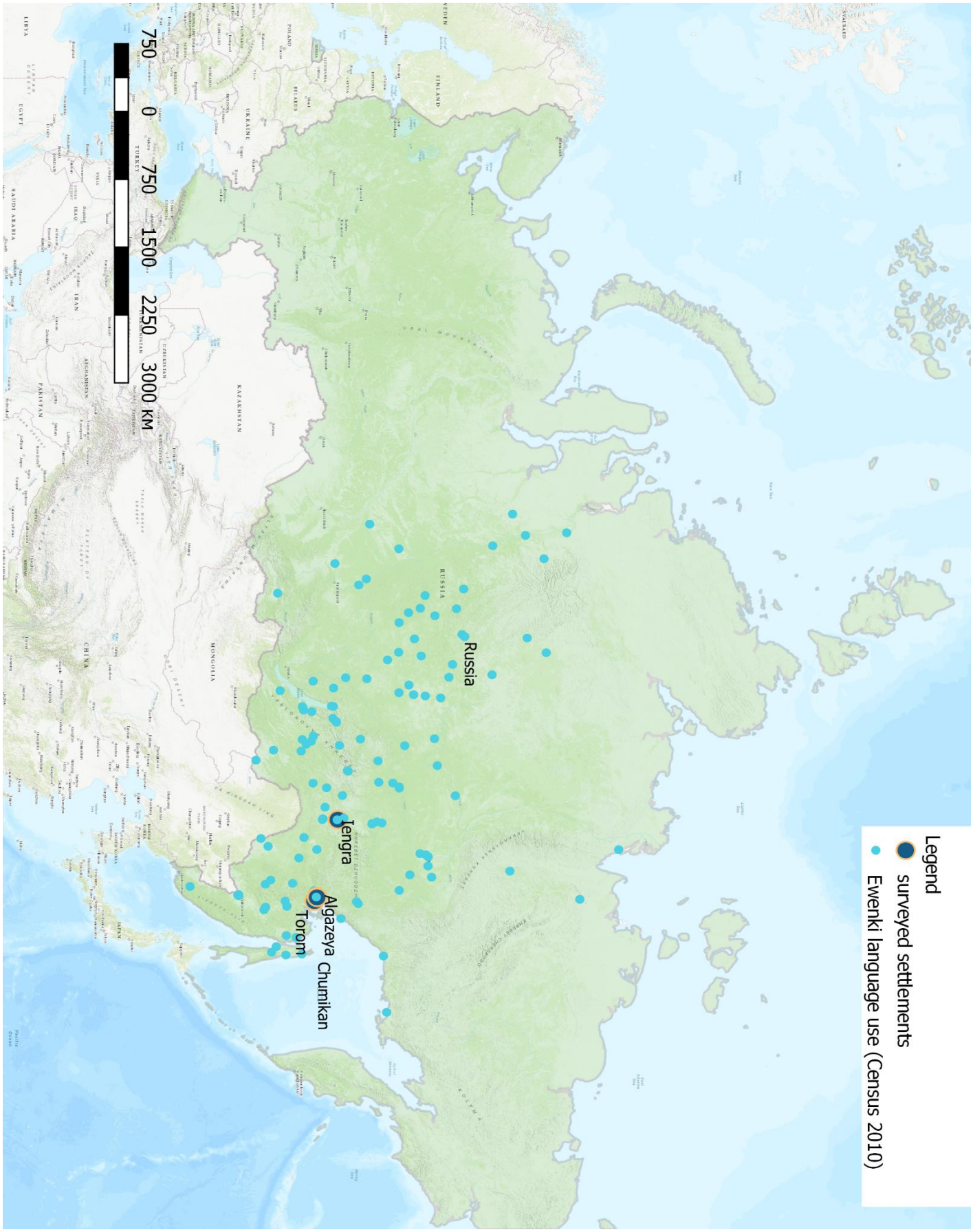
It is probable that the ancestors of the Ewenki only recently came to inhabit the vast territories of Eastern and Central Siberia from the Central Amur River, and not from the Baikal Region. The latter hypothesis dominated in Soviet academia but was later proved wrong (see Pevnov 2012). Researchers have suggested a number of drivers for such extensive migrations and wide areas of settlements of the Ewenki people. Among them are smallpox epidemics, the rise of the Manchu state, Russian tsarist colonial policy, the depletion of prey for hunting, trade, migrations of other ethnic groups and other factors. However, as the Soviet ethnographer and specialist on Ewenki, Glafira Vasilevich, pointed out in her fundamental monograph, "In many cases there was neither any particular reason for such extensive migrations nor any correlation between the reason and intensity, extent and duration of their journeys" (Vasilevich 1969: 4-5). It seems, she continues, the people just liked being on the move.

Nomadising in small groups allowed Ewenki to inhabit wide areas of Siberia (see Map 1). Due to the huge area of their distribution the Ewenki people's patterns of mobility have long been in

the focus of research, as the reasons and mechanisms of such wide migrations are still unclear. Although it is still unclear either when and why the Ewenki came to inhabit wide areas of Siberia, it seems that their migrations took a relatively short period of time (Vasilevich 1957: 163; Pevnov 2012). It is likely that the language and cultural expansion occurred both from south to north and in the latitudinal direction. Linguist Juha Janhunen (2012: 12) attributes this pattern of spread to the direction of the Siberian rivers which flow from south to north, i.e. into the Arctic Ocean, while their tributaries flow laterally into the main rivers.

Extensive nomadism, the advanced technology of reindeer riding, and exceptional navigation skills allowed Ewenki to spread their language and place names over a great territory. Some Ewenki toponyms became official toponyms of settlements and numerous rivers in Siberia. This thesis aims to understand how the people managed to occupy such a huge territory flexibly adjusting to new landscapes and livelihoods while, at the same time, maintaining a high degree of cultural integrity, including their common language. I suggest that the Ewenki's nomadic practices facilitated cultural expansion and continuity, including the incorporation of the new landscapes into the native language and geospatial cognition. Their spatial abilities, based on the deep knowledge of the Siberian river systems, in conjunction with navigation skills helped people to find new nomadic itineraries, whereas ontology facilitated the landscape cognition, be it a forest or a marine ecosystem. Methodologically, this research is based on the theoretical assumptions of geosemiotics and ethnophysiography, as well as place and space studies and toponymical research. In addition to my field data, I explore a wide range of archival and contemporary field data collected among the Ewenki people over the past century.

Map 1. The distribution of Ewenki in Russia according to first language use and fieldwork sites.



1.1. ***Research Aims, Hypotheses and Significance to the Field***

In this thesis, I investigate the relationships between Ewenki's spatial knowledge, cognitive adaptation to diverse environments, and mobility through the analysis of landscape terminology, geospatial concepts and place names. In particular, I aim to examine how the Ewenki language encodes space, place and landscape features, and what this reveals about people's spatial experience, geoontology and cognition of and adaptation in new environments. Considering that landscape to some extent facilitates the development of unique landscape category systems (Johnson and Hunn 2010), my intention here is to find out whether there is any difference in terms of how the Ewenki living in diverse surroundings use landscape concepts and attribute place names.

Understanding how the spatial knowledge and language practices of Indigenous people mediate their adaptation to new environments is relevant to a wide range of adaptation questions we face as a result of environmental and other changes in Northeast Russia today (Krupnik 1993; Crate and Nuttall 2009; Forbes et al. 2009), as well as in other Arctic and Siberian regions with Indigenous populations (see Krupnik and Jolly 2002; Nuttall 2002; Hovelsrud and Smit 2010). I argue that the notion of 'adaptation' should include the ability to flexibly cognise different landscapes and incorporate new meanings into the established system of landscape terminology and place names under the influence of environmental and other changes. This ability facilitates the responsive nature of this system. At the same time, the persistence of living on the land means that the terms related to landscape, subsistence and mobility persist despite language shift and other cultural change (Hunn 2008). Such retained terms always convey a concept or distinction that is not well defined in the dominant Russian or any other European language. This phenomenon makes them resistant and adaptive, helping people to define the local surroundings in their own terms. Hence, the adaptation of landscape terminology and place names is always a balance of stability and change.

By landscape here I understand not only physical characteristics of surroundings, but also a cultural process that makes these characteristics meaningful for people, animals and other beings (see Ingold 1993, 2000). In ethnoecology, landscape is similarly considered as "areal extent on the border

of drainage basins and surrounding interfluves, and may be thought of as the area of land with which human groups normally interact, travel in or have knowledge of" (Johnson 2011: 291). In Indigenous languages, the notion of landscape can be complex, both culturally and linguistically, or absent altogether (Burenhult and Levinson 2008). For some Indigenous people landscape, either real or mythological, is a kind of being itself which possesses not its own ontology but also its own law, as in the Australian case (Strehlow 1947). Landscape speech as a linguistic domain is especially important for those communities which are still more dependent on subsistence economy and local nature use (Mark and Turk 2003). In endangered language communities, including Ewenki, this domain is most vulnerable as its functioning largely depends on language 'wellbeing'. Despite a long tradition of research on human-environment interaction, until recently little research has been done on how different language groups conceptualise landscape entities in a comparative perspective (see discussion in Burenhult and Levinson 2008; Mark et al. 2011a). There is also the lack of research on multispecies perception of the environment and most of European languages do not have vocabulary to express this perception (Anderson et al. 2017). Among other things, in this thesis, I show that multispecies perception of landscape is linked to naming strategies in Ewenki and constitutes the core element of the Ewenki's geoontology or ontology of geospatial domain.

Over the past decade, researchers working within ethnophysiography, which studies cross-cultural perception and conceptualisation of landscape, have attempted to fill the gap in research on linguistic conceptualisation of human-environment interaction by providing comprehensive case studies of numerous languages. Since ethnophysiography is positioned as comparative study, it raises broader questions of the connection between culture, language, and cognition: to what extent are geographical concepts and landscape categories universal? (Bromhead 2018). Another important question is the relations between certain physical features of landscape and language which are considered within ethnoecology. The importance of language stems from the fact that every language is a culturally embedded system which is linked to people's experiences and practices. Hence, different languages conceptualise the surroundings in different ways (e.g., see Holton 2011a). This is

particularly evident in the case of focal or specialised terminology which is related to the local knowledge of land, landscape objects, vegetation and animals, their traditional means of classification and management, as well as to cultural values and beliefs (see Waddy 1988; Berlin 1992; Ellen 1993, 2010; Berkes et al. 2000; Douglas and Turner 2005; Messineo and Cúneo 2011).

Yet most of the existing literature on this subject has been based on the material collected among the Indigenous people of North America (see Basso 1988, 1996; Hunn 1996; Kari 1989, 1996, 2011; Aporta 2004, 2005, 2010; Thornton 2008, 2011, 2012; Davidson-Hunt and Berkes 2010; Johnson 2010; Krupnik et al. 2010; Holton 2011a, 2013; Thornton et al. 2018). Several empirical research papers discussing this issue on the examples of other languages have also been published (see papers in Johnson and Hunn 2010 and Mark et al. 2011b; also Mark and Turk 2003; Mark et al. 2007; Bordin 2017; Burenhult et al. 2017; Mazzitelli 2018; Cuellar 2019; Grenoble et al. 2019). All researchers highlight the necessity to study landscape perception and lexicalisation in a broader geocultural perspective of interaction between humans and their environments (see Levinson 2008a). At the same time, the Russian Arctic and Siberia remain largely unexamined within ethnophysiography, with only a few above-mentioned works examining the relations between culture, environment and landscape terms and concepts in detail (Istomin 2011; Lavrillier and Gabyshev 2017). Given the paucity of research on the conceptualisation of landscape and space through the practice of naming, landscape nomenclature and mobility among Arctic and Siberian communities, this study seeks to address this gap through a detailed case study of Ewenki spatial knowledge in one of the most geographically expansive ethnic ecumenes.

Based on the archival documents and my field data collected in Central and Eastern Siberia in the period between 2007 and 2018, I argue that Ewenki mobility strategies and landscape perception are closely related to the knowledge of hydrological systems (cf. Kari 2011). The river (*bira*) as a landscape feature is one of the core concepts in Ewenki culture which binds together many aspects of the Ewenki spatial cognition, ontology, and mobility (see Shirokogoroff 1929, 1935; Vasilevich 1963, 1969: 182, 1971; Vasilevich and Smolyak 1964; Campbell 2003; Ermolova 2007;

Sirina 2012; Oeterlaar et al. 2013 and others). According to Ewenki cosmology, the mythological river *engdekit* connects different shamanic worlds, inhabited by humans and other-than-human beings, and serves as the corridor for migration from one world to another, representing the same pattern of movement one can observe among Ewenki hunters and reindeer herders. Moreover, 'real' hydrological systems were associated with some shamanic rivers in Ewenki cosmology. Glafira Vasilevich (1966a) in one of her unpubslished papers even suggested that in the past it might have been the shaman who was responsible for the transmission of geographic knowledge in the community based on his journeying into other than human worlds. The shaman was supposed to memorise a lot of information about the local hydrological systems and transmit it to community members. Hence, the idea of 'river-as-the-corridor' is embedded in the Ewenki people's perception of space and place and can to some extent help to explain their patterns of movement in relation to non-human beings and interaction with the environment.

My field data shows that most of Ewenki place names are riverine names which continue to be passed on from one generation to the next despite the language shift towards Russian. These names are usually unique (minimum repetitive) and help the people to navigate, memorise, and make sense of space and place in their own terms. In addition, people continue to produce new names and change or modify the meaning of some old ones. This fact suggests that naming traditions are still alive and highly important for Ewenki. Yet the functions and semantics of riverine names, their use in practice, cultural significance, change and relation to landscape terminology in general have never been analysed in detail. The prominent exception is research by Glafira Vasilevich (1958a, 1965; uncatalogued archive), who systematically collected Ewenki riverine names, landscape terms and hydrological maps throughout her academic career. In her incomplete and unpublished texts stored at the Museum of Anthropology and Ethnography of the Russian Academy of Sciences, Vasilevich provides a general list of landscape terms for different sorts of elevations, river banks, and plains in the Ewenki language (Vasilevich 1965). The list contains thirty-four generic terms, although the exact

choice of these terms over other ones is unclear. She further discusses landscape terms in her article on the Ewenki geographical knowledge (Vasilevich 1963).

Vasilevich's material raises questions in part due to obvious contradictions evident in the meanings between the geographic terms given in these sources, those listed in the Ewenki dictionary composed by the same author (1958b), and my field data. Vasilevich attempted to create a unified list of the most generic geographic terms which would be more or less applicable along the whole Ewenki dialect continuum (see Appendix 4). This exemplifies a common approach in modern research on landscape nomenclature which considers language as a holistic, standardised and static system. However, such homogenisation should not be assumed but rather must be proved. The archival material and my field experience, in fact, suggest heterogeneity or differences in the meanings between the same geographic terminology in a single language and when combined with other modes of enquiry may reveal the reasons behind this phenomenon. To evaluate the development and diversity of geographic terminology and place names in Ewenki, I thus draw from both archival and contemporary data in multiple locales in order to highlight the mobile and fluid nature of Ewenki geographical landscape terms and place names.

I propose to consider the phenomenon of fluidity and change in landscape terminology and place names more critically. I seek to understand not only how the Ewenki people conceptualise and lexicalise landscape features but also to examine the similarities and differences cross-dialectally and in different geospatial locales. I hypothesise that Ewenki landscape terminology is well-developed, having generic concepts for the key geographic features that can be found in every ecosystem. In order for such system to accommodate new landscapes, I further hypothesise that it has evolved flexibility with regard to both a) the possibility of incorporating new geographic concepts into the established system of geographical terms and b) adapting existing geographic terms to changing landscape conditions. As a corollary to b, I argue that even though the system of geographic terminology appears to be more of less homogeneous along the whole Ewenki dialect continuum regarding the most basic landscape categories and their linguistic means of expression, the meaning

of geographic descriptive terms significantly varies from one community to another. I examine this variation in more detail and attempt to explain this phenomenon through the idea of mobility, theoretical assumptions of geosemiotics and understanding of landscape features as fluid in Ewenki geoontology.

A similar pattern of variation can be observed in place names. I argue that Ewenki place names are also transferable or 'nomadic' in their nature. The same patterns of naming are applied in different surroundings inhabited by the Ewenki people. At the same time, unlike some other Indigenous groups, a large number of names are not only passed from one generation to the next but also coined and modified to fit in the realm. To date, neither the patterns of landscape term variation or of place naming have ever been analysed in Ewenki and only scarcely in relation to other language groups (e.g., research on Athabascan place names by Harris and Holton 2018). In most of the literature, it is usually taken for granted that Indigenous places names are stable and passed across generations without change. This assumption leads to the representation of Indigenous knowledge of place names as inherently static. In this thesis, I aim to show that this statement is partly wrong and that the idea of variation in place names and landscape terms, as well as their change, is as important as the transmission of geographic knowledge.

To conclude, this study seeks to fill the gap in the literature and research on place names and geospatial nomenclature by capitalising on the unique multi-sited and multi-temporal corpus of landscape terms and place names for Ewenki collected over hundred years, while also using this data set to address broader anthropological, linguistic and geographical questions about the peculiarities of landscape and place cognition, reckoning and wayfinding, especially among mobile peoples of the North. Comprehensive research on hydrological maps, landscape terminology and riverine names in relation to the practices and patterns of movement and geoontology may help to shed light on the way the Ewenki people managed to migrate across Siberia and adapted themselves to very diverse environments.

1.2. ***Research Questions***

My investigation is organised around the following research questions which are discussed in three papers:

1. What are the key terms and concepts Ewenki use to mark and relate landscape features? Why and how does the meaning of basic landscape terms vary across the Ewenki ethnolinguistic and ethnogeographic continuum? What is the basis of this variation and how can this phenomenon be explained through ontological and semiotic approaches to language, and the conceptualisation of space?
2. What are the phenomenology and semiotics of Ewenki place names? How are the names produced, modified and used within a broader cultural context of human geographic experience, especially in negotiating the relationships between humans and other beings? How are these names linked to the Ewenki people's mobility?
3. What role do river systems play in the process of adaptation and migration of the Ewenki people across Siberia and what could riverine names and broader riverine terminology reveal about the Ewenki people's spatial knowledge, ethnogeography and mobility? What is the structure and semantics of these riverine names and how are they deployed pragmatically and ontologically? Are there stable patterns of naming across Ewenki communities in Siberia and how are the names distributed? How do changes of meaning occur in place names?

1.3. ***Background: The Ewenki People***

This section briefly discusses the Ewenki people: their language, traditional calendar, ecological knowledge, orientation and movement, as well as the notions of place and space in their ontology and language. Of course it would not be possible to give a full description of this group, as numerous Ewenki-speaking communities, scattered across Siberia, have individual features which make it difficult to talk about 'Ewenki' in general. Nevertheless there are some shared cultural and linguistic characteristics one can find in most of the communities, allowing researchers to talk about the joint origin and culture of all Ewenki groups in Siberia.

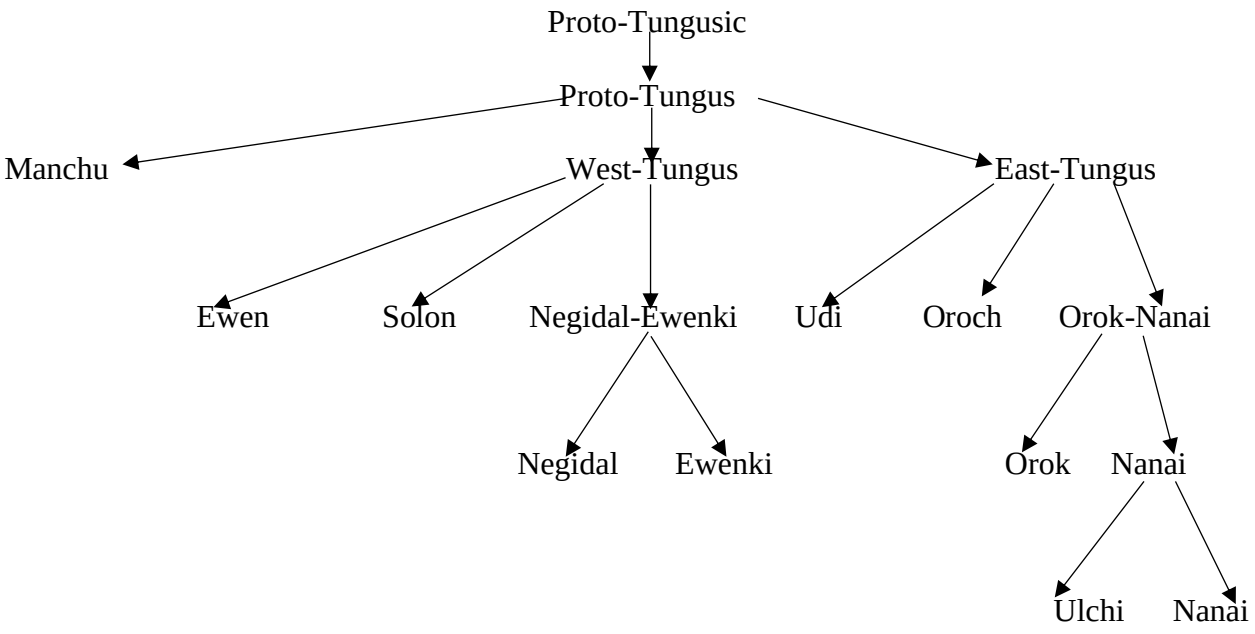
In ethnographic literature Ewenki are particularly discussed in research by G.M. Vasilevich (1936, 1946, 1947a, 1947b, 1951, 1958a, 1958b, 1966b, 1969, 1971 and many others). Her works are the significant contribution to the field of Siberian studies and research on Ewenki. There are also several fundamental works published by the following pre-revolutionary and Soviet researchers: A.F. Anisimov (1936), B.O. Dolgikh (1960), N.V. Ermolova (1984), V.V. Karlov (1982), P.E. Ostrovskikh (1909), S.K. Patkanov (1906), K.M. Rychkov (1917, 1922), S.M. Shirokogoroff (1929, 1935), V.A. Tugolukov (1958, 1960, 1963a, 1963b, 1965, 1974, 1982, 1985), M.G. Turov (1990). Several important monographs on Ewenki were published after the *perestroika* by D. Anderson (2000), A. Bloch (2004), D. Brandišauskas (2017), C. Campbell (2014), G. Fondahl (1988), A. Lavrillier and S. Gabyshev (2017), O.A. Povoroznyuk (2011), A.A. Sirina (2002, 2012), N. Ssorin-Chaikov (2003). These works cover such themes as material culture, traditional calendars and subsistence cycle, reindeer herding, ethnic history, Soviet history and transformations, land use and many other aspects of Ewenki culture and language. Some of these works are reviewed in the literature review section.

1.3.1. **Ewenki Language and its Classification**

The Ewenki language is traditionally classified as one of the Tungusic languages belonging to the Altaic language family along with Mongolic and Turkic languages (see Fig. 1). This language is

agglutinating with SOV word order. All suffixes are added to the stem of the word in a strict order. The system of derivational morphology is very rich and productive, with nearly a hundred derivational suffixes (see Bulatova and Grenoble 1999). Nouns, verbs and adjectives can be derived from a number of grammatical categories by adding corresponding suffixes. The complete morpheme ordering of a noun looks as following: stem– derivational affix(es)– number– case– alienable possession– personal / reflexive possession– clitic. The language has no gender endings. A verb adds suffixes in the following order: stem– derivational affix– valency– voice– modality– aspect– evaluation– aspect– tense / non-indicative moods/ nonfinite forms– agreement– similarity (Nedjalkov 1998: 291; see also Vasilevich 1940; Konstantinova 1964). This complex system of derivations seems to be incredibly helpful in communicating precisely when it comes to the verbs of motion. As one of my Ewenki interlocutors explained, this language appears to be convenient when it is needed to express *what* you are going to do and *how* without spending too much time on formulating the sentence. The precision and economy in Ewenki language is helpful during hunting when people are not supposed to speak aloud for practical and spiritual reasons as the animals could sense you. This rule is still characterised by circumlocution, the avoidance of particular words referring to hunting animals, tools and plants.

Figure 1. Classification of the Manchu-Tungusic languages by A. Vovin (1993)

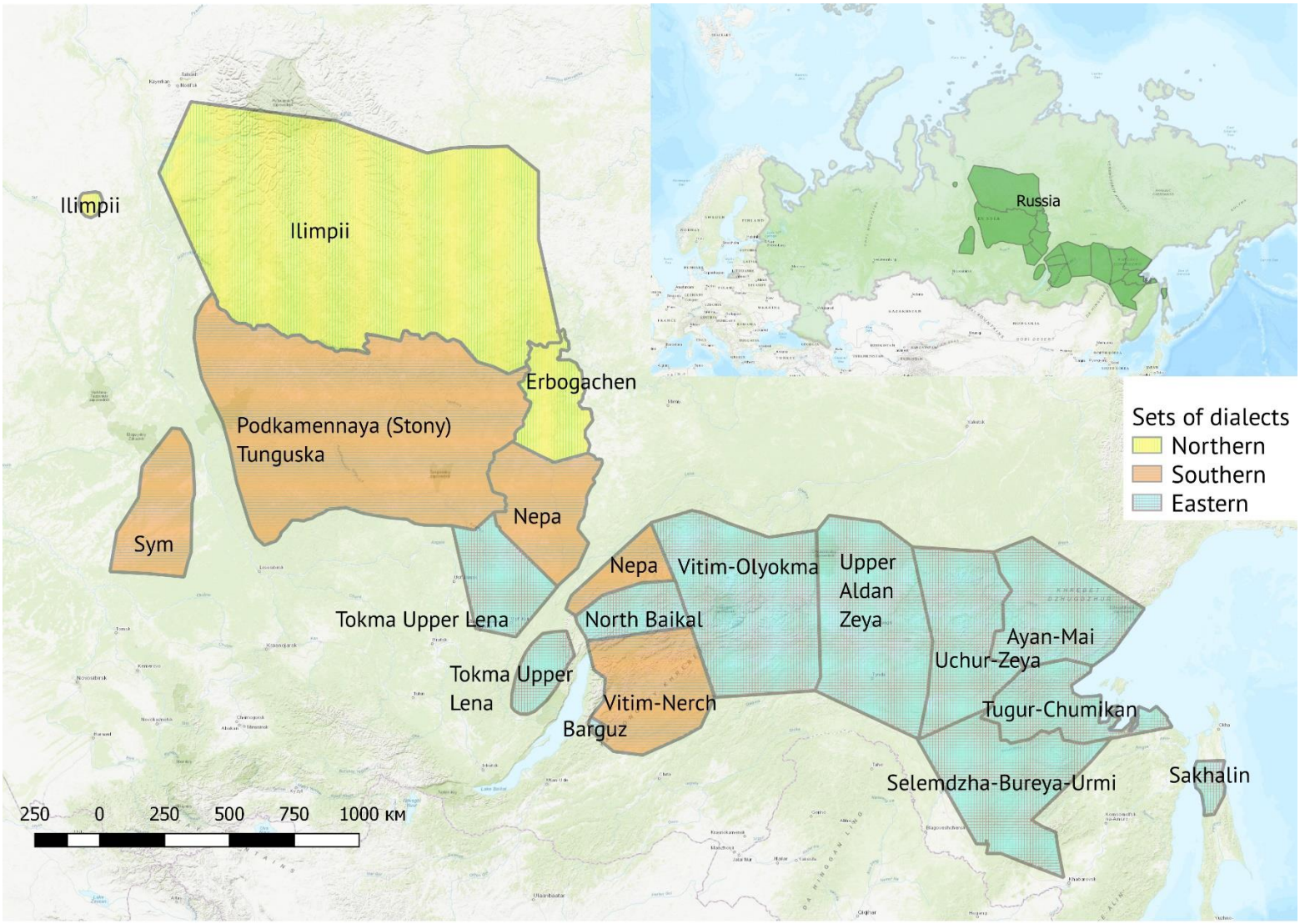


As for dialect variation, the Ewenki language spoken in Russia is divided into three groups: Southern, Northern and Eastern with more than fourteen dialects comprising over fifty subdialects (see Map 2). This three-branch classification is rather conventional and based on the variation of s/h at the beginning of the word and in intervocalic position which is challenged in contemporary research (see Bulatova and Grenoble 1999; Mamontova 2016b). All dialects are considered by linguists to be closely related varieties of one language as all of them are mutually intelligible. Despite such a huge territory of their distribution, there are similar cultural and linguistic features among all Ewenki communities (Atknine 1997). The similarity of the language within such a huge geographic area suggests the recent adaptation of the people to the Siberian environment (Pevnov 2012). Yet there is a distinction between the most western and the most eastern communities, i.e. living in proximity to the Yenisei River to the west and in the territory known as the Russian Far East to the east, not only in regard to phonetics but also in terms of vocabulary and grammar (Vasilevich 1948). However, considering the huge territory occupied by the Ewenki and their numerous language contact with neighboring ethnic groups, it seems obvious that Ewenki dialects cannot be purely grouped into three categories. There are some transitional and mixed sub-dialects, as well as the sub-dialects which developed in the Soviet time as a result of the Ewenki people's forced relocation within Soviet administrative reforms.

In the first part of the twentieth century linguists created the Ewenki standard or literary language and the name Ewenki was introduced to unite a huge number of scattered communities. The first literary language was created on the basis of the Nepa dialect spoken in the Irkutsk region. The project of Latin-based alphabet for this language was proposed in 1930. In 1931, when a script based on the Unified Northern Alphabet was introduced, the Ewenki language was standardised along with the rest of the so-called 'northern' languages. In 1937, it was transferred to the Cyrillic alphabet. Finally, when the Ewenki Autonomous Area (nowadays Ewenki Municipal District) was established as "the centre of cultural attraction for all Ewenki", it was decided to create a new literary language. In 1952, at the All-Union Meeting on Development of the Languages of Indigenous Peoples of the

North a new standard Ewenki language based on the Poligus dialect spoken in the southern part of the Ewenki Autonomy was approved (on Soviet language policy see Grenoble 2003).

Map 2. The distribution of the Ewenki sets of dialects in Siberia



1.3.2. **Ewenki Ethnonyms**

The differentiation in subsistence portfolios and huge territory of habitat resulted in the appearance of numerous ethnic names which the Ewenki have utilised to identify and separate themselves from other Ewenki-speaking communities. Among them are *Orochen, Ewen, Ewenki, Mata, Biragan, Ile* and some others (see Vasilevich 1969: 11-12). These groups did not share the same identity before Soviet transformations. S.M. Shirokogoroff highlights that those communities, which have been developed in different regions, do not recognise each other of belonging to the same group. The following example from his work on the Northern Tungus shows how his informants used their ethnic names: "... in the eyes of a Reindeer Tungus of Barguzin, the nomad Tungus of the lower course of Barguzin when they first met them were not, of course, the same people as they themselves were. They felt a sort of surprise and disappointment in knowing that these nomad Tungus called themselves Evenki, i.e., by a name that was used by the Reindeer Tungus by themselves. For practical purpose of distinction of groups they now call these nomad Tungus *murchen*, i.e., the horse-possessing (people), in opposition to themselves, *orochen*, i.e., the reindeer-possessing (people)" (Shirokogoroff 1929: 53). Therefore, he continues, if there was a small difference in a custom or a dialect, people would not use the term *Evenki* when referring to each other. Moreover, they were not inclined to use *Evenki* among themselves, as it was more important to learn such information as, for example, a social unit or origin.

Shirokogoroff further stresses that "the difference in the time of settlement or migration, or the association to different migratory waves, underlay the differentiation of the Northern Tungus." Each of them, he argues, believe of themselves to be the most genuine representatives of Tungus and oppose themselves to other ethnic groups (Ibid.: 107). Indeed, my field data collected among the Western Evenki show that the term *Ewenki* is usually used in conversations with strangers and rarely

among themselves. As one of my informants noted, “there is no sense to call themselves Ewenki inside the community” (FM 2011). Instead, the residents use a variety of terms and names in respect to their own and other groups which, in their opinion, differ in dialect and/or location. The cardinal points and riverine references are also widely spread as geographic names. However, the ethnic name *Ewenki* is not treated as alien by any Ewenki individual I know. Yet each of them believes to be the most authentic in terms of the preservation of culture and language.

1.3.3. **Subsistence and Traditional Calendar**

The traditional calendars of the Ewenki, the Ewen and the Oroch are based predominantly on hunting and gathering (Vasilevich 1969: 119). An Ewenki calendar divides a year into four seasons. Each season contains several subdivisions. The length of a year and each season may vary. The names of the months relate to the type of the main activity or specific environmental conditions. For example, *mire* (‘shoulder’, when the snow lies on the branches), *turan* (‘the time when crows come back’), *so:nka:n* (‘calving’), *irbe* (‘spawning’), *ulumi:ki:t* (‘hunting for squirrels’) and so forth (see Vasilevich 1963; Sirina 2012). Although this division of the year and the names of the months are declining in use, the key activities still are largely performed in accordance with traditional calendars. As a rule, people remember only those names which are still significant for them. Thus, the Ilimpii Ewenki, Central Siberia, among who I conducted my fieldwork in the period between 2008 and 2014, the most commonly use the name of *higelehe* month ‘the period when people hunt for sable’ (October-November). This term has been known mainly among the Ilimpii Ewenki and has not spread to other groups. The terms for seasons can be associated with certain parts of the forest where people usually spend these seasons. This model is present among the reindeer Tugur-Chumikan Ewenki who use Ewenki terms for winter, spring, summer and autumn to identify the location of the reindeer camp in the taiga (FM 2017).

Traditionally, Ewenki have hunted for wild reindeer, moose, goats, Siberian musk deer, bears and some forest birds (the choice of species depending on the local environment). While hunting, some Ewenki groups ride upon reindeer to travel long distances. This advanced mode of herding also enabled people to establish wide social contacts and exchange networks with neighboring groups. Thanks to the nomadic way of life, the Ewenki had greater contact with many other groups and, consequently, acquired some possessions and useful skills that they later distributed among other natives in Siberia, including reindeer herding (Tugolukov 1982; Roon 1996).

The importance of hunting was culminated in the festivities *ike:nipke:* described by Glafira Vasilevich (1957) in more detail. She writes that in the 1930s the festivities were preserved only among the most Western Ewenki, the Sym group, and lasted eight days. They consisted of a set of rites, including the chase of an imaginary reindeer by a shaman, other community members and spirits, its killing and sharing of the meat (*nimat* in Ewenki), as well as imitating the behaviour of different animals. The shaman also travelled down and then up the mythological river *engdekit* that connects the upper (*ugu buga*) and lower (*hergu buga*) worlds together. Each shaman had his or her own shamanic river, one of the tributaries of *engdekit*. In one of her archival documents, Vasilevich writes about *engdekit* the following, "*Ongʒəkit dyrontynin majin biʒərən, oŋʒəkit daptunan būkit biʒərən"* [At the source of the river, there is *majin* (god, driving force, agency), at the mouth of the river there is the world of the dead – N.M.]. The mouth of *engdekit* is located in the east and described as a good land (Vasilevich's archive 1925-1931, MAE RAS, f. 22, l. 2, c. 4, p. 16).

On the way, the shaman passed through different places and landscapes which he described in his narratives. During this trip the shaman also communicated with a number of spirits, both good and evil. *Ike:nipke:* was meant to celebrate and mediate the spiritual unity between different human-animal actors and to demonstrate all phases of hunting calendar. It was crucial for the shaman to know the exact way to the mythological worlds and back, the behaviors of animals and spirits, and different landscapes. As it has been mentioned earlier, Vasilevich (1966a) suggested that the shaman was supposed to gain and transmit–through his/her own elevated sensory, communicative and journeying

capacities–geographic knowledge to the community. Either way, the mediation of places of spiritual and economic significance and travelling were integral to the festivities. Recently, these festivities have been to some extent revitalised in several Ewenki communities (Lavrillier 2003).

During the festivities the shaman would journey through the imaginary area in the forest destroyed by fire which is called in Ewenki *agijandyaki:ch* 'burnt path' (Vasilevich 1957: 159). In one of the sources it is translated as a 'good place' (Vasileivich's archive, MAE RAS, f. 22, l. 2, c. 4, p. 61). Additionally, in order to obtain *kutu* 'hunting luck'[1], the hunters used to create a symbolic model of the landscape which would be attractive to animals. Such models invariably included burnt areas and other culturally significant landscapes (Anisimov 1949 in Brandišauskas 2017: 85). Through modelling and strategic planning with some elements of sympathetic magic the Ewenki would make present an attractive landscape for game and thus increase *kutu* and develop more successful hunting strategies.

Burnt-out places in the forest are an unexplored category in Ewenki reflecting historical-ecological disturbance. While forest fires are considered a problem by modern forest managers (see Lavrillier 2013), small burnt-out places are used for hunting purposes, as fresh bushes, grass and berries attract moose and reindeer (Vasilevich 1969: 50-51). Some Ewenki have long cultivated these kinds of places through controlled burning. For example, Donatas Brandišauskas reports that the Ewenki-Orochen burn last years' grass to then create open fields with fresh grass (Brandišauskas 2017: 198). There are a few terms designating naturally burnt places in Ewenki, including: *nyady, ne:gdy, nirgal, churgi, yaktan, go:ndakta* (Myreeva 2001: 81). Some of them are dialect variations, but others can be found in the same dialect often as distinct terms. While not all distinctions between terms for burnt places have been clarified, but one marked characteristic is the age of the place, i.e. whether the burn is new or old. The other is the presence / absence of fresh grass and bushes (see Table 1).

[1] The English translation of the Ewenki term *kutu* does not fully grasp the meaning of this complex concept. For further discussion see Brandišauskas 2017.

Table 1. The names for burnt places in Ewenki dialects (adapted from Vasilevich 1958b and Myreeva 2001)

Name in Ewenki	**English Translation**	**Dialect**
Nyady	Burnt place in the forest with burnt trees	E
Ne:gdy	Burnt place	M, Tt, Sak, Urmi
Nirgal	Burnt place / forest	Uchur
Churgi	Burnt place	
Jaktan	Old burnt place	PT, N, E, I
Go:ndakta	Burnt place in the forest with fresh grass and bushes	PT
Bugar	New burnt place in the forest without fresh grass	PT, N, E, S, Z, Ald
	Old burnt place	NB
Degdek, degdenne, degdende, degderne	Burnt place	PT, N, E, Z, Ald, I, Tng, Urmi, Uchur
Kurung	Old burnt place with fresh grass and bushes	Ald, Uchur, Urmi
Hula:ka:g	Burnt place with fresh aspen-trees	Tmt

Despite the great importance of hunting, it is through their distinct type of reindeer herding, known as the Ewenki or forest type, that the people have managed to spread their culture and language within such a wide and diverse geographic area, flexibly adjusting to and cognising new landscapes and environmental surroundings. Their reindeer economy is characterised by small herds, usually from 10 to 50 animals (Vasilevich 1964). In contrast to other Siberian minorities, they use reindeer for both pack and riding when moving from one place to another as well as for hunting purposes. This type of reindeer herding was spread amongst most of the Ewenki groups, with the westernmost Sym Ewenki, who never used saddle-reindeer, as a prominent exception. In contrast, the Ewenki-Orochen type was characterised by big herds, from 20 to 500 reindeer, which were used for both pack and riding (Vasilevich and Levin 1951). Therefore, among Ewenki communities, extensive reindeer herding has largely prevailed only among the Ewenki-Orochen. In the seventeenth century or even

earlier, the Ewenki crossed the Yenisei River in the west and in the nineteenth century inhabited Sakhalin in the east. Vast migrations also took place in the Soviet period.

In Siberia, Ewenki had long served as a lingua franca among the previous Indigenous groups who once inhabited Eastern and part of Western Siberia (Tugolukov 1982: 168). Janhunen (2012) points out that some traces of those Indigenous groups are still evident in place names and mythological stories. According to Vasilevich (1965), in many cases Ewenki imposed their own terminology for river tributaries once they occupied a new territory previously inhabited by other Indigenous groups. Some geographical terms became toponyms widely distributed over the territory where Ewenki groups came in the seventeenth century onwards. In the places which the Ewenki left after the seventeenth century those place names became largely assimilated by newcomers. However small rivers often preserved Ewenki names or they received secondary names in other Indigenous languages. For example, the tributaries of the Sym, Eloguy and Ket' rivers (Western Siberia) have both Ewenki and Ket names. In some cases, Ewenki continued to use both naming systems to identify the same rivers. These patterns helped people to make sense of a new territory and establish a set of interconnected places bound together by river systems.

However, not all Ewenki communities were fully involved in reindeer herding and hunting, and some shifted their mode of subsistence from hunting to reindeer herding and back, or combined these activities interchangeably (Takakura 2012: 43; cf. also with Kolås and Xie 2015). When being left without reindeer, due to epidemics, they continued hunting on foot or fishing. This is also the reason why some Ewenki groups are known in the literature as 'wandering Tungus'. Extensive reindeer herding was introduced only in Soviet times when it became collectivised and industrialised, resulting in the overexploitation of reindeer pastures. In the post-Soviet 1990s, many Ewenki lost their reindeer and the state infrastructure that supported the system in Siberia basically collapsed. In the wake of this, many Ewenki had no choice but to revitalise their traditional ways of hunting and living off the land (see Vorob'ev 2004). They relied upon subsistence knowledge and resource tracking to live off the taiga.

Finally, all Ewenki communities have long combined hunting and reindeer herding with fishing. Even among some reindeer Ewenki of Central Siberia fisheries used to determine nomadic routes in summer time. Some of them switched to fishing and a sedentary style of life when they lost their reindeer (The State Archive of Krasnoyarsk Krai, f. П-1380, l. 2, c. 17, p.7). Historically, there were only a few Ewenki communities which could be defined as proper fishing communities. One of these inhabited the lake area north and west of the head of the Vilyui River and the other the coast of the Okhotsk Sea (see Ermolova 1984). Unlike other Ewenki groups, their calendar has a few summer months named after fishing activities (Vasilevich 1969: 42). Currently, mainly the Okhotsk Ewenki are involved in salmon fishing and sea mammal hunting.

1.3.4. **Orientation, Movement and Cardinal Points in Ewenki**

The Ewenki are not only the most widely spread community but also the most mobile among the Indigenous peoples of Siberia. The Ewenki language possesses a huge number of sophisticated verbs describing not only different types of movement but also the means by which this movement is performed, for example, *d'avra:-mi:* 'to go by boat', *nulgi:-mi:* 'to nomadise', *u:d'a-mi:* 'to follow footprints', *mu:lesin-mi:* 'to go and bring some water', and so forth (Vasilevich 1940: 172; see Table 2). There is also a large number of verbs and relator nouns in Ewenki for the expression of complex movement. Most of them are related to subsistence activities.

Table 2. The terms describing movement in Ewenki (adopted from Vasilevich 1958)

Terminology	Gloss in English	Dialects
Avikta-mi (verb)	to wander around in the taiga in the winter	N, E, Z
Agikta-mi (verb)	to wander searching for animal's footprints on the snow (without skis)	PT, N, E, Tng, Z, Uchur, Sak

Agil-mi (verb)	to get around a swamp / boggy place	PT, N, E, I, Tng, Ald, Urmi, Sak
Ala-mi (verb) Dava-mi (verb)	To pass over the mountainous range	Uchur, Urmi, Sak
Alin-mi (verb)	To nomadise, to move over to another place (about squirrel)	NB
Arikta-mi (verb)	To climb high, to wander around looking for something, to hover	Tng, Sak, Vit, Z, Ald, Uchur
Asilga-mi, ahilga-mi (verb)	To set marks along an animal's footprints; to take a notice of a place	PT, N, E, I, Olkm, Tng, Z, Ald, Uchur, Urmi, Chum, A, Sak
Ajanna-mi (verb)	To travel, to move / migrate from one place to another (humans and birds)	N, Z, Ald, Uchur, Urmi
Begit-mi, beit-mi (verb)	To hunt in frosty weather	PT, N, I, E, Urmi, Sak
Girkugir (noun)	Transient squirrel / reindeer	Olkm, Tng, Z, Ald, Uchur, Sak
Da-mi (verb)	To search for and find an animal's footprints	Not specified
Dag-mi (verb)	To cross the river	PT, N, E, I, S, UL
Darivul-mi (verb)	To step aside from the main path for hunting	N, PT, I
Devgidetki-mi (verb)	To go upstream (literally up towards the tundra)	E, Sak
Lupuli-mi (verb)	To go out of the taiga to an open place	Ald, Uchur
Mui-mi (verb)	To cover the entire area searching for an animal's footprints; to circumvent the reindeer herd	PT, N, Tng, Z, Uchur, Urmi, Sak
Ngene (noun)	Way, travel, trip	Not specified
Neke	A place which is trampled down by an animal	PT, N, E, S, Tkm, Uchur, Urmi, Sak

Nekee-mi (verb)	To travel, to wander around in the taiga, to fly by plane	Z, Ald, Uchur, Urmi, Chum, Sak
Samniv-mi (verb)	To lead, to show the way in the taiga	Z
Suncha-mi (verb)	To travel for a long time	Z, Uchur, Sak
Ud'a-mi (verb)	To follow in an animal's footprints	Not specified
Tysu-mi, tyhu-mi (verb)	To explore a way, to clear a way in the taiga	PT, N, NB, E, I, Tng, Z, Ald, Urmi
Ukcha-mi (verb)	To travel riding a reindeer	Not specified
Herki, helki (noun)	Fresh animal's footprint	PT, N, E, I, Z, Ald, Urmi, Uchur, Sak
Honta-mi (verb)	To go without a path	S
Hede-mi (verb)	To cross over a river / mountain	Brg, Nerch, Tng, Z, Ald, Uchur, Urmi

Along with verbs of motion, geographic and spatial terminology in Ewenki constitutes the most developed part of vocabulary (Vasilevich 1940: 171-175). A hunting family on average used to cover about 300 km on foot and 500 km by reindeer per year (Vasilevich 1963: 306). Nowadays in some regions the people have to cover up to 1500-2000 km annually to combine reindeer herding and hunting (Lavrillier and Gabyshev 2017: 42). Contemporary forms of mobility include a variety of vehicles and patterns of movement which continue to exist along with traditional means of transportation (see Mertens 2016).

Linguist Lenore Grenoble (2014) defines Ewenki as a satellite-framed language in terms of the way of encoding directed motion events. In a satellite-framed language, the path must be a satellite and the manner is a verb. According to Grenoble, up to eight Ewenki cases can be regarded as spatial; along with deictic forms they help to express the location and direction. The language also demonstrates a rich system of relator nouns or spatial nominals to describe spatial relations. This system helps the Ewenki to communicate detailed spatial information in terms of the direction of movement, positionality and location. Grenoble identifies the following relator nouns: *amar* 'behind',

ʧ:agi:da: ‘further behind’, *doo* ‘inside’, *ojo* ‘up’, *ugi* ‘over / above’, *daga* ‘proximity’, *ʤəginŋidə* ‘left side’, *oldon* ‘side’, *solo:ki:* ‘upstream’. Their opposites are: *ʤulə* ‘in front of’, *tuli* ‘outside’, *hərgi* ‘down, bottom’, *hərgidə* ‘lower part’, *goro* ‘distance’, *anŋida* ‘right side’, *bargi(da:)* ‘opposite’, *əjəki:* ‘downstream’ (Ibid.: 124). Some relator nouns in Ewenki are closely related to the orientation terminology and serve as place names. Yet in general the system of orientation in Ewenki is relational to water flows and—in some communities—to mountainous slopes (see also Table 3).

For example, the term *soloki:* ‘upstream’ in the form of *soli:da:* ‘upper part of the river, including the area around’ is commonly used as a place name suggesting that this river is well suitable for traveling upstream. For the lower reach of the river, the most commonly used words are *ne:ski:* ‘down’ and *edi:gi:* ‘down’ / *edi:gide:* ‘the lower course of the river, including an area around’. The former also designates an area at the foot of the mountain. The terms for different parts of mountains and rivers in Ewenki are overlapped in some dialects. For example, the Ewenki word for the head of the river is *bira dere:nin* that also means the southern slope of the mountain in the Aldan dialect spoken in Yakutia (Vasilevich 1958b: 137). Ewenki use this term to refer to both the head of the river and the area in the upper reach of the river.

Other relator nouns possess multiple meanings and serve as either geographic terms, or cardinal points, or both depending on context. For example, *dy:ski:* normally means ‘upward’ and *ne:ski:* ‘downward’. But in some dialects, the former can identify ‘east’ and the latter stands for ‘west’. The word *dy:ski:* can be used to define the movement in the direction of the taiga, an upper place, as by the taiga Ewenki speakers usually mean the mountainous landscape. In this case the word *hergiski:* ‘down the hill’ or ‘at the foot of the mountain’ is a semantical pair for *dy:ski:*. The terms *hergi* ‘down, bottom’ and *hergide* ‘lower part’ generally identify that something is located on the bottom. Along with *ne:ski:*, it can also mean ‘the lower reach of the river’. Therefore, semantic pairs can be formed depending on the chosen criterion, one of which is the opposition between taiga / upwards and tundra / downwards: *dy:ski:* (east, upwards, up the hill, towards the taiga) vs *hergiski:* (lower part, bottom, at the foot of the mountain, the lower reach of the river, down the hill, towards

the tundra). The following table shows some other relator nouns in Ewenki and their possible meanings:

Table 3. Most common relator nouns in Ewenki

Term	English Gloss	Term	English Gloss
Amar Amargida:	back; stern (of a boat) back side	D'ule:	in front of / before; future; bow (of a boat)
Amargu:t	later, in the future		
Cha:gida:	place in some distance; nearest future; further, distant	See d'ule	
Cha:gida:du:	nearby, not far (from this place)		
Do: (do:gida)	inner part, inside	Tuli	outer part, outside
Ojo	upper part; the top of a tree / mountain; the earth / water surface	Hergi	lower part, bottom
Ugi: Ugide:	height, over / above, upper part	Hergide Hergiski: Herelge:n	lower part; at the foot of the mountain; the lower reach of the river; down the hill; towards the tundra; valley
Daga Dagadu: Dagadi:n	proximity	Goro	Distance
Oldon	Side	Bargi Bargida:	opposite; opposite river bank
Anngida:	right side	Deginngide:	left side
Dy:ski	east, upwards, up the hill, towards the taiga	Ne:ski:	west, downward, the lower reach of the river

Soloki:	upstream	Eje:ki:	downstream
Solokida:	area in the upper reach of the river	Eje:gide:	area in the lower reach of the river

Shirokogoroff (1928: 172) highlights that the cardinal points in Ewenki include the idea of movement and the relation in space. At the same time, the orientation terminology and the interpretation of the local reference points may be significantly dependent on the position of a community in regard to the river which speakers identify as the main artery. Hence, these terms are usually culturally and geographically specific, and thus vary from one community to another. Vasilevich (1958a: 32) further argues that the choice of the terms may help to understand the Ewenki people's ways of migration and orientation in a particular geospatial location. She believes that those groups which migrated to Siberia following trails on land tended to use such terms as *amaski:* 'backwards' and *d'ule:ski:* 'forwards' along with some anatomical references as the cardinal points. Thus, *d'ule:ski:* can stand for 'east', 'south' or 'west'; *amaski:* for north, east or west. Similarly, the terms *soloki*: 'upstream' and *eje:ki:* 'downstream' are used to mark the directions in those communities which traveled mainly along the riverine trails. Finally, the terms for mountain slopes are also occasionally utilised to identify the cardinal points. For example, the word *antaga* means either a sunny slope located on the southern side of the mountain (P.-T., Ald., Uchr., Urm.), or a shady slope located in the north (Tng.), or even just the north (Olkm.) (Vasilevich 1958b: 32). The term for the opposite slope is *bosogo / bosoho,* which can be used to designate the west (Ibid.: 62).

When moving from one place to another, it is crucial for the Ewenki to identify the most noticeable slopes which serve as landmarks and, at the same time, designate the four directions. However, as Nadezhda Ermolova (2007) notes, in the areas with 'smooth' mountainous ranges the landscape cannot be observed with a human eye, and thus the rivers turn out to be the only reliable reference points for human orientation. Hence, the terminology for mountain slopes, rivers, and cardinal points are to some extent overlapped, and all above-mentioned forms of marking the

directions can be found in the same community. It is important to keep this complexity in mind when it comes to the related riverine names in Ewenki.

This complexity in the way the Ewenki people traditionally identify and name the cardinal points suggest that there is no abstract south or north but the directions are linked to movement, mythology and the position of community. Thus, the terms for the direction of river currents *soloki:* 'the upper course of a river' and *edi:gi* 'the lower reach of a river' as related to the speaker are applicable to people: *sologon* 'a person living at the upper course of a river' and *edigen* 'a person living at the lower course of a river'. Similarly, the terms for 'up' and 'down' are related to the speakers and can encode some important information besides being just the terms for directions. For example, when the Ilimpii Ewenki living in Central Siberia speak about people, they use the terms *dygan* 'upper' and *negan* 'lower' not only as geographical points but also to identify speech communities, i.e. groups of people who differ in terms of the dialects they speak. The Ewenki living in the south of the area and mainly speaking Southern dialects identify the people inhabiting the Lower Tunguska, which is the key water arteria there, and upper areas as *dygar* (PL), whereas the Ewenki living in the settlements north to the Lower Tunguska perceive the space somewhat differently. They use this term to refer to those Ewenki who inhabit hilly terrain of the Ilimpii group of settlement, and *negar* (PL) 'lower' to those living on the banks of rivers and lakes, that is, in the lowlands. It is characteristic that the imaginary distribution of speech communities coincides with the position and direction of the river current. Therefore, geographical terminology is overlapped with a cultural-geographical meaning.

1.3.5. **Place and Space in Ewenki Ontology**

Movement requires a good understanding of the local environment, landscape and vegetation. The list provided by Ewenki speaker and researcher Anna Myreeva (2001) includes more than 300 Ewenki dialect terms for different types of forests, trees, bushes, plants, grass, flowers, berries and moss. In

contrast, it seems that there are not so many terms for forest variations in Ewenki. Forest *mo:ha / mo:sa / mo:sha* or *agi* is itself a rather ambiguous category. For example, the Ewenki living in the Ewenki District tend to call the forest *dunne / dunde* 'earth', 'land', 'space' or even *mutki: dunnengit* 'our land', in many cases making no distinction between such terms as forest, taiga, and mountainous taiga. This is the reason why Ewenki interlocutors have difficulty remembering the 'generic' term for taiga, as the practice of elicitation has proved. At the same time, there is a tendency toward overdifferentiation (in relation to the Russian geographical terminology) to meaningfully reference distinct parts of the forest that are relevant to navigation, mobility, and subsistence. Thus, there are terms describing a dead forest, a forest hit by a hurricane, open parts of the forest covered with different types of vegetation, marshy areas in the forest, and so forth.

On the whole, the terminology referring to different parts of the forest, as well as different kinds of trees, their parts and characteristics, appear to be more developed and highly precise than that for different forest types. The language also differentiates a number of types of trees according to their shapes and conditions rather than to phylogenetic characteristics as in: *nengi:ri:* 'inclined tree', *nelge* 'tree removed from the ground with its roots', *he:gi:* / *he:gipcha:* 'lightning struck tree' (Ibid.: 72-73). These categories are important not only for reckoning places but also in assessing their affordances and utility. Additionally, it is important for the people to identify and clearly name separate areas or patches in the taiga, for example associated with non-humans, rather than to perceive the taiga as a holistic category.

In ethnographic literature, the places associated with spirits are usually called *bugadyl / buhadyl* in Ewenki. As Nikolai Ssorin-Chaikov (2001: 3), who conducted his fieldwork among the Ewenki of the Podkamennaya (Stony) Tunguska River, writes, "*buhadyl* accumulate in people, as they grow old, and in their burial grounds, when they die." There are some places which are believed to be dwelled by *buhadyl*. They are usually located far away from settlements in the forest (Ibid: 5). The word *bugady* literally means 'local', i.e. belonging to *buga*. Hence, in some Ewenki communities, *bugady* is a spirit of a particular hunting territory (Vasilevich 1958b: 63). These spirits dwell in the

same world with humans but in a different ontological reality. Such places as mountains or old camps can also be inhabited by *buhadyl.* They are rarely believed to be localised in particular parts of the forest but can be rather dispersed. Some *bugadyl* may form a network of places which include abandoned campsites, old storages and destroyed settlements, cemeteries, shamanic mortuary aerial sites located deep in the taiga, as well as all other places which are known in the community as 'sacred'. These places may have distinct names.

Since *bugady* is a rather fluid category of spirits, objects, territories, and even animals, every place can potentially be or become *bugady*. This stems from the Ewenki's understanding of the interconnections between inanimate and animate objects through *musun*. In a broad sense, *musun* means a driving force or agency (Vasilevich 1969: 277). Humans, spirits, animals, the phenomena of nature, some objects and even words are believed to possess *musun* as long as they can move, transform and make an influence on others. For example, a rifle has *musun* because it kills a beast. This is one of the reasons why Ewenki hunters are very careful with their rifles—a rifle can fire on its own. Before hunting season starts, Ewenki hunters 'introduce' their rifles to some birds so that to increase hunting luck (FM 2017). In a narrow sense, *musun* is a master of any phenomenon or place (*musun* of a fireplace). After his or her death the shaman may live in the form of *musun* in a particular place. Therefore, the idea of *musun* lies at the heart of the Ewenki ontology and allows people to experience cohesion between different actors and phenomena. Moreover, it shapes further on the admitted dualism of inanimate and animate objects, soul and body, humans and non-humans, as well as thoughts and language.

The understanding of *musun* shapes the way the Ewenki move in the taiga and interact with different objects and places. Thus, after their death some people, especially shamans, continue to make an impact on humans due to their *musun*. Some abandoned things, including camp sites, may still possess *musun*. For this reason, Ewenki rarely pick up abandoned items in the taiga, even if they seem to be useful, as these things might be connected with the spirits of the dead *bugadyl* or even may be a property of beings from other-than-middle worlds. Things which seem to be out of place

are especially dangerous. I once had a discussion with Ewenki hunters over a plastic bag they found in the taiga hundreds of kilometres away from any settlement. This object was found to be scarily inappropriate in that place (FM 2017). People do not usually touch these kind of things as through the *touch* they may become 'infected' with alien *musun*. This is also the reason why Ewenki avoid old burials and abandoned places if they do not know who were buried there and what kind of people lived in those places. Otherwise, such places are not considered to be dangerous. This implies that people gradually learn the behaviours of different spirits, their dwelling places, characters and attitudes, and thus learn to relate to them as animate forces of the landscape. Ignorance of such places may result in disorientation and endangerment. Similarly, Ewenki place names reflect the interactions between people, animals and spirits and people take into account these interactions while naming places.

From a brief discussion on the notion of *bugady* it is evident that the idea of place is rather complex in Ewenki. At the same time, there is no systematic research on Ewenki concepts of landscape, place and space. These notions are usually used non-analytically and as taken for granted in the literature. Moreover, there are no words in this language that imply the same meaning as these concepts. Two terms are of particular interest in this research: *dunde* and *buga*.

It appears that whereas the term *dunde* implies physical dimension, the term *buga* is more abstract and can be better translated as 'world' in its ontological meaning, for example, the middle world which is inhabited by certain humans, animals, and spirits. Shirokogoroff (1935: 122) defines *buga* as "the world as the speaker knows". Sometimes this term is also translated as 'nature' and 'environment'. I would extend the notion of *buga* by including all other possible worlds about which the speaker knows but not necessary has ever been to them. For example, people are aware of the existence of the lower world *hergu buga*, but only some of them have some experience of getting in touch with this world. However, in some contexts the difference between these two terms is more nuanced. The clarification of the difference may help to understand what the Ewenki people mean by world.

Thus, in Ewenki epic texts, the term *buga* is more frequently used to refer to different worlds, inhabited by supernatural creatures and monsters, as it is seen in the following example: *Mit **bugaduk** umun-de Ai-beye eche muchura* (Not a single Ai-man has ever come back from our world).[2] Or: *Tar sangarduli ehile Hergu **Bugala** garparikan-mata, mit bejengit istan* (Through this hole garparikan strong man, our man, went into the lower world). The hole in this example is a way into the lower world. One of the names of the North Pole is *Sangar*, i.e. the hole between the worlds. One of my informants explains this idea in the following way:

> *This sky is mine. I live as if under a dome, like in a tent.... If a plane arrives, then there should be a hole somewhere. There is another sky over there. And I think that other people are living there. We used to think that we were alone here. We did not see other people, we never heard of them (Ewenki District, Tura, 2011).*

At the same time, the term *dunde* is not the opposite to the concept of *buga*, but rather describes more intimate space, one which the speaker can observe and directly experience. In the following example, this difference is especially clear: ***Dulin Dunnedu** bilivkil. Tyken biderektyn, aminin achindun umneken **dunneletyn** avahind'a emeche* (They are living in the middle world. While they were living this way, once, when their father was absent, avahi (harmful beings from the lower world) arrived to their land). Here the term *dunne* refers to the speaker's world, or homeland. In the following dialogue in one of the narratives I recorded in the Ewenki District, the shaman of the lower world tries to establish the origin of the man from the middle world, using the term *dunde* 'homeland':

> *"Iduk emesen?"* ("Where did he come from?" [asked the shaman])
>
> *Tadu-te, hele, ulgusenivki, ulguselden, "E," guse, "Edu etem-de bi inen."* (Here he told him, he has begun to talk, "Hey," said [the man], "I will not live here.")
>
> *"Angkal, ngenedekel d'ulai, **dundengdulai,** tar **dundengdui**!"* ("You go, go home to your land!")
>
> *"On-ka bakad'am," gusə, "**dundengmi**, emedekpi?"* ("How would I find," he said, "my land, where I've come from?")

[2] All examples hereafter are taken from the Ewenki digital corpus: http://corpora.iea.ras.ru/corpora/search.php

In order to deliver the man back to his homeland, the shaman gives him a flying horse to lift him up hat further suggests the location of the lower world below the middle world.

Access to some of the shamanic worlds, especially the lowest ones, was dangerous. Only the most skilful shamans were able to navigate in those worlds without a danger of being lost and, hence, stayed there forever. Therefore, less experienced shamans preferred to send their guardians forward or embodied themselves into particular spiritual helpers, usually birds (*humungkitan* 'owl', *kiran* 'eagle', *gaha* 'crane', *ternga* 'seagull' / 'falcon' / 'hawk', *ukeng* 'loon') when travelling to those worlds (Vasilevich's archive, 1925-1931, f. 22, l. 2, c. 4). In Ewenki cosmology, birds are associated with the lower worlds, including the world of the dead where human souls live in the form of birds until their birth. The shaman went the following places on his way to *bu:kit* 'the world of the dead' (Ibid.: 61):

1 day. D'əpkāčōd'əkič

2 day. Gičud'akič 'the place where the shaman falls on his back'

The first two days the shaman passes through at night. The rest of the day he goes in the day.

3 day. Tymakšad'akič

4 day. Odyndur

5 and 6 days. The shaman takes a rest.

7 day. Agijand'akič 'good place' and Inygəd'əkič.

At the end, the shaman comes back in the form of a bird.

The most powerful among the birds is the Thunderbird, named Kingit in Ewenki. Some birds, for example, a hawk, helped the shaman to find 'lost souls' in the lowest worlds, where the shaman and his spiritual helpers did not dare to travel. The transformation into a bird helped the shaman to acquire some superior abilities. Among them was not only the ability to fly but also to use a bird-eye perspective for transmitting geographic knowledge.

When it comes to other-than-middle worlds, where a person travels, then the term *buga* is more common as contrasted to the world as the speaker experiences. He can also introduce himself

to the inhabitants of the lower world as a person from the world *buga*, and not *dunde.* In other contexts, the meanings of these concepts may be similar. For example, *dunde / buga* ends at the border with the tundra, which landscape is only scarcely conceptualised in Ewenki. Hence, both terms signify the end of the safe world as opposed to the bigger world around or the beginning of another world / space in general: *De tar d'adangi beje gunen, "Ngenem* ***buga*** *mudandulan, inen bimi, muchandingav"* (That poor man said, "I am going to the end of the world. If I stay alive, I will come back"). Another example: *Ke, tyken bidene gorovo, eneilikse, emukin derikse,* ***dunne*** *chechelben checherinacha* (Well, having lived like this for a long time, he got bored and, having tired of his loneliness, he left to stroll over the ends of the world).

To conclude, although the notions of place, world and space in Ewenki need further investigation, I suggest that the concepts of *buga* and *dunde* reveal a complex, relational and multiperspectival view of the universe which is not limited to the world of humans but also includes other worlds which are located either vertically (the middle world vs the lower world) or horizontally (taiga vs tundra; different parts of the mythological river). The taiga is rarely conceptualised as being an abstract space but rather as the world or homeland which can be directly experienced (dunde), unlike the world in general (buga) about which the speaker knows. In the narrow sense, the taiga can designate a safe part of the world as opposed to the tundra, which is located at the end of the world where humans get in touch with other than humans beings. These relations between taiga and tundra are examined in detail in one of the papers of this thesis.

2. Conceptual Framework: Towards the Theory of Phenomenological Geosemiotics

2.1. Introduction

This thesis combines the study of place names and ethnophysiography. It also attempts to link these research fields with phenomenological, interpretative and semiotic approaches to the study of place names and geospatial nomenclature, as well as mobility studies. Mobility is considered here from a holistic sociocultural perspective. Geographer Tim Cresswell (2010: 19) highlights that there are three key aspects of mobility: the fact of physical movement, i.e. getting from one place to another; the representations of movement that give it shared meaning; and the experienced and embodied practice of movement. Cresswell (2006) further argues that there are basically two forms of metaphysics in terms of how one sees the world in relation to movement: a sedentarist metaphysics and a nomad metaphysics. He writes, "Each of these resolves around understanding of mobility, spatial order, and place. The first sees mobility through the lens of place, rootedness, spatial order, and belonging. Mobility, in this formulation, is seen as morally and ideologically suspect, a by-product of a world arranged through space and spatial order. The second puts mobility first, has little time for notions of attachment to place, and reveals in notions of flow, flux, and dynamism" (Ibid.: 26). A new conceptualisation of place as hybrid in its nature is present in the works of the well-known geographer Doreen Massey (1994), who argues that both place and people's identities are never fixed and stable; they change and shape each other.

When it comes to some Indigenous geoontologies, mobility is not reduced to physical movement in the landscape but also includes the understanding of landscape perception as mobile or fluid. Moreover, this perception is not universal. As the linguists Stephen Levinson and David Wilkins (2006) demonstrate, spatial thinking and its linguistic forms of expression are diverse and depend on cultural factors. This fact challenges assumptions of universality in spatial cognition and reorients research towards the understanding of space and place as relational concepts. Since the idea

of mobility lies in the heart of Ewenki and other nomadic people's ways of knowing and ontologies of geospatial domains, it is crucial to link conceptions of mobility to people's understandings of landscape and also to consider it as an adaptative practice per se. Broadly speaking, adaptation is a functional human response to environmental change, which may come as a product of changes in place (e.g. via climate change) or changes of place (e.g. via migration). By adaptation I mean not only the capacities needed for effective survival but also the complexity of networks between environment, people and nonhuman entities that support social-environmental systems and systems thinking. As the land and the landscape are continuously changing, people have to be constantly responsive in cognitively accommodating these changes.

In order to explore the relationships between language and landscape, I also employ an ethnoecological approach, especially landscape ethnoecology which explores "the broad domain of local understanding of the environment, of the land and the entities that dwell there, and of the relationships among them, including the relationships of people to other living things and the land" (Johnson 2008: 146; see also Johnson 2010a). One of the questions of ethnoecology is how people experience landscape and what kind of knowledge, discourses and strategies they use to make sense of the surroundings around them.

*2.2. **Ethnophysiography and Geoontology***

Within ethnophysiography landscape is considered as a cognitive domain consisting of a set of ecotopes, or the smallest ecologically-distinct landscape features in a landscape mapping and classification system (see Hunn and Meilleur 2010: 15). The term 'ecotope' (ökotop) was proposed by Carl Troll (1950) who defined ecotopes as the smallest components ('die kleinsten Landschaftsräume') of landscape. This notion is widely used in spatial and geographical research. Ethnophysiography examines how people conceptualise objects in the landscape and seeks to document cross-cultural and cross-linguistic variations in the delimitation, classification, and naming of geographic features (see Mark et al. 1999; Mark and Turk 2003; Mark et al. 2010). It also studies

toponyms and cultural associations with landscape and its perception in different societies and geographical areas in their relation to ontological differences. Broadly speaking, ethnophysiography seeks to understand how "landscape is conceptualized, that is, how a continuous land surface, a landscape, becomes cognitive entities, and how those entities are classified and represented in language and in thought" (Mark et. al 2011: 1). Researchers working in this field posit that humans in general and Indigenous people in particular perceive and classify landscape objects very differently and that this difference can be documented and analysed through research on geographical terms and concepts (Bohnemeyer 2001; Bohnemeyer et al. 2004).

In their core publication discussing landscape terms and categories, Niclas Burenhult and Stephen Levinson (2008) from the Language and Cognition Group at the Max Planck Institute for Psycholinguistics highlight the necessity to examine landscape ontology cross-culturally in order to understand which objects are selected and named and why. Ontology is broadly defined as a study of existence and entities. In ethnophysiography, the idea of ontology in landscape has a specific application (see Smith and Mark 2001, 2003). According to Werner Kuhn (2011: 369), it is the ontology of geospatial domains that specifies vocabularies. Kuhn posits that the purpose of ontological specification is to treat meaning as a process to be constrained, rather than as an object to be defined. Hence, the specification of landscape terminology vis-***à***-vis the local conceptualisation of existence, including its spiritual or mythological dimension, constitutes significant part of research on landscape terminology, geospatial concepts, and place names. Mark and Turk (2003b) further state that "basic level categories in a language must be tuned to the variations in the particular environment in which a speech community lives." This observation suggests that even basic geographic categories are not constant which, in turn, opens up the expectation and need for discussion of variability or fluidity in landscape terminology. This problem remains almost unexamined in ethnophysiography.

Researchers working within ethnophysiography also highlight that landscape concepts cannot be properly understood without considering the broader cultural system, including verbal and nonverbal interaction with spirits and other nonhuman beings, including animals, plants, and

geographic features themselves, which are linked to particular places and may be embodied into these places as acting beings with their own ontologies (see Thornton 2008, 2011; Johnson 2010; Mark et al. 2010). This understanding of landscape implies that it is more than a set of given geographic objects but a complex geocultural domain, with very variable characteristics cross-culturally.

Ethnophysiography pays particular attention to the modes of ecotopes' selection and their classifications. Potential similarities between ethnobiological and ethnoecotopic classifications across languages are particularly highlighted (Hunn et. al 2010: 16). At the same time, as the linguist and founder of 'language and ecology' Einar Haugen (1972) posits, the relationships between the environment and language are not static and defined only in physical terms but rather they depend on how speakers themselves respond to variation and change in the environment (cf. Burenhult et. al 2017). The problem of lexicalisation of local knowledge in general and ecotopes in particular is discussed in Roy Ellen's (2010) research on forests in Eastern Indonesia. He suggests that ecological and subsistence differences influence the ways people categorise and lexicalise knowledge and that not all knowledge can be equally lexicalised. He shows that the ecological variation of forest expressed in the local vocabulary is in fact multidimensional and continuous. This variation is hard to reduce to simple taxonomical models (Ibid.: 117). Ellen highlights that the knowledge of the local environment and its lexical codification can be very flexible and argues that personal experience may be more important than transmission of a formalised knowledge (Ibid.: 133-134).

At the same time, despite a general recognition of relational understanding of landscape features and the influence of cultural drives and personal experiences on landscape perception, most research seem to interpret language as an inherently enclosed system and tend to talk about linguistic properties of landscape as arbitrary static. However, as the Ewenki case shows, there is a need to pay close attention to the variation in meaning of the same landscape categories in a single language, especially in nomadic societies with a broad and varied area of habitat. One solution to this language-habitat problem is to take into consideration the fact that humans in general and some Indigenous people in particular are mobile. Variations occur not only due to differences in the environment but

may also result from movement and change. Therefore, mobility as both theory and practice should be integrated not only into geospatial dialectology (see Britain 2016) but also place and space studies and ethnophysiography.

2.3. ***Phenomenology of Place and Space***

Experience or a sense of place and the environment is one of the core concepts in landscape and place and space studies (see Thornton 2008). Although the notion of place has a huge number of meanings (see Cresswell 2004; Evans and Robson 2010), the most definitive characteristics of place is the fact of location; places have objective coordinates and materiality. Whereas space is associated with movement, places can be described in terms of stops along the way (Y.-F. Tuan cited in Cresswell 2015: 15). One way of turning space into place is to give it a name. Through naming people become attached to places through memory and experience. The phenomenon of attachment lies at the heart of phenomenological optics. Some phenomenological approaches to the study of landscape have also been recently applied by ethnophysiography (see Mark et al. 2010: 31-32).

Within humanistic geography, a phenomenological approach to place and space, which is largely based on the works of such prominent philosophers as Martin Heidegger and Merleau-Ponty, was initially introduced by David Lowenthal (1961) and Yi-Fu Tuan. Most of the authors working within this theoretical framework highlight the importance of direct engagement with places through body and senses. I review some of the key works.

The existential sense of place in human geography was elaborated in pioneering research by Edward Relph (1976) who called his method "a phenomenology of place." Unlike many of his predecessors in geography who wrote about place and space from a functionalist perspective, Relph argued that space is not just a frame for places but an important geographical concept per se. In his seminal book 'Place and Placeness' he notes, "space is not uniform and homogeneous, but has its own name and is directly experienced as something substantial or comforting or perhaps menacing (Ibid.: 5). He proposes to make a distinction between such modes of spatial experiences as pragmatic,

perceptual, abstract, planning, cognitive and existential. All these modes of spatial experiences are mutual, overlapped and exist in everyday life of each individual. According to Relph, space makes sense of places by filling them with meaning. He defines places as "the significant centres of our immediate experiences of the world" (Ibid.: 141). He argues that places are primarily characterised by experiences and intentions, and not physical forms. Relph also develops the idea of existential insideness as a kind of deep identity with a place, the sense of belonging and rootedness. Based on social anthropologist Peter Berger's research, he distinguishes behavioral insideness (physical presence in a place), empathetic insideness (involvement with a place) and existential insideness (complete commitment to a place). In contrast, placeless or outsideness is viewed by him as the end of intimate and real experiences with places. Placeness is defined as "a weakening of the identity of places to the point where they not only look alike and offer the same bland possibilities for experience" (Ibid.: 90).

The relationships between insideness and outsideness are in the focus of research by another two humanistic and phenomenology-oriented geographers, Anna Buttimer and David Seamon. Buttimer (1980: 171) stresses that in geography the researcher usually assumes the role of outsider or the detached observer. As a result, the person interprets place in his or her own terms and, finally, find in places what "he or she intends to find in them." In contrast, the insider is grounded in the everyday experience of living in the place, but because of that he may not take into account many things which he accepts as taken for granted. According to Buttimer, the solution is to unite both perspectives in order to get a holistic understanding of place.

David Seamon (1979), who continues the phenomenological line of research on the environment, focuses on the everyday environmental experience of the body-subject. He shifts from the analysis of feelings towards the study of body and embodiment experiences. To describe human experiences through movement, Seamon introduces such concepts as 'body ballet', a set of integrated gestures and movements which sustain a particular task or aim. When present for other people sharing the same space, he calls such sequence of movement 'place ballet'. If such movements are performed

for a long time, they become part of a time-space routine, or "a set of habitual bodily behaviours which extend though a considerable portion of time" (Ibid.: 54). His research aims to show that movement is only partly a cognitive process. The rest is managed by a prereflective knowledge of the body, which is not separate from the cognitive stratum of spatial behaviour. The sense of place, according to Seamon, is based on the knowledge of the time-space routine.

Finally, John Urry (2012) identifies the problem of a static understanding of dwelling or being in the world in his seminal book 'Sociology Beyond Societies: Mobilities for the Twenty-First Century'. He notes that in classical phenomenology dwelling is always associated with staying with things. Unlike Heidegger, Urry argues for considering diverse forms of dwelling which are not limited to "a pattern of life rooted in a particular earth and world" (Ibid.: 132). He turns to James Clifford's idea of 'dwelling-in-travel', which challenges the notion of the static world and "rooted Indigenous cultures", and suggests considering new forms of solidarities as mobile. He also criticises the notion of community as a localised unity of people. Urry highlights that this notion fails to take into account bodily movement within and through community; it is over-focused on people and their social relations while ignoring the movement of objects. Communities can also be very stratified with unequal internal social relations between their members. Hence, it is wrong to talk about a kind of 'romanticised rural communities' with tight social bounds which Heidegger refers to in his works. Driven by Tim Ingold's (1993) understanding of landscape as an enduring record and testimony to the lives and works of past generations who used to dwell in in it, Urry also discusses the links between forms of dwelling and remembering practices. He argues that people produce their memories together within particular social contexts. Memories are usually organised around particular objects or spaces. Urry (2012: 137) makes a distinction between land and landscape. The former is defined as a physical tangible resource with a lack of distance between people and things (e.g., farming as a practice that unites a farmer with a piece of land). Landscape, however, is an intangible resource which main characteristics is visuality (but see Gell's 1995 critique). Therefore, despite its novel

approach to landscape perception and acknowledgement of mobility as its characteristics, Urry remains within Cartesian understanding of landscape, which Tim Ingold has attempted to overcome.

In Ingold's phenomenology, mobility is focused upon perception-in-motion idea (Wylie 2007: 177; Ingold 2000). Ingold proposes to look at landscape from "the dwelling perspective", as a place to dwell in (Ingold 1993: 152; Ingold 2000; see also Wylie 2007: 153-162). In his seminal paper 'The temporality of landscape', Ingold (1993) criticises the notion of landscape as a way of seeing and proposes to look at it as a way of being in landscape. Like other humanistic geographers, his theoretical assumptions are largely based on the philosophy of Maurice Merleau-Ponty, the author of the body-subject concept, who emphasised the key role of body in human experience. The body is connected to the world through senses. In this regard, Ingold pays attention to physical experience of being in the world and the direct perception of the environment. Moreover, for Ingold the world itself precedes experience in the world. He writes, "worlds are made before they are lived in; or in other words, that acts of dwelling are preceded by acts of worldmaking" (Ingold 2000: 179). Hence, for Ingold ontology precedes epistemology.

Through the concept of the building perspective, Ingold puts forward his idea that the world ontologically is the same for everyone; it is rather continuous than multidimensional. He states that it is wrong to make a distinction between the environment and its perception, as well as nature and culture. At this point, he criticises Clifford Geertz and the school of interpretative anthropology for creating what is in his opinion an artificial separation. Therefore, he largely denies ontological plurality, linguo-cultural relativity and hermeneutic traditions with their attempts to represent the world as multilayered in terms of meaning and its symbolic representation. Within Ingold's approach, the world is not represented but rather experienced and performed. He states that humans and other beings are embodied into the environment and their cognition is inherent in the relationships of the body-environment system. The human being is perceived as immersed into the world; the knowledge about the world is gained through direct interactions with it, for example, by the means of walking (see Vergust and Ingold 2008).

To sum up, phenomenology provides research with a deeper understanding of places as linked to human experience and practice (taskscape in Ingold's terms). Yet despite great importance of the notion of experience for understanding the relationships between place and space, phenomenologically oriented researchers have rarely engaged with language and cognition. In the growing number of research works on the categorisation of space and place in Indigenous languages, there is a tendency to turn to phenomenology rather narrowly. While the notion of living or dwelling in the landscape is well represented in the literature, the experiences of nomadic peoples and their interactions with landscape in a language-environment perspective have surprisingly been underexamined.

Most landscape research also fails to consider multispectivial and multidimensional understanding of places. As Tim Cresswell (2015: 35) highlights, within humanistic geography place is seen "as a universal and transhistorical part pf the human condition. It was not so much places (in the world) that interested the humanists but 'place' as an idea, concept, and a way of being-in-the-world." Most of them make distinction between the sense of belonging to a place (placeness) and being out of place. Although the idea of deeply rooted places was challenged by Marc Auge (1995), who coined the term non-places to describe places of transience (e.g., airports), and later by James Clifford (1997), it is hard to integrate the experience of nomadic peoples into phenomenological apparatus primarily developed for settled communities and groups.

Ingold, an ethnographer of northern Indigenous herders, helped to advance research on phenomenological understanding of places by attempting to overcome the static idea of place. However, whereas their practices of moving and dwelling have been examined in detail, there is still the lack of works dealing with language as an experience. Language is assigned the role of representing the world rather than modifying it. In fact, the relations between language, culture and the environment are more complex and diverse. Hence, my intention is to show that not only places modify along with human experience and engagement but also linguistic forms of conceptualising

them respond to these changes. The same can be stated in relation to landscape perception and conceptualisation of landscape objects. In order to do this, I turn to geosemiotics.

2.4. Geosemiotics and Interpretative Approach in Cultural Geography

In their pioneering work on geosemiotics, which is the study of the meaning systems by which language is located in the material world, the linguists Ron Scollon and Suzie Scollon (2003) argue that information and knowledge cannot have any independent existence but must be represented by a system of signs. The authors posit that all three basic forms of signs–symbols, icons and indexes–are the property of indexicality because they have to be located in order to exist in the material world. The notion of indexicality refers to the works of the philosopher and mathematician Charles Peirce and is defined as the property of the context-dependency of signs. They write, "Language indexes the world. We speak and listen, write and read not only about the world but in the world, and much of what we understand depends on exactly where we and the language are located in the world" (Ibid.: ix). The idea of indexicality enables the consideration of place names and geospatial nomenclature as grounded signs in the world and talk about the phenomenal understanding of landscape as a semiotic system. This is also a way of integrating phenomenology into geosemiotics.

Scollon and Scollon further posit that signs often combine with each other and it is common to see all three types of them altogether. In this regard, there are no 'pure' signs. The sign reveals its meaning only in relation to the place in which it is located. If any sign is in the wrong place, this phenomenon is called transgressive semiotics. Tim Cresswell (2004: 103) notes, "When something or someone has been judged to be 'out-of-place' they have committed a transgression. Transgression simply means 'crossing a line.'" Transgression raises questions of how otherness is constructed and how the notion of 'unexpected' is reflected (Pennycook 2012). For example, in Ewenki topography, borderline and anomalous areas are mostly concentrated in boggy places, such as swamps and tundra, as well as at crossroads, mountain and river passes, and some other places associated with spirits and

non-human beings. They are also linguistically marked either by using specific landscape terms or place names. In terms of everyday engagement, these places are supposed to be avoided and the names reflect the semiotics of the places. In other words, linguistic forms of marking certain places make an impact on the way of experiencing and dealing with these places. This example demonstrates how language as a practice functions phenomenologically in the everyday discourse.

All signs can be interpreted through particular discourse. Scollon and Scollon (2003: 202) distinguish the discourse which produces signs and the discourse for interpreting signs. One of the most important concepts is that of semiotic aggregates or sign complexes. They define places as being semiotic aggregates which provide resources for the production of performances, on the one hand, and restrict other performances on the other hand (Ibid.: 76). Context, in which signs are used and interpreted, serves to ground their fluidity within a schema of interpretation, or frame (Goffman 1967), thus restricting the number of meanings.

Similarly, in the hermeneutic tradition of cultural geography, there is a tendency to focus on landscape and place as a discursive practice or a text which can be interpreted. This understanding of cultural phenomena is based on the hermeneutic tradition which can be traced back to the school of phenomenology in general and Hans-Georg Gadamer in particular for whom interpretation "comprises the basic structure of 'Being-in-the-world'" (Gadamer 2007: 168). In cultural anthropology, which theories have significantly influenced cultural geography, hermeneutic traditions have been developed by Clifford Geertz. His method of 'thick description' implies interpretation of the meaning of social situations through local cultural symbols. Geertz (1973: 14) notes that "nothing is more necessary to comprehending what anthropological interpretation is, and the degree to which it is interpretation, than an exact understanding of what it means—and what it does not mean—to say that our formulations of other peoples' symbol systems must be actor-oriented." When it comes to landscape, a hermeneutic approach implies a detailed, multi-faceted analysis of how people produce and interpret cultural and social meanings embodied in landscape concepts and symbols, as well as in place names.

Although the hermeneutic approach is largely criticised within phenomenology for being too detached from real experience in the world by putting 'mind' ahead of experience, it appears rational when it comes to the notion of meaning and linguistic phenomena, with which phenomenology engages scarcely. Within hermeneutic perspective, meaning is considered not as a given, or direct product of experience, but rather as assigned and created. The goal of research in this vein, therefore, is to elucidate cultural process through the study of landscape (Duncan 1990: 4). Yet the opposite is also possible: to examine the notion of landscape as a cultural process. In 'Iconography of landscape', Stephen Daniels and Denis Cosgrove (1988: 8) highlight that "landscape seems less like a palimpsest whose 'real' or 'authentic' meanings can somehow be recovered with the correct techniques, theories or ideologies, than a flickering text displayed on the word-processor screen whose meaning can be created, extended, altered, elaborated and finally obliterated by the merest touch of a button". The idea of landscape-as-text is further developed in the influential works by cultural geographers James and Nancy Duncan (1988; Duncan 1990) and Denis Cosgrove. Their concepts of assemblages and intertextuality are of particular importance for this research.

James Duncan (1990: 17) posits that landscape "is one of the central elements in a cultural system, for as an ordered assemblage of objects, a text, it acts as a signifying system through which a social system is communicated, reproduced, experienced, and explored." The theory of assemblages was initially introduced by Guattari and Deleuze and developed by Manuel DeLanda (2006), whose understanding of the essence of this theory is different (see Nail 2017). DeLanda points out that assemblages, which mean 'a coming together', are wholes characterised by relations of exteriority. This implies that a component part of an assemblage may be detached from the whole and attached to a different assemblage, in which its interaction is different. Assemblages can be rearranged to form new patterns. He writes (2006: 10), "Relations of exteriority also imply that the properties of the component parts can never explain the relations which constitute a whole, that is, relations do not have as their causes the properties of the component parts between which they are established." In the second chapter of the book 'Assemblage Theory' (2016), DeLanda argues that language itself can

be represented as an assemblage. He distinguishes properties (what an entity is) from capacities (what it can do). Unlike properties, capacities are not constant; they code the components of an assemblage. When it comes to place, the difference between properties and capacities can be presented as a dualism of a material existence (locale or landscape) and an expressive existence (cultural entities) (Cresswell 2015: 53-54). Landscape can also be represented as a combination of assemblages. The theory of assemblages may help to understand how different components of landscape are grouped together to produce a new meaning. The change of place names, which I discuss in one of the papers of this thesis, occur along with changes in the relations between assemblages constituting the landscape.

Another key concept is intertextuality. Although James Duncan is primarily interested in the political discourse of landscape, the ideas of socio-semiotics can be applied to any society, including Indigenous people, for who narratives, kind of texts, serve a source of geographic and cultural information. The interpretation of these narratives constitutes the essence of intertextuality, which implies that the context in which landscape is framed is another text and that narratives are encoded in the landscape (Duncan 1990). Hence, through the narratives one can understand how people conceptualise landscape in their own terms. Narratives shape the way people perceive the environment and help them to mark spatial features in their own terms and categories, both cultural and linguistic (see Basso 1996; Burenhult and Levinson 2008; Thornton 2008). Place names are usually integrated into narratives. Thomas Thornton (2008: 31) highlights that as "icons, indexes, and symbols of place phenomena, place-names have enormous referential power. They evoke not only material aspects of the landscape but also human tasks, events, emotions, and other mental associations tied to those locales."

What is missing in the way cultural geographers deal with the notion of landscape is its highly adaptive nature and possibility to change, both in terms of physical measurable features and cultural processes. At the same time, landscape has to preserve some constancy in order to be recognisible. Even the assemblage theory does not explain how and why different assemblages are selected to form

a new configuration. In this regard, the idea of 'layered simultaneity', proposed by sociolinguist Jan Blommaert (2005) appears to be useful as it helps to overcome this dualism of stability and variation and, at the same, to present the process of signification as holistic. By layered simultaneity he understands the process when several chronotopes, configurations of space-time in discourse, are synchronised in a way to form a new one, which is more adequate to here-and-now. The notion of chronotope was borrowed from the works of the Soviet philologist and literary scholar Mikhail Bakhtin, who coined this term to describe how time and space are configurated in narratives. Blommaert (2012: 20) argues that linguistic landscape studies have to pay more attention to "the detailed study of situated signs-in-public-space, aimed at identifying the fine fabric of their structure and function in constant interaction with several layers of context." The task is to deconstruct different layers of meaning in order to establish the role of sign in semiotisation of space and place. The relations between place names and places may not be direct and simple but contain many layers and references. Blommaert emphasises the here-and-now understanding of signs. The configuration of time and space is unique in each case but it may easily change. The idea of layered simultaneity when combined with indexicality provides a suitable theoretical tool for interpreting landscape features and place names as phenomenological signs, while still grounded in a context yet variable or fluid in nature. The implication of this idea is discussed in one of the papers of this thesis in which I show that the same place name can have different levels of interpretation depending on the referent. In Indigenous ontologies, the referent is not always a human being. This observation brings us to the multispectivial perception in the semiotics of place names.

2.5. ***Multispectivial Perception in the Semiotics of Place Names***

When it comes to some Indigenous ontologies in their relations to landscape concepts and place names, the problem of diversity of experience becomes even more complex. In recent years, ontology as a study of reality which is not limited to humanly constructed worlds has become particularly popular within the ontological turn in social sciences (for a good account see Kohn 2015). Within this

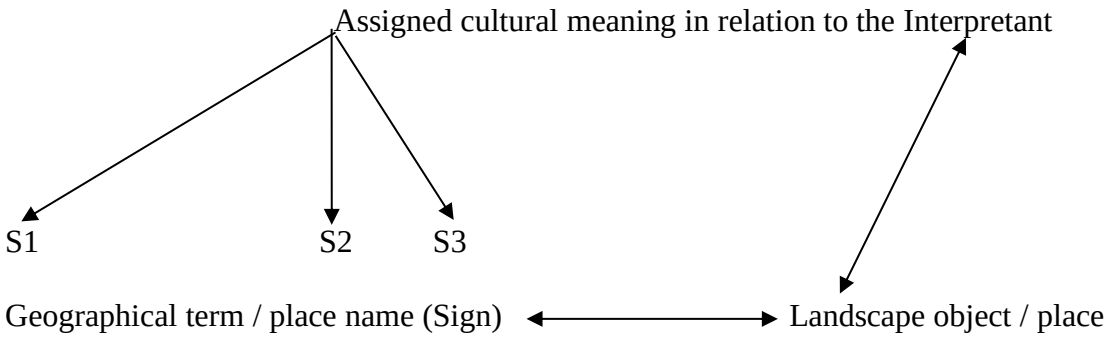
approach, all other possible realities or multiple worlds are regarded as existing along with a human one, including the notion that humans evolved from and are interwined with other beings through the process of assemblage. This idea has been further developed within such theories as animism (see Descola 1994, 2013) and perspectivism (Viveiros de Castro 2004).

Although I do not generally engage with the ontological turn, my interpretation of Ewenki place names, their functioning and production within semiotic circles of interaction with animals and other beings, is driven by some ethnoecological ideas developed in Eduardo Kohn's (2013) seminal book, 'How Forests Think.' Kohn examines semiotic relationships between people, animals, spirits and forest through the amplification of non-human actors' perspectives. Most importantly for my research, Kohn's approach utilises Charles Peirce's (1994) theory of signs which recognises signs as consisting of three inter-related parts: a sign, an object, and an interpretant. The interpretant is a new sign which is cognised in a speaker's mind in response to a sign. The latter can be a geographical term or a place name. The notion of the interpretant is absent in Ferdinand de Saussure's sign theory and overlooked in Kuhn's geoontology, which is influential in ethnophysiography.

Peirce's semiotics posits that every sign signifies as long as it is being interpreted. He writes (1994), "A Sign is anything which is related to a Second thing, its Object, in respect to a Quality, in such a way as to bring a Third thing, its Interpretant, into relation to the same Object, and that in such a way as to bring a Fourth into relation to that Object in the same form, ad infinitum. If the series is broken off, the Sign, in so far, falls short of the perfect significant character. It is not necessary that the Interpretant should actually exist. A being in futuro will suffice." According to Peirce, only certain characteristics of an object lead to its determination as a sign (see Fig. 2). For example, some physical features or salient characteristics of the landscape make it possible to select and determine ecotopes. The sign, in turn, determines an interpretant based on the relations between the sign and the object. These relations are facilitated by cultural, social and other factors. The generated interpretant may then start functioning as a new sign of the object. This triadic structure lies at the heart of the process of creating meaning and can be applied to the landscape as a sign system. In particular, this schema

can help to understand the phenomenon of semantic variation of cognates in Ewenki landscape terms, which is discussed in one of the thesis papers, and the complex relations between place names, referents and contexts.

Figure 2. The application of Peirce's triadic theory of signs to the analysis of geographical terms and place names



Although Kohn engages with Peirce's complex theory of signs very limitedly, focusing mainly on icons and indexes, his approach helps him to overcome human-nature dualism and opens up a possibility of considering language as a part of ontological system. According to Kohn, the relationships between humans and other actors are always mutually semiotic. As Kohn (Ibid.: 61) notes, "all signs involve mediation and all of our experiences are semantically mediated." Yet we can only learn of others' semiotic systems though participation and shared experience or "direct experiential knowledge" according to A. Irving Hallowell (1967), who informed the original ontological turn in anthropology in many respects. Hallowell posits that "in order to be spatially in the widest sense, that is, beyond the field of immediate perception, the individual must not only be aware of himself but of his own position in some *spatial schema*" (Ibid.: 186). The relations between the self and other objects, he continues, are constantly varying and the individual should be aware of this fact in order to flexibly position himself at any point. Not only geographic, but also social and cultural factors, including place names and cultural models of the world, play an important role in continuously positioning oneself in the world.

Relations between humans and other-than-human beings are especially important in Ewenki ecoethics and positioning in the world. Thus, Sergey Shirokogoroff in 'Social Organization of the Northern Tungus' (1929: 43) points out that "a perfect knowledge of these relations and a faithful following of them is the most important condition of a peaceful existence for man. <…> These regulations are also observed by the animals too, as otherwise life for them would also be impossible <…>. These relations in taiga compel the Tungus, first of all, to know every valley thoroughly, and also to know which animals inhabit it." Shirokogoroff further discusses the idea of territorial rights and stresses the fact that animals, according to the Tungus, have similar rights over the territory along with humans. This is another reason why it is crucial for both sides to know the surroundings and each other's behaviours well in order to avoid conflicts.

The relationships between different actors in the taiga are supported by the system of paths which serves as a means of communication. Shirokogoroff discusses this idea in more detail in the book 'Psychomental Complex of the Tungus' (1935), in which he points out that people easily read, interpret and modify the system of paths. The environmental changes, animals and other ethnic groups make the Tungus to create new paths, incorporate old ones into a newly established system, relate them spatially and in accordance to spatial behaviours of animals (Ibid.: 69-70). In addition, people have to gradually learn animals' systems of paths. Shirokogoroff's idea can be extended by including non-human beings and even certain types of landscapes which force people to adjust their spatial behaviours. This complex approach is necessary to capture the semiotic nature of the relationships between people, places, animals and nonhuman beings, as well as to look at the landscape itself as an agentic force, prone to sentience, variation, and transformation.

Using the ideas of semiotics beyond humans proposed by Eduardo Kohn (2013) and Shirokogoroff's idea of 'Tungus paths', in my research I seek to demonstrate how language flexibly responds to these changes in landscape through the adaptation of landscape terms and place names to new realms of navigation and experience and through considering them from different perspectives, in the same way as Ewenki interpret and create new paths. Although ecotopes and place names are

complex signs, which are absent in, for example, animal's semiotic systems, the view at the landscape from different perspectives is evident in the ways of naming different landscape objects and places.[3] It is also seen in the phenomenon of intertextuality, when there are several and equally significant referents of the same name.

2.6. Concluding Remarks

To conclude, this research aims to demonstrate that in order to understand a semiotic system, anchored in landscape, we need to examine the interpretants in their relation to both signs and objects (landscape features) among a particular group of people who share the same language code and experience. As sociolinguist Penelope Eckert (2016: 76-77) highlights, all signs are unstable at their nature. But people with similar experience and sharing the same ontology tend to have more similar interpretations of semiotic landscapes.

Yet the Ewenki case shows that there can be several layers of interpretation of the same signs, for example, place names in the same community. This fact challenges the key role of shared experience in the environmental perception, as even people with similar experience may utilise different strategies to talk about the same places. This phenomenon can be approached through the study of intertextuality, which implies that there are different contexts in which landscape and place names are framed. These contexts are not separate and well-defined layers, as it was previously assumed in the school of hermeneutic geography, but rather represent a layered simultaneity in terms of Blommaert's semiotics. It suggests that meaning is generated here and now to fit changing conditions, but this process is always culturally and linguistically grounded. In practice, it has resulted in multiple and equally relevant meanings of the same place names, depending on which contexts are highlighted by speakers, and leads to the fluidity of geospatial terms. Yet the interpretation always follows certain schemes or templates. This process can also be represented as semiotic assemblages:

[3] Cf. In Tlingit, animals name places. For example, the salmon people name landmarks used to navigate back to their natal streams (from personal conversation with Thomas Thornton; see also Thornton et al. 2018).

different parts of it come together to form a new meaning which is contextually appropriate. It is rational to suggest that even within the same linguistic groups one can find numerous assemblages.

In Ewenki communities, assemblages are related to practice, affordances and mobility (walking and journeying) as a spatial practice. This complexity allows us to understand how a wide range of landscape features, cultural patterns and practices, as well as relations with other beings are combined to form place names. This also makes it possible to explain how the change of one of the assemblages provokes changes in the whole system that, consequently, leads to the modification of place names and even landscape terms, which are more resistant. Sergey Shirokogoroff expresses this process well in the idea of the system of paths. He explains how different affordances in the taiga, mobility strategies and motivations in choosing a good place shape people's spatial behavior:

> "Fallen trees may often produce the same deviations of the path. When the fallen tree is rotten and reduced to nothing the new path may persist while the deviation of the path cannot be understood from a 'rationalistic' point of view. However, the old path may be restored if he deviation of the new path is essential and if the making of a new path would not require too much energy. <…> Yet, the path sometimes makes a deviation for reaching a place good for erecting a wigwam. A wigwam [*d'u* 'tipi' – N.M.] requires special material (wood) and the Tungus like to have their wigwams protected against the winds in winter and autumn, and open for winds in summer, against the insects. Moreover, the Tungus like to have before their eyes 'good scenery'. For finding such conditions the paths make either a deviation or a branching. Sometimes one can see no reason for such a deviation if one does not know that the place may be good and is sometimes used as a summer or winter station, or just to spend a night on the way."

The metaphor of path can be applied to the way Ewenki deal with place names and some landscape terms: they adjust the names to bring them in tune with the local surroundings and in relation to other beings.

This fluidity in meaning of the names and geographic terms is further explained by the fact that all signs are linked not only to objects but also to their interpretants, according to Charles Peirce. The object, the sign and the interpretant are in the constant process of meaning production and, as Scollon and Scollon demonstrate, they are simultaneously grounded in the material world and can be modified under the influence of external factors, including environmental changes. Since the links between objects and signs are not direct, the elicitation of the most salient features of the landscape and their classification, what ethnophysiography intends to do, is not always productive due to the fact that signs are always relational rather than essential. In addition, when it comes to place names as complex signs, they may depend on the referent, which in Ewenki society is not always a human being but can be an animal or a spirit. This conclusion, in turn, leads us to the necessity to integrate semiotic and interpretation approaches into the study of geographical nomenclature and place names in order to shift from entirely human-centric phenomenological dimension to a broader understanding of meaning embedded in geographical concepts.

3. Spatial Cognition, Landscape Terminology and Place Names: Review of the Literature

The aim of this section is to investigate how research on place names and the relationships between language and landscape and language and mobility have been defined and developed in the literature evolving over the past few decades. Key empirical research works dealing with the concepts of mobility, place, space and geospatial nomenclature in Indigenous languages, predominantly spoken in the North America and the Arctic, are the focus of this review. This section is structured as follows: I start by analysing literature on mobility and movement as related to language and navigation. In the 'Space and place in Indigenous languages' sub-section, the focus is on the conceptualisation of place and space and the meaning and use of these concepts in different Indigenous languages. The 'Language and landscape' sub-section deals with current research on ethnophysiography and landscape nomenclature. The last sub-section on place names considers research on the role of place names in Indigenous cultures, as well as the use of cartography in place names' mapping research projects. I do not review here the literature on methods and theory as these issues are addressed in more detail in the corresponding sections and papers of this thesis. In each sub-section, I begin by reviewing landmark works in the subject area, then continue with analysis of how these ideas are reflected in current literature on Indigenous people in general and the Ewenki in particular. I end with identifying a research gap and my potential contribution to the field.

3.1. Mobility and Movement

Over the past few decades, mobility has become one of the key themes in Indigenous studies. This tendency corresponds to recent trends in the anthropology and geography of mobility (e.g., Clifford 1992; Cresswell 1997, 2006; Cresswell and Merriman 2008; Vergunst and Ingold 2008), globalisation and migration studies (Appadurai 1996), and language superdiversity theory (Blommaert and Rampton 2012). Tim Cresswell (2006: 4) defines movement as being "made of time and space. It is

the spatialization of time and temporalization of space." He further posits that time and space serve as the context for movement and, at the same time, they are the product of movement. Research highlights that understanding of space and time can be distinct in some Indigenous epistemologies. For example, in her seminal research on modern Aboriginal spatial taboos, Nancy Munn (1996: 462) points out that "Aboriginal 'excluded spaces' can be understood as particular spatiotemporal formations produced out of the interaction of actors' moving spatial fields and the terrestrial spaces or bases of bodily action." She criticises the tendency to consider space as static and time as dynamic and shows that in Aboriginal cultures time and space are integrated into each other. Munn argues that this integrity is achieved though the experience of the "spatially and temporally situated actor." Andrey Golovnev (2016) further discusses the metaphor of life as movement or life journey in four different nomadic cultures: the Nenets and the Komi on Yamal Peninsula, the Chukchi in Chukotka, and the Sami on the Kola Peninsula. His field data collected over a long-term participant observation shows that being on the move is a normal condition in the tundra. He discusses different modes and techniques of movement and the ways they are embedded in everyday life and ontology of these four Indigenous communities. Golovnev (2004) argues that nomadic peoples 'divinise' the movement of important supernatural beings. Thus, in Nenets culture all the gods are portrayed as highly mobile.

Increasing mobility under the influence of technology leads to the phenomenon of shrinking of the globe in terms of both time and space. Researchers attempt to find new methodologies to capture the essence of mobility in a modern world. Anthony D'Andrea (2007: 4) proposes 'nomadic ethnography' as a new method which "embodies a transition from the Ptolemaic geocentrism of conventional anthropology to an Einsteinian perception of the relativity of placement and displacement in a globalizing world." He further suggests that nomadic ethnography implies that the researcher travels "with and like the native, sharing positions, perspectives and sites while on the move and throughout the uncontrollable and shifting circumstances of hypermobile field research" (Ibid.: 33). This method has long been utilised by those ethnographers who spend a substantial time with nomadic societies. As David Lewis (1976: 249) in his research on spatial orientation among the

Aboriginal People of the Western Desert Region in Australia notes, "[p]ractically all my field data were gathered on the move."

In Indigenous studies, this concern with globalisation is reflected in research on the technology impact on Indigenous people, their mobility patterns and engagement with the environment (e.g., Stammler 2005, 2009, 2013; Mertens 2016; Istomin et al. 2017). At the same time, research highlights adaptivity in the ways Indigenous people deal with technology. In my previous research on the incorporation of online space into the Ewenki people's ways of constructing and performing shared identity, I showed that the Ewenki forms of mobility are not limited only to physical movement (Mamontova 2014). People use Google maps and online groups to 'travel' together, communicate, revitilise the Ewenki language and coordinate joint activities.

Research on the mobility of nomadic Indigenous communities is largely informed by Tim Ingold's (2000) phenomenological understanding of practices of walking and dwelling (see Stammler and Beach 2006; Jordan 2011). This paradigm calls for documenting and analysing more nuanced, embodied practices of movement. Ingold has introduced such concepts as 'the dwelling perspective', 'the building perspectives', 'the temporality of movement', 'lines' and so forth. These concepts have become key in recent works on mobility practices among Indigenous people (e.g., Mazzullo and Ingold 2008 and other essays in the collected volume *Mobility and Place* by Bærenholdt and Granås 2008). In Ewenki studies, the temporality of movement is discussed by Vladimir Davydov (2011) in his dissertation on the Ewenki people living in the Republic of Buryatiya. He shows that even though hunters and reindeer herders have always adjusted to the various forms of spatial management designed for them by the state, they have tried to incorporate these forms into their own systems of spatiality. He demonstrates that the nomadic people settle neither in the village nor in the forest but are constantly moving between them. The intensive movement is represented both as a metaphor of life and as a daily practice. This deconstruction of the 'settlement-centered view' is further reflected in the way people utilise stationary structures in the settlement by turning them from static objects into movable ones.

In Ewenki studies, the mobility turn is reflected in the growing body of research dealing with the relationship between movement, the perception of space, and different aspects of culture, including subsistence and traditional knowledge (Anderson 2000; Davydov 2011; Safonova and Sántha 2010, 2011; Lavrillier 2011; Oeterlaar et al. 2013; Mertens 2016; Brandišauskas 2017; Lavrillier and Gabyshev 2017 and others). Many authors turn to Sergey Shirokogoroff's research (1928) on the Tungus system of orientation and his idea of the system of paths. Shirokogoroff points out that whereas the people living in the steppes used navigation skills based on the idea of orientation according to cardinal points, for the Northern Tungus it was more important to identify landmarks, the direction of the main water arteries, and well-known geographical places. The concept of 'known places' seems to be central for understanding how people perceive the landscape and construct their cognitive maps. It is also important for transmitting geographical knowledge and explaining a route to those people who have never seen the place before. Kirill Istomin (2011) in his research on the Nenets spatial knowledge also highlights that the people's movement is largely based on memorisation of 'known places', directions and distances between them. 'Known places' constitute a network helping people to move from one point of destination to another. As anthropologist Keith Basso notes, "placeless events are an impossibility; everything that happens must happen somewhere" (Basso 1988: 10). Indigenous people tend to name the most culturally important landmarks. In terms of navigation, the names for key landmarks are as essential as, for example, the terms for snow and ice (Aporta 2010; Magga 2006). Their key purpose of these terms is to serve as 'living geographic information system' for native speakers (Eades 2017: 22). Walking is one of the basic human techniques which combines embodiment, experience and practice (Ingold and Vergunst 2008).

The idea of movement in the form of walking is further discussed in a few works by Tatiana Safonova and István Sántha (2010, 2011, 2013) who draw attention to the concept of *manakan* in the Ewenki language that is translated by them as 'independence', 'solitude', 'making your own way'. The authors argue that this concept is the most significant for the Ewenki ethos, and the idea of territory constitutes the integral part of this ethos. An experience of *manakan* is overlapped with that

of the discovery of a new territory. Since nomadic life is a precondition of *manakan*, the land becomes "a part of the Ewenki mind" which Ewenki metaphorically call "walking mind" (Safonova and Sántha 2010: 91). The concept suggests that moving or walking is an important practice on its own and supports the resilience of Ewenki culture. Through walking together the Ewenki learn and transmit their cultural norms. The walking mind, therefore, "connects various aspects of Ewenki culture through practice and not through narrative" (Ibid: 94). Although this idea may seem attractive, and there is no doubt about the importance of walking as a way of discovering and examining the territory, there is no concept of *manakan* in the Ewenki language. It is probable that the authors mean the word *me:neke:n* 'myself', which they wrongly interpreted as 'solitude' and 'independence'.

Ethnographic research by Donatas Brandišauskas (2013, 2017) continues research on walking and movement. It is based on excellent first-hand material which the author collected during extensive fieldwork among Ewenki-Orochen in the Tungokochen District of Zabaikal Province. The key idea of the book (2017) is to show "how the anxiousness for luck permeates people's practical activities, discursive strategies, practices of place-making and spatial experiences in the taiga and the village" (Ibid.: 14). The author discusses a variety of strategies that the Orochen use to obtain and maintain luck through their interactions among themselves and with non-human beings. The notion of hunting luck is central in this research and is discussed throughout all nine chapters organised around one or a few main themes, such as, for example, subsistence, sharing, dwelling, walking, healing and so forth. A good deal of the book is devoted to the analysis of movement and dwelling in the taiga.

The concept of luck (*kutu* in Orochen) is one of the most complicated and there has not been any comprehensive research on this issue so far, although its importance is highlighted in research by Sergey Shirokogoroff (1935) and David Anderson (2011a). The reason seems to be grounded in the fact that, in order to understand how the Orochen and the Ewenki in general conceptualise luck, it is vital to consider a number of hard-to-grasp relationships between people, animals, spirits, environments and even objects. This task appears to be more problematic considering that luck is a subject which is not supposed to be talked about among the Orochen as it is surrounded by numerous

cultural regulations and prohibitions which must be learned largely through experience and involvement, not through communication. To approach this peculiar subject and, at the same time, not to break the local cultural norms, the author applied one of the most classical ethnographic methods, namely long-term participant observation. Over the course of seventeen months of fieldwork, he was a member of a few hunting families, living and moving along with other hunters in the taiga. Consequently, his ethnography is based on individual relationships with the community members who taught him how to understand different behaviours of animals and spirits, to hunt and deal with reindeer, to read footprints and nuances of landscape, to predict weather and so forth. The book is provided with a good glossary of Orochen and Russian terms as well as there are terms in brackets to a number of concepts and objects throughout the text. However, there are occasional misprints and spelling of the same term in different ways. Nevertheless, this is the only contemporary research on the concept of luck as linked to mobility (cf. Nelson 1983). In my research I attempt to further discuss this concept in order to show how the understanding of luck is bound to both movement and place naming.

In general, the literature on the Ewenki people and other Arctic and Siberian Indigenous communities shows there is a tendency to focus on the patterns and techniques of mobility, seasonal migrations, and the perception of movement but with limited attention to linguistic terms, including landscape nomenclature (e.g., Habeck 2006; Golovnev 2009; Jordan 2011; Dudeck 2012; Miggelbrinket et al. 2013). Changes in nomadic practices under the influence of first Soviet and then post-Soviet transformations are also in the focus of research (Dwyer and Istomin 2009; for Ewenki: Fondahl 1998; Anderson 2000; Sirina 2002, 2012; Povoroznyuk 2011). For example, Otto Habeck, who conducted his fieldwork among the Western Ewenki in the mid-1990s, argues that the fact that the majority of the Ewenki people had been moved out from the traditional habitat resulted in 'cognitive enclose', meaning the loss of "capability of making a living in a certain environment" (Habeck 2013: 169). Some Indigenous terminology for key cultural concepts may be introduced, but typically only randomly in brackets next to their literate language equivalents but without detailed

analysis or discussion. One remarkable exception is a recent study of Ewenki landscape terms and the people's ecological knowledge published by Alexandra Lavrillier and Semen Gabyshev (2017), which directly discusses the usage of geographic terminology in relation to people's cultural and economic practices, including nomadic activities. However, this research is restricted to data collected among the Ewenki of Yakutia (Sakha) and the Amur Region and is focused mainly on the ethnoecological dimensions of landscape terminology, leaving place names themselves and a comparative study of landscape terms unanalysed. I review this research in the next sub-section.

3.2. ***Space and Place in Indigenous Languages***

Whereas the notions of place and space are well elaborated in western thought (see Casey 1993, 1998; Benko and Strohmayer 1997; Janz 2007), there is lack research on the understanding of place and space in Indigenous languages. Yet there are important studies focusing on political space and spatiality among Indigenous peoples (see, e.g., Slezkine 1994 on the narratives and representation of Siberia as an alien space; Fondahl 1998 on traditional land tenure systems vs. post-Soviet land use reforms in Ewenki communities; Harris 2002 on making space and a postcolonial land policy in British Columbia; Parmenter 2010 on Iroquois spatial relationships within and beyond the Confederacy), symbolism of space and space as a social practice (e.g., Brookes 2008 on the metaphor of space as a common pot among Indigenous communities of Northeast; space as a network of relations, including sharing and ceremonies), the performance and construction of space and place through narratives and story-telling (Cruikshank 2005; Basso 1996; the use of the narratives as a colonial tool in the making of contemporary Arctic space in Cameron 2015), making place through Indigenous art and literature (Benterrak et al. 1996).

The difficulty in grasping the notion of space led to the development of participatory mapping. Over the past decades, Indigenous cartography has become a powerful technique in documenting places and defining Indigenous spaces (e.g., Brice-Bennett 1977; Belyea 1992; Bravo 1996; Woodward and Lewis 1998; Fox 2002; Aporta 2004, 2005; Chapin et al. 2005; Fox et al. 2005;

Herman 2008; Bryan and Wainwright 2009; Sletto 2009; Bryan 2011; Thornton 2012; Aporta et al. 2014). Research highlights the richness and distinctiveness of Indigenous mapping traditions, their unique ontological and epistemological characteristics, and the importance of providing Indigenous people with access to their cartographic heritage (see also Harley and Woodward 1992-8 on history of Indigenous cartography). However, Siberia and the Russian North remain a blind spot in Indigenous cartographic research.

Several collected volumes discussing an anthropological understanding of place and space have been recently published. One of them is 'The Anthropology of Space and Place' by Setha Low and Denise Lawrence-Zuñiga (2003). The editors pay attention to the recent shift towards the rethinking and reconceptualising of our understanding of culture in spatialised ways. This book combines classic and contemporary thinkers in social anthropology under six thematic categories: Embodied Spaces, Gendered Spaces, Inscribed Spaces, Contested Spaces, Transnational Spaces, and Spatial Tactics. Among them is Pierre Bourdieu's analysis of the Algerian Berber house. Bourdieu shows how space is produced through practice and the system of structuring dispositions which he calls *habitus*.

Bourdieu's work stimulated research on vernacular architecture, which is also a promising field in relation to Indigenous spaces. In the collected volume 'Reclaiming the Forest. The Ewenki Reindeer Herders of Aoluguya' by Åshild Kolås and Yuanyuan Xie (2015), there are two papers dealing with the relations between vernacular architecture and space. T. Ge (2015) explores the role of the reindeer in the Ewenki livelihood through the concept of *urilen* 'campsite'. He argues that, despite the ban on hunting handguns, the Ewenki succeeded in changing their identity from hunters to reindeer herders. This shift has even brought them some economic benefits and inspired new norms of mobility. He considers *urilen* as a core social unit of the Ewenki community that has long played a 'glue' role in keeping the nomadic style of life alive. R. Fraser (2015) examines 'traditionality' vs. 'modernity' discourse through his research on a *djiu* 'tent', in relation to its politicised symbolic version promoted by the authorities. Applying a phenomenological approach, the author demonstrates

the irrelevance of simplistic division between traditional and non-traditional architecture by shifting the focus from "the walls and hearth of the tent to the ways in which the Ewenki themselves order the world around them" (Ibid.: 149). This allows him to reconsider all kinds of dwellings, including the houses for hunters, as vernacular. Women's roles and spaces in the tundra are analysed in Zoia Vylka Ravna's (2018) research on *maya*, Nenets traditional dwelling. She shows that the construction and purpose of *muya* have not changed much. Her research demonstrates that *maya* is an unchanged symbol of Nenets culture which is strongly associated with the notion of home and security.

Most of current research on space and place among Siberian Indigenous people deals with the issues of interaction between people and non-human beings, so-called 'sacred landscapes', and particular places of cultural and spiritual significance (for Ewenki see Anderson 2000, 2011a, 2011b; Ssorin-Chaikov 2001; Ermolova 2007; Oeterlaar et al. 2013; Fondahl 2018. For other Siberian indigenous groups see Halemba 2006; Vitebsky 2005; Jordan 2011; Willerslev 2011; Ulturgasheva 2016, etc.). The other key issue is the creation of administrative boundaries and linguistic, gender and educational shifts in the Soviet period and after the *perestroika* (Vakhtin 2001; Ssorin-Chaikov 2003; Bloch 2004; Hirsch 2005; Donahoe et al. 2008; Povoroznyuk et al. 2010; Humphrey 2011), as well as research on land forms and Indigenous space in a legal perspective (Fondahl 1996, 1998, 2005, 2013).

Similarly, my previous research (Mamontova 2013, 2016a) was devoted to the relationships between the Soviet state and the Ewenki people. Through the analysis of archival material, interviews and oral history, I examined how the language and nationality policy shaped the sociolinguistic landscape in Central Siberia and contributed to the creation of 'Ewenki nation' within the evolutionary paradigm of that time, which determined the early Soviet policy in relation to Indigenous minorities. I also examined the relationships between identity, language, and 'clan organisation' among Ilimpii Evenki, one of the territorial Ewenki communities, and analysed how these relationships formed and changed over the course of the twentieth century under the influence of Soviet policy, administrative reforms, and local discursive practices. I also investigated how the

names of the former administrative clans of contemporary Ilimpii Ewenki started to be associated with language communities and used to mark dialect boundaries.

At the same time, there are only a few works on how the notions of space and place are addressed in Indigenous languages. For example, Iain Davidson-Hunt and Fikret Berkes (2010: 235-236) define place as the spatial and temporal dynamics. Places are remembered as they are encountered "along the paths of remembering." They emphasise that the Anishinaabe concept of *akii* 'land' defines not only the land surface but also a set of organisms, it can refer to a bounded territory, or it can also mean the life around (Ibid.: 238). Some Indigenous communities may possess very complex definitions of place and space. For example, Brown (2008: 169) writes that in Tzeltal *places* can be linguistically expressed by using the word *y-awil*, a possessed nominal meaning 'its-place.' This word is only used in relation to stationary objects. However, things which can move around, including people, animals, cars, do not have a *y-awil,* unless these objects are spatially enclosed, for example, people in the house has a *y-awil*. Interestingly, trees, mountains and rivers do not have a *y-awil* as well. Brown argues that this "suggests that entities labelled by place names, which do not have a *y-awil,* are not conceptualized as places (in the sense of *y-awil*) but rather as objects in the world" (Ibid.: 169). Speech about places is organized in this community around the cognitive template of 'uphill/downhill/across', which is a cultural construct with an absolute position. In other words, speakers have to orient themselves in relation to this template when they talk about location. Brown highlights (Ibid.: 180) that one "cannot talk in Tzeltal about where things are or where they are moving through the landscape without reference to this template."

Some researchers (e.g., Smith and Mark 1998a) claim that there is a difference between geographical entities and non-geographical entities, also known as 'first-order entities'. The former are not located in space but constitute part of the landscape or space itself. Gabriele Cabitz (2008) investigates this distinction in Marquesan. She compares the use of the prepositions 'i and 'io which mark nominals for location, goal and direction towards a goal. These prepositions are present in different lexical classes which are different in size. Her research shows that in Marquesan 'io-marked

geographical entities are conceptualised as things rather than places. For example, such terms as *vao* 'interior of island', *motu* 'island' and *moana* 'far out at sea' are marked with 'i. These concepts represent vast spaces which boundaries are hard to perceive, hence, they are unlikely to be classified as objects or things. Cabitz concludes that landscape features have an ambiguous ontological nature in Marquesan speech, "but factors such as size and the ability to perceive boundaries of these entities do play a role when speakers mark landscape terms either as location-denoting nominals or nominals denoting first-order entities" (Ibid.: 224).

Nick Enfield (2008) discusses the complexity and specificity of linguistic categorisation which is overlooked in research on categorisation in general. In his research on geographical features in Lao, Enfield shows that a landscape term is not only a reference, but it functions to provide "associated ideas into social discourse" about how the corresponding landscape object is utilised. He considers words' meaning as a social construct and focuses on how cultural practices affect the structure of the language. Enfield argues that any linguistic category is a unity of a semantic category and a phonological one. They both link to a symbolic function. This makes the links between words, their meanings and corresponding landscape features complex. The author hypothesises that "the very wide range of cultural activities which entail direct interaction with the geographical environment result in a richly culture-specific understanding of the landscape. It is a rich ethnography of the landscape, waiting to be done" (Ibid.: 245). Renee Paulani Louis (2011) in her research on Hawaii place names and cartographic traditions embraces senses into the system of knowledge about places and cultural landscape. This suggests that understanding of place is not limited to practices and linguistic forms but also includes the sensual dimension. Sensuous references are also embedded in landscape terminology (cf. Thornton 2008).

Some attempts to conceptualise space and place through Indigenous terminology have been made using examples of Siberian languages. For example, Alexandra Lavrillier, who works among the Ewenki people in the Amur Region and in the south of Yakutia, writes that for this community the taiga is an organised and structured *space*. She highlights the distinction between *beyechi*

'domestic space' and *kanula* 'wild space' that helps people to arrange their nomadic practices and build up relationships with the spirits (Lavrillier 2011). However, while first part of this statement is tenable, the distinction fails to take into account the multiple nature and relationality of each *space* in terms of its ethno-ecological and ontological context. Most importantly, the notion of space in its relation to the taiga needs further clarification. In addition, some ethnographic observations, including my own, show that the Ewenki people do not make such simple distinction between domestic and wild parts of the forest but rather flexibly engage with animals through complex relationships of partnership and sharing.

Thus, Donatas Brandišauskas (2013) discusses the notion of *bikit* in Ewenki-Orochen that is literary translated as 'the place of being'. He reports that each animal has its own *bikit.* Hunters gradually learn about different *bikit* by examining tracks and dwelling places. He writes that "tracks might also reveal an animal's gender, age, and activity, and inform us where a particular animal stays most of the time while grazing, resting or drinking water. Tracks can show how an animal prefers to walk and if it is a careful animal. Tracks might also bring information about how long an animal has lived in an area, whether it resides in the area or is just passing through" (Ibid.: 13; cf. Shirokogoroff 1935). In this paper, Brandišauskas also notes the importance of certain landscapes for human and animals. For example, the open place known as *kever* 'open field of grass hummocks', which is located near the reindeer camp, is crucial for observing animal movements and predict their routes of migration.

The complexity of the concepts of space and space in Indigenous languages, their newness and distinctiveness, resulted in the development of ethnophysiography. I review some key works in this field in the following sub-section.

3.3. ***Language and Landscape***

The notion of landscape has as many connotations as semantically related concepts of place and space (see Wylie 2007). In 'Landscape: Between Place and Space', Eric Hirsch (1995) notes that the

Western representation of landscape is an expression of a foreground / background relationship. He further examines this duality by focusing on the relationship between the subject-position and the non-subject-position of space in relation to landscape. Stephen Daniels and Denis Cosgrove (1988: 8) compare landscape with a "flickering text displayed on the world-processor screen whose meaning can be created, extended, altered, elaborated and finally obliterated by the merest touch of a button." Alfred Gell (1985) highlights that there is no absolute landscape but a series of moments or perspectives which form what we understand as landscape. John Wylie (2007: 7) points out that landscape is not only the phenomenon itself but also our perception of it. He argues that landscape "takes shape within the realm of human perception and imagination" (Ibid.). If so, landscape is not only a combination of physical features but also our perception and understanding of these features. Tim Ingold (2000) defines landscape as dwelling and an embodied practice that should be directly experienced rather than seen from a distance.

Abovementioned research, however, has not addressed the question whether it is possible to talk about the perception of landscape as a universal category. David Mark with colleagues (2011), who propose to look at landscape as a linguistic domain, have attempted to answer this question from a perspective of cognitive anthropology and ethnophysiography. They posit relativity and relationality of taken-for-granted terms and concepts of landscape features and demonstrate how variable they can be cross-culturally. This also suggests that humans may dwell in the same landscape and have a similar experience but cognise it differently (e.g., Holton 2011a). David Anderson with colleagues (2017) further note that most European languages lack corresponding vocabularies to express evocative notions of place with multispecies perception. Ethnophysiography proposes to look at landscape from a non-western point of view and through languages which encode how people perceive the environment.

Most of the existing literature on categorisation and lexicalisation of landscape features has been based on the material collected among the Indigenous Peoples of North of America that can be traced back to the pioneering works of Edward Sapir (1912), Alfred Kroeber (1916) and Franz Boas

(1934, 1940). The number of publications discussing the landscape-language relationships using other examples is also growing (e.g., see papers in Johnson and Hunn 2010 and Mark et al. 2011b; also Williams et al. 2012; Burenhult et al. 2017; Feng and Mark 2017). The legacy of pioneering research on the conceptualisation of landscape among North American Indians is still reflected in modern research on language and landscape in American traditions of language and landscape research. For example, Gary Holton shows how differently two nomadic hunting Athabaskan (Na Dene) and Inuit language communities categorise the same landscape and utilise place naming strategies (Holton 2011a, 2013). This shows non-universality and possibly niche-construction in selection and use of landscape terms and concepts in the same environment. The Athabaskan means of space conceptualisation seems to be close to that of the Ewenki people, as the two groups are highly dispersed and have a structurally similar riverine landmark orientation system. In his research on Athna, one of the Athabaskan communities, James Kari (2011) demonstrates that their geography represents a web of interconnected place name networks. The content, structure, and distribution of the place names have similar features within the whole language area. They serve to facilitate memorisation of places, to mark travel corridors and boundaries, and to represent land use agreements (see also Kari 1989, 1996). Among other most important research on North American Indigenous cultures are works by Eugene Hunn (1996) on Sahaptin , Ian Davidson-Hunt and Firket Berkes (2010) on Ojibway, Thomas Thornton (2008, 2011, 2012) on Tlingit. They are reviewed in the place names sub-section.

The interest in cross-cultural studies of landscape perception, cognition and lexicalisation resulted in joint research carried out by a group of international specialists in Indigenous languages at the Max Plank University. Linguistic groups covered in this research include the following: Tzeltal (Mayan, Mesoamerica), Jahai (Mon-Khmer, Malay Peninsula), Marquesan (Austronsian, Polynesia), Lao (Tai, Mainland Southeast Asia), Ye´lıˆDnye (isolate, Island Melanesia), Low-land Chontal (isolate, Mesoamerica), Seri (isolate, Mesoamerica), Kilivila (Austronesian, Island Melanesia), and ≠Akhoe Hai//om (Khoisan, southwestern Africa). The results of the project were published in a

special issue of *Language Sciences*. Research leaders Niclas Burenhult and Stephen Levinson (2008) conclude that their "cross-cultural sample suggests there is reason to be cautious about the integrity of landscape, at least as far as generic terms are concerned. It may be a domain at least in some languages, whereas in others landscape is an obscure concept." Stephen Levinson (2008b) further argues that it appears that perceptual salience is not the most important and universal factor in identifying landscape features as it was believed before. His research on Rossel Island, Papua New Guinea, demonstrates that of three possible motivations for categorising landscape features, namely perceptual salience, human affordance, and cultural models, the latter two factors are predominant. Thus, despite a rich set of seascape terms in the Ye´lıˆ Dnye language, there is no concept of 'sea' as it is known in, for example, English. Instead, people utilise a number of terms to define depth, type of bottom, distance from land, and so forth.

The interest in cross-cultural research on landscape and language led to the appearance of research on landscape from phenomenological and ontological perspectives (see Smith and Mark 2001, 2003; Janz 2011; Turk et al. 2011; Burenhult et al. 2017). Two edited volumes (Johnson and Hunn 2010; Mark et al. 2011b) mark the development a distinctive approach to landscape and language, blending together linguistics, language documentation, and the phenomenological turn in social anthropology and human geography. This approach is more holistic and not limited to merely linguistic analysis. I will start by reviewing 'Language ecology. Concepts of Biotic and Physical Space' and briefly discuss the key ideas presented in these volumes and their significance for the field of language and landscape studies.

Using an example of the Kaska Dene, one of the Athabaskan languages spoken by mobile hunter-gatherers in the subarctic interior of western North America, Leslie Johnson (2010a, 2010b) reveals that people's sense of motion is highly embodied in their language. Johnson uses the notion of cultural landscape by which she understands not only the land but also related Indigenous cosmology, history, people's environmental values and customary activities on the land. Together they form a sum of the relationships between humans and the environment in this community

(Johnson 2010a: 204). She discusses a few categories of ecotopes referring to wetland terms, vegetation terms, terms related to landforms, key places related to hunting. Johnson shows that these terms are integrated in the Kaska people's seasonal activities and way of life and should be considered as part of daily activities. She concludes that Kaska knowledge of the land is rather embodied in the landscape than cognised. Iain Davidson-Hunt and Fikret Berkes (2010) emphasise the coherence of living forms on the land in the geographic ontology of the Anishinaabe, one of the Ojibwa groups in Ontario. They highlight that people link the history of land to place names which provide a mental map of the land. They argue that place names represent "the fixed nodes" upon which people create their spatial pattering (Ibid.: 229). Catherine Fowler (2010) introduces rare archival material collected by Isabel Kelly in the 1930s among the Southern Paiute and Chemehuevi communities in the Grate Basin region. She analyses more than a thousand place names and their importance for the modern Indigenous communities. Her research exemplifies how silent archival data can be used in current research on place names in Indigenous communities. In addition to North America, the volume contains diverse ethnophysiographic data from other regions, including West Africa, South America, Greenland and Indonesia. Most of the authors emphasise the importance of human experience in reckoning diverse environments and point out that standard modes of classification of taxonomic features are rather misleading. Thus, Roy Ellen (2010) examines forest types among the Nuaulu in Seram, Maluku, eastern Indonesia. He argues that Nuaulu representation of forest is nontaxonomic and is based on the intersection of different classificatory dimensions. Ellen further argues that whereas people's knowledge of the local habitat can be rich and profound, formal lexical codifications are "the least satisfactory way of organizing that knowledge" (Ibid.: 133). He suggests that personal experience and engagement with the environment are more important for people that the formalisation of their knowledge. Ellen concludes that it is likely that people "lexicalize their environment more flexibly and with more limited shared encoding" than it can be demonstrated through systematic categorisation.

The complexity of the links between perception, practice and conceptualisation of landscape features is further examined in ‘Landscape in language: Transdisciplinary perspectives’ (Mark et al. 2011b). Most of the papers take a phenomenological view of landscape. The central concept of ‘landscape’ is discussed in terms of its applicability to research on Indigenous languages. For example, Brian Murton (2011: 94) argues that the term ‘landscape’ as it is used in Western epistemology is inappropriate in Maori who see their country as a net of interconnected place names rather than observe it from elevation. In contrast, the term *dugu* in the Manika system of landscape categorisation appears to represent a holistic concept of geographic reality that can be compared with the western notion of ‘landscape’ (Duvall 2011: 134). The idea of landscape as a storied place is further developed in Gary Holton’s (2011b) chapter on landscape in Western Pantar, eastern Indonesia. He shows the interconnection of place names, verbs of motion and spatial terms in the local geographic discourse. One of the striking features of Western Pantar and related languages spoken in the area is the absence of the generic word for ‘river’. Holton suggests that in this case we may deal with the conceptualisation of landscape which is embedded into the language family. He argues for more careful documentation of landscape documentation which is not limited to a simple elicitation of terms but includes the study of landscape ontologies.

Despite growing number of publications on language-landscape relationships, the Russian Arctic and Siberia remain unexamined. Over the past decade, only a few papers devoted to the relationships between language and landscape using examples of Siberian Indigenous minorities have been published (e.g., Istomin 2011 on Komi and Nenets landscape terminologies as related to movement; Lavrillier 2011; Lavrillier and Gabyshev 2017 on Ewenki terminology). Research by Lavrillier and Gabyshev appears to be the first comprehensive research on landscape and ecological terminology using Siberian linguistic and ethnographic material. Alexandra Lavrillier is a Siberian anthropologist specialising in Ewenki culture (Lavrillier 2011, 2013; Lavrillier et al. 2016, etc.). Her co-author is the Ewenki hunter and reindeer herder Semen Gabyshev, who is one of the participants of the BRISK project (Linking the Scientific Knowledge on Arctic Change to That of Peoples:

Vulnerability and Adaptation of Societies and the Environment). This research represents the results of a long-term fieldwork carried out by Lavrillier in Yakutia and the Amur Region in the period from the 1990s to today. The precise location of the field site is impossible to establish as the authors do not specify in which settlements they conducted research and how many people took part in their project. In addition, the authors point out that all Ewenki texts were recorded in the local dialects, but the dialects are not identified in the text either. This further makes it impossible to locate the site.

The monograph examines many aspects of the Ewenki traditional ecological knowledge, which remains practically unexplored due to its complexity and the lack of long-term research. Structurally, it consists of two chapters: 1. The system of Ewenki ecological knowledge and its typologies 2. Observing and predicting norms, anomalies, and transformations.

The first chapter deals with traditional calendar and discusses the typologies of landscape, clouds, winds, snow types and vegetation. The authors also examine a huge number of Ewenki landscape and other terms. The terms are accompanied by a photograph or drawing and provided with short texts in the Ewenki language with translations in Russian and English. Yet there are some inconsistencies between the original Ewenki texts and their translations. The texts in Russian and English are rather an expanded translation or commentary to what is said in Ewenki.

I find the authors' interpretation of the terms problematic. Many of them are translated in the monograph as if they were nouns and classificatory terms. However, most of the terms considered in the monograph belong to adjectives, participles and sometimes verbs. For example, the word *dullen / dulcha* is translated as 'spring warmth from the sun in clear weather that makes the snow melts' (Ibid.: 175). This word is derived from the verb *du:l-mi* 'to warm' (about the sun) (Vasilevich 1958b: 124). However, *du:llen* (the third person singular verb in the past tense) and *du:lcha:* (past tense participle) should be translated as 'the sun has warmed'. This term is used not only in relation to spring warmth, but in a wide variety of contexts. Another example: the term *oku* or *eku:* 'warm', 'hot' is applicable not only to summer temperatures, but also to objects. *Inginye* or *ingine:* is an interjection meaning 'cold!', whereas *ingini:*, as the authors write, means 'cold weather' indeed. These are two

different morphological categories. *Kurang* is translated as ‘heat wave in the summer’. However, this word primarily means ‘drought’ and as an ecotope may refer to a burn-out place. Moreover, these terms can be used in different contexts. They are not regarded as classificatory terms. Similarly, in the landscape terminology section, some words are not specialised terms but rather descriptive adjectives. For example, *boltoko* ‘round’ does not refer to a particular type of the elevation but rather signifies its shape. Therefore, here we deal with descriptive vocabulary for different natural phenomena rather than specialised terminology.

In addition, some presented ‘typologies’ cannot be regarded as typologies. For example, one of the sections examines how the Ewenki link environmental and climatic changes with the weather and how the ability to predict the weather affects hunting and reindeer herding activities. This issue is also discussed throughout subsequent sections on cloud typology, precipitation and winds. However, in my opinion, the types are not presented in these sections. Thus, in the ‘cloud typology’ section, there is only one Ewenki word *tuksu* ‘cloud’ and its variations denoting different size of clouds rather than their types (Ibid.: 203). These words are followed by such concepts as ‘rainbow’, ‘smoke from fire’, ‘fog’ and some others. In the section about precipitation, ‘lightning’ and ‘thunder’ are listed along with rain. Again, these are not types, but rather separate words bound together. The choice of the terms is not discussed at all.

The typology of snow, presented in the first chapter, is more detailed. The authors highlight that Ewenki terms for snow and ice are hard to distinguish due to a number of ‘transitional’ types between snow and ice. The presented classification of snow and ice partially overlaps that proposed by L. Grenoble (2011), although not cited in the monograph. Yet it contains such categories as, for example, ‘the type of snow according to its physical transformation’, ‘according to the noise it produces’, ‘its transformation by reindeer’ and so forth (Lavrillier and Gabyshev 2017: 245). The authors note that understanding of the Ewenki snow typology is impossible without the knowledge of the Ewenki language. They suggest examining unfamiliar words related to snow in Ewenki narratives, in folklore texts, and to study this vocabulary through direct observation in the taiga. At

the same time, the authors emphasise such a phenomenon as the temporality of terminology: Ewenki can remember the terms only during the seasons in which they use these terms. The authors also point out that for nomads the snow cover is an open book in which they can 'read' the traces of animals. In this regard, the authors propose to consider snow as a cultural landscape. Claudio Aporta writes about this phenomenon using the example of Inuit (Aporta 2004, 2005). Lavrillier and Gabyshev recorded twenty five terms for snow. However, most of them are not special terms but rather combinations of the Ewenki word *imanna* 'snow' with an adjective signifying its depth or colour. This mirrors the Eskimo words for snow controversy (see Krupnik et al. 2010).

To conclude, even though this research is a good introduction to Ewenki ethnoecology and traditional ecological knowledge, it is not a consistent or reliable source for Ewenki landscape terminology.

3.4. ***Place Names and their Relations with Landscape Terms***

Place names have long been a focus of linguistics, social anthropology and geography. Research highlights the important role of place names for Indigenous people around the globe (Basso 1996; Hunn 1996; Thornton 2008; Fowler 2010; Kari 2011; Paskvan 2011; Clark et al. 2014; Cogos et al. 2017). Keith Basso points out that along with narratives they even serve as a "spatial concept of history" to Indigenous people (Basso 1996: 34). These collective forms of narratives help people make sense of their experience, identity, and ensure the continuity of a community (Kirmayer et al. 2011: 84). Moreover, some linguistic forms, for example, dialects, can evoke the meaning of places and become a kind of markers of local identity shared by the members of a speech community (see Johnstone 2004). Thomas Thornton (2008) also emphasises the leading role of language in place naming traditions. In his research on Tlingit place names he posits that "place is not only a cultural system but the cultural system on which all key cultural structures are built" (Ibid.: 4). He distinguishes four elements which organise space and establish relationships between humans and

places: social organisation, language, material production, and ritual processes. Place names are embedded in landscape and connected to ecotopes (Hunn and Meilleur 2010).

Place names are also related to mapping practices and Indigenous cartography. On a map they help to understand visually how Indigenous communities represent and produce space. In their research on place names among the Saami people, Sarah Cogos with her colleagues (2017) argue that in the past, "the name was the map," meaning that place names served for navigation and orientation. Research points out that place names "are not only 'narrated maps,' they constitute 'mental maps,' drawing a cultural landscape by telling a story within the series they form together." Similarly, Keith Basso (1996) in his seminal book on Apache place names argues that the people 'map' their land with names. The names provide people with cultural templates on how to behave properly, speak about and deal with and in named places. Some researchers successfully combine Western mapping approaches and technology with Indigenous knowledge. For example, Guy Bordin (2017) in his research on Inuit toponyms referring to other-than-human beings demonstrates that mapping can reveal a lot about the distribution of these toponyms and their spatial and cultural meanings. He shows that these toponyms represent the other nature of space, which he compares with the space commonly visited by humans and animals.

At the same time, the use of Western cartographic traditions in Indigenous place names studies has long been considered problematic. Cartographic meaning is assigned and re-established by choosing what should be represented on a map and how. Researchers call for the critical rethinking of cartographic legal strategy and emphasise the importance of taking into consideration political and economic processes and implications behind mapping (Wainwright and Bryan 2009). This concern is epistemological in nature and implies that any map is not free from power (Harley 1988). In addition, as geographer Tim Cresswell (2010: 19) highlights, it is important not to take for granted the perceived prioritisation of more rooted and bounded notions of place, especially in nomadic societies with a broad and varied area of habitat and diverse relations with the environment. This perception is reinforced through mapping.

In contrast, Robert Rundstrom (1991), a specialist in Inuit cartography, argues that postmodenist approach to indigenous cartography can lead us to nihilism that implies "nothing else than the end of the map." He points out that although any map is ideological, it is not necessary to abandon cartography as a colonial project at all. Unlike some postmodern geographers, who consider maps as texts, Rundstrom proposes to have a look at cartography as a dynamic process and refers to is as a 'process cartography'. He writes, "Process cartography consists of two concentric ideas. It situates the map artefact within the mapmaking process, and it places the entire mapmaking process within the context of intarcultural and intercultural dialogues occurring over a much longer span of time" (Ibid.: 6). Within this approach the focus is made on the process of map creating rather than the product of this process. He develops this idea further in his paper on Inuit cartography arguing that for the Inuit people, known for their highly accurate maps, the act of making a map is more important that the product itself. This is the reason why they may easily throw the maps away after the act of production is over. Rundstrom (1990) explains this fact by using the concept of mimicry. He states that for the Inuit drawing is an important form of environmental mimicry and mapping is "an innately intracultural action thus became a significant means of constructing accurate map artefacts for intercultural communication" (Ibid.: 166).

Along with mapping, (re)naming has long been a tool of creating spaces and establishing boundaries (see, e.g., Edlund's 2018 research on Saami place names in Dorotea, Sweden). Michel de Certeau (1984: 130) notes that "every power is toponymical and initiates its order of places by naming them." The relationships between the documentation of place names, mapping and state are often ambiguous and complex (Turnbull 2000; Wood 2010). In this regard, human geographers emphasise the importance of shifting from research on the rootedness of places and place names towards "understanding place naming as a contested spatial practice" (Rose-Redwood et al. 2010: 455). This is especially relevant to Indigenous place names. Some of them are not bound to certain landmarks but rather represent networks and are connected to rich story-telling traditions. The shift from maps to mapping is a promising topic to explore.

In Russia, toponomastics was one of the major fields at the Soviet Academy of Sciences. Research on place names was mainly focused on documenting and linguistic analysis of toponyms, their etymology and classification. This tradition continues in current linguistic research. Tatyana Davydova (2013) in her dissertation on the history of toponymical research in Russia defines four periods: 1) Pre-scientific (the 18th century): in this period the first accounts on the toponymy of the Indigenous peoples of Siberia and the Far East appeared and the first attempts to develop methodology for collecting and systematising place names were made. 2) The period from the 19th century to beginning of the 20th century: toponymic studies were developed as part of historical and philological research; 3) The Soviet period: toponomastics became a scientific field, with a distinct methodology and research schools. It functioned not only as a complex field of knowledge, but also as an auxiliary historical discipline. In this period, several research centers and schools were established in St. Petersburg, Moscow and Tomsk. 4) The post-Soviet period: the development of historical toponymy as part of complex research on geographical names. Therefore, the Russian school of tomonimics remains within a historical paradigm.

Among scholars who significantly contributed to the collection and analysis of toponymic data was Andrey Dulzon, the founder of the Tomsk school of toponomastics (on the legacy of Tomsk toponymical research school see: Gritsenko 1974; Osipova 1976; Galkina and Osipova 2000; Vajda 2018). Dulzon carried out numerous field research projects among the Indigenous communities of West and Central Siberia. One of the results of his work was the establishment in 1959 of the research laboratory at Tomsk Pedagogical Institute aimed at studying place names. Dulzon with his students established a card index of Siberian toponyms which contains 342,000 place names in different Indigenous languages, including Ket, Selkup, Shor, Ewenki and others (Gritsenko 1974). The other significant contribution to the field of toponomastics was the development of a complex methodology allowing to examine substrate toponyms in Siberia (Dulzon 1950, 1959, 1962, 1969). From the 1970s on, there were published a number of collected volumes of ‘Language and Toponyms in Siberia’, covering a wide range of issues, including place names’ classifications, methods of data collecting,

research on toponymical affixes and so forth. Dulzon's approach helped to clarify the distribution and migration of Indigenous populations in Siberia in the past. He examined several ethnolinguistic areas in Siberia and analysed hydronymic areas among the Ket people and some extinct Ket-speaking populations (1959). On the bases of Dulzon's research, Edward Vajda (2010) established the genealogical relations between the Yeniseian language family and American Na-Dene.

Despite its significance, toponymical research in Russia has largely been concentrated on the linguistic aspects of place names. Similarly, despite a wide distribution of Ewenki toponyms in Siberia, the literature on this topic has been narrow. Research focuses mainly on linguistic properties of toponyms (Vasilevich 1958, 1971; Yurgin 1970; Gritsenko 1971; Simonov 1976; Boldyrev 1978) and highlights the importance of names for the community (Sirina 2012), overlooking the process and politics of mapping, as well as the engagement with the names in the Ewenki communities and the production of new names. In my research, I intend to fill this gap by focusing on the ethnography of naming and examining Ewenki place names in the light of recent phenomenological and semiotic works, as well as by using ethnophysiography as both a method and a theoretical framework.

3.5. ***Research Gap and Contribution to Literature***

Geographer Tim Cresswell highlights (2010: 19) that when it comes to the notion of place, it is important not to take for granted "the perceived prioritisation of more rooted and bounded notions of place as the locus of identity." Thomas Thornton (2008: 7) also points out that the literature on Indigenous peoples has tended to emphasise a contrast of intimate relations between Indigenous communities and their land versus more mechanistic ones in Euro-American societies, neglecting the unity between and diversity within the two groups. In fact, Indigenous people may have very diverse patterns of land use and attachment. These patterns are also mirrored in place names.

In Ewenki communities place names are bound to the notion of mobility. When anthropologist David Anderson questioned his Ewenki informants about the location of their original lands, they told him that in the past people "travelled everywhere" (Anderson 2000: 133–135). It seems that the

idea of moving is more important for the Ewenki people than that of being attached to a particular area. This idea is not limited to physical travelling but includes the understanding of the environment as mobile as well. I argue that in nomadic societies, such as the Ewenki people, the focus of research should be shifted from considering certain places as static. This inevitably leads to the necessity of a more nuanced understanding of how the relationships between language and place (place names) and language and landscape (landscape terminology) form and change.

At the same time, in most of the works on Indigenous people the conceptual understanding of movement as linked to the linguistic forms of representation of space and place is missing. Similarly, in place and space studies there is a tendency to see Indigenous names as an alternative form of history, i.e. static in nature. As Keith Basso (1996: 7) highlights, long before the advent of literacy, "places served humankind as durable symbols of distant events in as indispensable aids for remembering and imagining them—and this convenient arrangement, ancient but not outmoded, is with us still today." None of the above reviewed works examine the patterns of mobility and spatial knowledge in relation to landscape terminology and place names, especially in the light of recent ontological and phenomenological theoretical approaches developed within ethnophysiography and semiotics, which study how signs and meaning are produced and interpreted (see 'The conceptual framework' of this thesis).

In addition, in the literature on Indigenous people, there is a tendency to select and examine the most salient features of landscape and consider them as static. Burenhult and Levinson (2008b: 137) point out, "landscape terms for the most part seem to denote objects – very large, unmovable objects, Immobilien in fact." What has been ignored is that landscape objects and the environment in general are prone to transformation. Transformation here is understood not as a negative process but as a normal condition of any ecosystem. Hence mobility can be viewed more broadly as an ability to change and modify. This holistic understanding of mobility is reflected in a number of current research works, both in human geography (Cresswell 2010) and in the sociolinguistics of nomadism (Britain 2016), but is only scarcely present in place and space studies and ethnophysiography (cf.

Harris and Holton 2018 research which acknowledges change in Lower Tanana place names). Therefore, it seems essential to approach this issue by considering mobility as part of landscape cognition process: it is not only the movement of people and other beings facilitates the change in the way people cognise and conceptualise the landscape, but also the landscape changes that bring about changes in landscape terminology and place names.

4. Material, Methods and Data Analysis

This research is qualitative in terms of the methods of data gathering and analysis with some quantitative statistics based on empirical linguistic data from Ewenki language and geography studies. It is multi-sited research as I undertook my fieldwork in several Ewenki communities separated from each other by thousands of kilometres and utilised a variety of data from different time periods. Initially my intention was to find out whether there is any difference in terms of how the Ewenki people living in diverse surroundings use landscape concepts and place names. In order to examine differences and similarities, I pursued ethnographic field research in and used multiple data from more than one geographical location and time period.

As the ideologist of multi-sited ethnography George Marcus (2005) writes, the impulse of such research is to examine the subject that is developing: "such research pushes beyond the situated subject of ethnography toward the system of relations which define them." I intended not only to examine landscape concepts but also to consider them as a part of the complex relationships between humans, places, landscapes, animals and spirits. I also tried to present these relationships as fluid and multi-layered, and to show that the landscape terminology and place names similarly respond to this fluidity by varying in meaning.

This research may also be defined as historical and comparative as I used archival material stored at the Museum of Anthropology and Ethnography in St. Petersburg along with current field data. Yet ethnographic fieldwork was still a core method of this research. Fieldwork included participant observation, informal and semi-structured interviewing and writing field notes. For this thesis, I conducted two field research among the Ewenki people: one in the Tugur-Chumikan District of Khabarovsk Krai in 2017 and the other in the Neryungry District, Yakutia, in 2018. In addition, I consulted my field material, including linguistic data and interviews, collected over the course of six expeditions to the Ewenki District of Krasnoyarsk Territory in the period between 2007 and 2014.

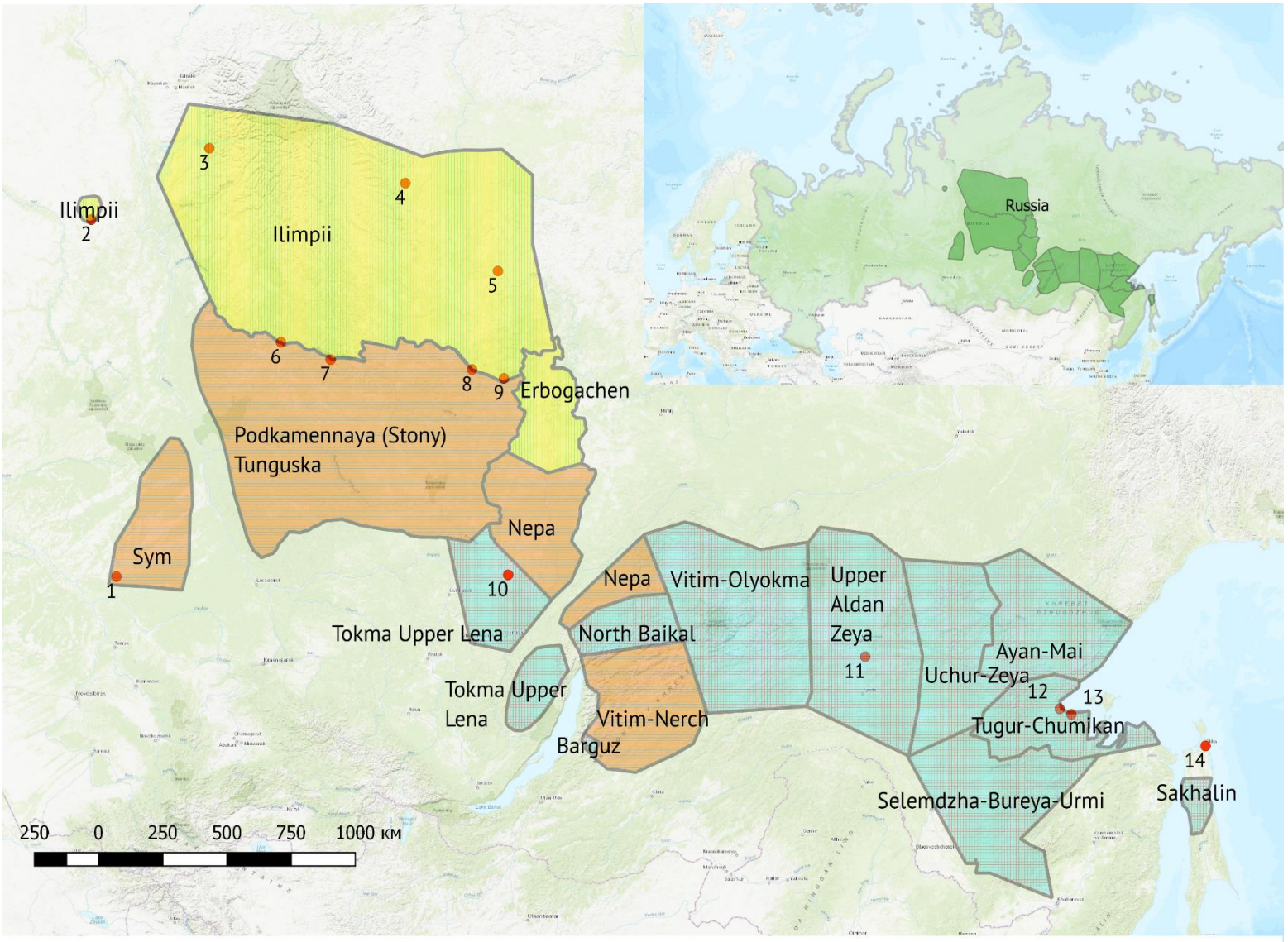
My previous experience, the knowledge of the area and the Ewenki language significantly helped me to establish contacts and arrange my interviews with Ewenki participants.

4.1. Multi-sited Ethnography: The Choice of Ewenki Communities and Study Area

The data I use in this thesis includes Glafira Vasilevich's archival material collected in different Siberian regions from the late 1920s to mid-1960s, my field data from two diverse communities I gathered in 2017 and 2018, and voiced vocabularies recorded in fourteen Ewenki communities in the period from 2005 to 2018. The latter were selected on the bases of three main criteria: 1) Geographical diversity (westernmost, central and easternmost communities; different geographical areas and environments, such as mountainous taiga, semi-tundra and coastal areas are considered). 2) Linguistic diversity (representatives of all three sets of dialects are examined). Linguistic data were used from Ewenki, Taimyr Dolgano-Nenets and Turukhansk districts of Krasnoyarsk Territory, as well as from Tomsk and Irkutsk Regions, and Sakhalin Island. 3) Comparability with Vasilevich's data (cartographic material gathered in the 1940s and in 2018). Finally, field data I collected among the Tugur-Chumikan Ewenki is considered here as a special case, exemplifying how the approaches of interpretive anthropology and humanistic geography in tandem with semiotics and contextual methods can be used to study the production and change of place names *in situ.*

Geographically, the surveyed communities can be divided into three groups: Western Ewenki of Central and partly Western Siberia, Eastern Ewenki of Eastern Siberia and Okhotsk and Sakhalin Ewenki living in the Tugur-Chumikan District and Sakhalin Island respectively (Far Eastern communities). Linguistically, Western groups belong to the Northern and Southern sets of dialects, whereas all Eastern, Okhotsk and Sakhalin Ewenki speak the Eastern set of dialects. Map 3 shows the location of the surveyed villages in these three dialect areas. In the following sub-sections I give a brief definition of the Ewenki communities in each geo-cultural and linguistic area.

*Map 3. The surveyed Ewenki villages (co-designed with Elena Klyachko)**



Sets of dialects
- Northern
- Southern
- Eastern

Surveyed settlements

1. Belyi Yar	6. Tutonchany	11. Iengra
2. Sovrechka	7. Uchami	12. Algazeya
3. Khantayskoye Ozero	8. Kislokan	13. Torom
4. Chirinda	9. Yukta	14. Okha
5. Ekonda	10. Tokma	

*Although in the official classificatory system the North Baikal and the Upper Tokma Lena are Southern dialects, the field data suggests that the Ewenki dialects spread in these regions should be classified as Eastern.

4.1.1. Okhotsk Ewenki (Tugur-Chumikan Community)

In the literature, Tugur-Chumikan Ewenki are also known as Okhotsk Ewenki as they live in the proximity of the Okhotsk Sea. The choice of the Okhotsk Ewenki is justified by the fact that they are the most distinct among the rest of the Ewenki communities as their subsistence economy is largely based on salmon fisheries that determines their livelihood and the style of nomadism (see Pic. 1 and 2). The proximity of the Okhotsk Sea has made them unique in many respects. Unlike the rest of the Ewenki population spread across Siberia, the Tugur-Chumikan Ewenki cannot be defined as pure reindeer breeders or hunters—the image of the Ewenki people that has long dominated in the literature. Fishing began to play a dominant role in the Okhotsk Ewenki's livelihood in the 19th century. In the second half of the 19th century, this group was impacted significantly by the Russian-American Company and 'fur rush' which resulted in the spread of money-commodity relations among all the Indigenous fishing and hunting groups of the Russian Far East. As a result, the Indigenous people became more dependent on nonlocal resources which they exchanged for sable pelts. However, at the end of the 19th century the sable population dramatically declined and people could not rely anymore on hunting as a means of subsistence (Turaev 2004). Having abandoned their reindeer, some of them migrated from the taiga to rivers and bays full of salmon fish where they came in close contact with the local Indigenous groups, namely Koryak and Nivkh, from whom they are believed to have borrowed most of their fishing techniques. In the 1920s, about half of the Okhotsk Ewenki were still involved in the nomadic reindeer economy, although the 'border' between nomadic and sedentary lifestyles became fuzzy, as many Ewenki practiced hunting along with riverine and marine salmon fishing. The rest of the population was engaged largely in salmon fishing and marine mammal hunting. Nowadays only a small number of people are still involved in reindeer herding in the villages of Algazeya and Tugur. The language is preserved relatively well.

Due to the distinctiveness of the Okhotsk Ewenki, I initially hypothesised that marine fishery and semi-sedentary lifestyle have shaped the way they deal with the landscape. Considering the fact that Okhotsk Ewenki had to change their typical habitat and traditional practices, I supposed that

these changes might correlate with some changes in landscape terminology and the ways of cognising and dealing with the landscape. In the course of my field research these suggestions, however, proved being wrong. Since Okhotsk Ewenki have never practiced marine navigation and travelling, their means of orientation are mainly based on the hydrological systems in the taiga. Surprisingly, I did not manage to record any concepts related to the marine environment either. Yet the terminology for different marine fish species and sea mammals is well developed in the dialects of the Okhotsk Ewenki and almost unknown among other groups. Another interesting fact is that like the taiga, the sea is conceptualised as a being or master. For example, it is believed that the master of the sea covers the fish with a blanket during the spawning seasons, thereby showing the people where they could find fish.

Picture 1. Fishing camp nearby Torom village, Khabarovsk Territory, 2017. Photographed by N. Mamontova



Picture 2. Ewenki women fishing at the bay. Torom village, Khabarovsk Territory, 2017. Photographed by N. Mamontova



To conclude, despite their heavy dependence on salmon fisheries, the Okhotsk Ewenki have a similar system of orientation and are largely taiga-oriented people in terms of their dominant subsistence practices, namely hunting. This fact suggests the unity of the Ewenki cultural area stretching from the Yenisei river in the west to the Sea of Okhotsk in the east.

4.1.2. Western Ewenki

The biggest bunch of the data, including voiced dialect dictionaries, containing a significant number of landscape terms and concepts, was collected among geographically western communities (see 'Linguistic Methods' in this thesis). Western Ewenki is an umbrella name for a few Ewenki-speaking communities living in Central and partly Western Siberia. In contrast to fishing Okhotsk communities, Western Ewenki occupy the mountainous taiga of Central Siberia and have long been involved in hunting and reindeer breeding. Since the Ewenki Autonomous Region (Ewenki District since 2007) was established in the territory of their traditional habitat, Western Ewenki have been

portrayed as ‘typical’ Ewenki people (see Pic. 3). However, their economy and ways of life are still by no means homogeneous. The local idioms, spoken in this area before the Ewenki expansion, were completely lost as the aboriginal population massively shifted to the Ewenki language (Janhunen 2012: 13). In the Ewenki District of Krasnoyarsk Territory, approximately 10% of the Ewenki population speak the language fluently. However, in all settlements the majority of the families have lost the language transmission between the generations. In terms of dialects, the Ewenki inhabiting the northern part of the Ewenki District (north to the Lower Tunguska River) speak the Ilimpii dialect of the Northern set of dialects, whereas the Podkamennaya (Stony) Tunguska dialects of the Southern dialect group are mainly spread south to the river, e.g. in Poligus village. Hence, the Lower Tunguska serves as a natural boundary for the two speech communities which is important in sense how the people perceive the space and their belonging to different dialect communities divided by the river (see Mamontova 2016a).

Picture 3. Ewenki reindeer camp in the taiga, Ewenki District, 2011. Photographed by N. Mamontova



Comparative linguistic data for this research was obtained from Khantayskoye Ozero on the Taymyr Peninsula and Sovetskaya Rechka (Soviet River) village in the Turukhansk District of Krasnoyarsk Territory, on the western bank of the Yenisei River. Despite some geographical

remoteness and isolation, the Ewenki living in both settlements belong to the same Ilimpii dialect group. The language is strongly endangered and is preserved only among the elderly people. In Sovetskaya Rechka, however, the situation is relatively better as even children have some knowledge of their mother tongue.[4]

In this research, the Southern set of dialects is presented by a number of Ewenki communities living in the Ewenki District. I have selected the dictionary entries recorded in Tutonchany, Kislokan, Uchami and Yukta villages. These villages can be defined as mixed in terms of dialect diversity. However, Kislokan and Uchami are more Southern-speaking villages (Stony Tunguska dialects), whereas the populations of Tutonchany speak mostly the Ilimpii dialect. Geography is rather similar in these settlements but the communities are linguistically slightly different. The language is strongly endangered.

The Sym dialect, located beyond the main Ewenki-speaking area, is also classified as one of the Southern dialects with some features of the Ilimpii dialect. It is now spoken by the Ewenki living in the mountainous taiga area located west to the Yenisei River. Originally, this community inhabited a huge area stretching up to the semi-tundra vicinity in the north (Vasilevich 1948: 56-60). Two dictionaries which I analyse in this thesis were recorded in 2010 in the settlement of Belyi Yar, located in the Verkhneketskiy (Upper Ket) District of Tomsk Region on the Ket' River, a tributary of the Ob River. The language is deeply endangered with only two fluent speakers remaining.

Geographically, all Western Ewenki communities inhabit the Central Siberian Plateau. The climate is continental, with long cold winters and short summers. The northern part of the Ewenki District and Khantayskoye Ozero village on Taymyr are located above the Arctic Circle. The taiga forest (larch trees) penetrates there into an area of the tundra and the significant part of it is covered with lakes (see Pic. 4). In the southern part of the area, however, the vegetation is more diverse; on the banks of the Lower Tunguska River, for example, in Kislokan village, one may find pine and cedar trees which are more common in its southern part. The main rivers are the Yenisei, the Lower

[4] For statistics and a complete sociolinguistic description see http://siberian-lang.srcc.msu.ru/en/page/linguistic-situation

Tunguska (see Pic. 5) and the Ob. The relief is mountainous with the highest peak in the Putorana Plato on Taymyr (1,700 m).

Picture 4. Semi-tundra landscape of the norther part of the Ewenki District, 2011. Photographed by N. Mamontova



Picture 5. Elena Khukochar-Espek in a traditional Ewenki helmi ornamented with a Siberian diver at the Lower Tunguska River, Tura, Ewenki District, 2014. Photographed by N. Mamontova



4.1.3. Eastern Ewenki

In this research, I examine geographical terminology in three Eastern and very diverse dialect groups: the abovementioned Tugur-Chumikan Ewenki of Khabarovsk Territory (Torom, Algazeya and Chumikan villages), Sakhalin Ewenki (Okha), Neryungry Ewenki (Iengra village, Yakutia), and Tokma Ewenki (Tokma village, Irkutsk Region). The majority of the Ewenki speak the Eastern set of dialects and are concentrated in Yakutia. I conducted my fieldwork among the Neryungry Ewenki in the south of Yakutia, in the settlements of Iengra. The Ewenki language is well preserved there only among the elders and some middle-aged residents. Apart from the rest of the Ewenki communities, both Tugur-Chumikan and Sakhalin Ewenki are coastal. In Khabarovsk Territory, the Ewenki people reside the mountains taiga located in proximity to the Okhotsk Sea. In Sakhalin, they inhabit the North-Sakhalin Plain, which is a sloping area to the south of the Schmidt Peninsula crossed by the river network and separate low mountain ranges. The Ewenki people migrated to the island of Sakhalin only in the 19th century by crossing the Tatar Strait. Linguistically, their dialect is related to the Ewenki idioms spoken in Yakutia and Amur Region. The language is better preserved in Khabarovsk Territory. Most middle-aged people speak it fluently there. However, the main language of communication in most of the families is Russian. By contrast, the language is deeply endangered in Sakhalin, with only a few native speakers left.

4.2. Interviewing and Participant Observation

In-depth unstructured and semi-structured interviewing was a significant part of everyday interaction with people in the field. The difference between them is that unstructured interview is characterised by a minimum of control over the people's responses. In most cases it is the best type of interview as people are willing to discuss a wide range of topics, which might not be directly related to the main research subject but are essential for understanding local cultural values and identify core informants.

I used semi-structured interviewing mainly with people with a good knowledge of the Ewenki language as a part of the survey (vocabulary specification using a special form).

When asking my core informants about the meaning of landscape terms and concepts, I provided them with visual context in the form of the photographs of particular landscape objects and local surroundings and gave them some linguistic examples from my previous field research. My examples also helped to overcome boredom and exhaustion related to language focused interviews, when people are asked to translate and clarify a huge number of terms and concepts.

I regard context as being crucial for understanding of how people use landscape terms and produce and assign meaning to places. It was particularly important in collecting place names. 'The Oxford Handbook of Names and Naming' defines context as important as place names themselves (Taylor 2016). Context can by physical, linguistic, cultural, temporal and so forth. A. Lavrillier and S. Gabyshev (2017: 245) in their research on Ewenki landscape terms note that the knowledge of certain terms may have a kind of temporality: people remember terms during the season when they frequently use these terms and then forget them for the following seasons. The best way of getting into the context is participant observation. The main idea of participant observation is to carry out what the social anthropologist Clifford Geertz (1973) called "thick description," or a comprehensive description of people's behaviour, its cultural and social meanings. Ethnophysiography also offers a number of methodological techniques for both the documentation and analysis of landscape categories (see Mark et al. 2010; Johnson 2010a). The essential part of language documentation includes the interaction with native speakers through experiential learning and discussing landscape terms and concepts (Johnson 2010a: 203-204). Thus, fieldwork research helped me to analyse landscape terminology and place names in the cultural, linguistic and geographic contexts in which they are primarily used, as well as to examine the practices and patterns of naming and the perception of the environment *in situ*, i.e. during long excursions in the taiga together with hunters and reindeer herders, as well as during berry picking with Ewenki old ladies and children. I was especially interested in understanding what kind of landscape objects people selected to bring my attention to,

as they were aware of my interest in this topic. During our walks, I would record new terms into my notebook to discuss them later in the village with other community members. I also took photographs of the sites they showed me.

I interviewed people usually in their homes in the settlements and outside at reindeer and fishing camp sites. Approximately 27 and 12 in-depth interviews with Ewenki informants were recorded in the Khabarovsk Territory and Yakutia respectively. This number does not include numerous group discussions, informal talks during some activities, as for example berry picking which I have mentioned earlier, and conversations with my Ewenki hosts. Most of the informants were older people with a good command of the Ewenki language who could provide holistic information about the origin and meaning of landscape terms and place names (see Bowern 2008: 130-139). I also made a number of interviews with middle-aged and younger people with a good knowledge of the local surroundings. The interviews were conducted in Russian. When it was essential for understanding some cultural and linguistic context, I asked my informants to switch to Ewenki. I also collected Ewenki narratives about significant places which I recorded in the native language and then transcribed and translated them together with my informants.

All the interviews were documented by using a digital-recorder. I wrote down such metadata as place, participants' names and time into my notebook and then assigned simple unique file names to each recording. It helped me to easily identify my informants and link them with any field data I collected besides the interviews. For example, some of them drew pictures of landscape objects while explaining the meaning of corresponding terminology. I also took notes in the course of interviews enabling me to transcribe recordings and wrote down my thoughts and observations into a field diary afterwards.

The anthropologist and researcher of city ecotopes James Spradley (1979: 74-76) defines four type of field notes: condensed account, expanded account, fieldwork journal, and analysis and interpretation. The condensed account includes all notes taken during interviews or observations. I made this type of account during most of my interviews. The second type is the expanded account. I

have transcribed the interviews with core informants and supported them with my notes as well. Although it was a time-consuming process, I largely benefited from that work afterwards as it was easy for me to find suitable citations to back up my statements and ideas. Most of my interviews from the previous field research were also tape-recorded that enabled me to make comparisons if needed. I did not make a distinction between a fieldwork journal and analysis and interpretation notes and wrote down all ideas and suggestions into my diary. I also documented my informants' comments on the terms in the survey form I asked them to fill in and place names on the list. Finally, all the narratives and stories in Ewenki were recorded in a separate journal: Ewenki text on the left and translation into Russian on the right.

The following sections explain which other methods were used to collect and analyse my field data. They include a set of linguistic and visual methods, statistical analysis and survey.

4.3. Linguistic Methods and Geo-Linguistic Survey

As said in the Introduction, in her archival material Glafira Vasilevich (1965) provides a general list of landscape terms for different sorts of landscape objects. The list contains 34 generic terms, some of which she also discusses in her paper (Vasilevich 1963). To evaluate and compare the semantic diversity of geographic terminology in Ewenki, I conducted a survey among the Tugur-Chumikan and Neryungry Ewenki communities in 2017 and 2018 respectively (see the list in Appendix 3). The survey included the completion of the lists of most basic Ewenki landscape and spatial terms from the Ewenki-Russian dictionary (Vasilevich 1958b), ethnographic accounts and Vasilevich's archival material (see Appendix 4). In collaboration with native speakers these dictionary entries were voiced, clarified, and even replenished by recording some terms which were absent on the initial vocabulary list (on methods see Bohnemeyer 2001; Bohnemeyer et al. 2003). The results then were compared with similar field data (voiced dictionaries) collected among other Ewenki-speaking communities between 2005 and 2018 and Vasilevich's unpublished data. Therefore, I used three different sources of linguistic data: archival and published materials, voiced dictionaries, and my data collected through

the survey. It is important to highlight that I do not examine the evolution of landscape terminology as Vasilevich's data lacks information on the location of the settlements. Yet it is still possible to compare the data at the level of the dialect variation.

The voiced dictionary entries were collected within the ongoing project on language documentation entitled 'Minority Languages of Siberia as Our Cultural Heritage' led by Dr. Olga Kazakevich at the Laboratory for Computational Lexicography, Research Computing Centre, Lomonosov Moscow State University. The objective of the project was the development of a digital database and a website containing comprehensive data on the Indigenous languages of the Ket, Selkup, and Ewenki communities inhabited the basins of the Middle Yenisei River and the Middle and Upper Taz River in Western and Central Siberia. The data is stored at the archive of Moscow State University and in part available online.[5] I participated in this project in 2007 and 2008 (Ewenki District, Krasnoyarsk Territory) and worked on the recorded Ewenki material during the year between these expeditions as part of a seminar on language documentation led by Kazakevich. The data will be gradually uploaded at 'Lingvodoc' and the general results of the language documentation project will be published. For the present, an example of the dictionary entries collected from one of the informants is available online:[6] The rest of the dictionaries, which I use in this research, were selected from the archive. The principles of selection were the same as for overall data: dialectal and geographical diversity, as well as partial compatibility with Vasilevich's data.

The vocabulary list which was used in the project contains more than 2000 entries divided into several thematical sections. One of the sections is 'Landscape terminology and terms of orientation' (about 70 entries). Participants were asked to translate the terms from Russian into Ewenki in their own dialect and explained the meaning of the terms. We also asked to interpret Ewenki terms in Russian to clarify their understanding of the corresponding landscape objects. I

[5] The language documentation project web-site with more detailed information, including the type of data gathered from each Ewenki community: http://siberian-lang.srcc.msu.ru/en/about)
[6]The example of a voiced dictionary recorded in Kislokan village, Ewenki District, in 2008 http://lingvodoc.ispras.ru/dictionary/1574/87668/perspective/1574/87669/view?fbclid=IwAR3P3CEAOidReLmGEJMHnJyXtDNnx9kusrgzhSYevaIAK6wRLD4gFhyskZ0.

carried out similar research among the Ewenki people of Yakutia and Khabarovsk Krai to make my research data comparable. Yet my list also contained some terms from Vasilevich's research. In total, 46 full voiced dictionaries were collected in these communities. In this research, I use linguistic examples from 28 most comprehensive dictionaries (19 from men and 9 from women) (see Table 4). The recorded geographic categories include Ewenki words for the following English concepts: 'river,' 'forest,' 'mountain,' 'lake,' 'swamp,' 'tundra,' 'plain' and all related words for some distinct features and qualities of the landscape. Since I was primarily interested in the use and meaning of landscape terminology, all my informants were native Ewenki and Russian bilingual fluent speakers aged 50 and older. I sampled both women and men for this interviewing. However, since most of the surveyed communities are involved in hunting, I have a slightly higher proportion of men over women in my sampling, as hunting is considered to be a predominately a male occupation. In addition, in some communities, for example in Belyi Yar, there are only two native speakers remaining, both are men.

At the same time, as my data shows, even some non-Ewenki speakers possess a good knowledge of landscape terminology and place names. Some of the terms are passed from one generation to the next despite language shift. This phenomenon of lexical retention of key Indigenous terms in geographic nomenclature has been observed among other Indigenous groups too (Johnson and Hunn 2011; Mark et al 2010). This phenomenon explains why over the course of data recording it was sometimes hard to explain to my informants from the elder generation what kind of geographic object I meant. Referring to concrete places of the local landscape helped mitigate this problem to some extent but was not always possible.

After I collected enough information on the meaning of landscape terminology in the surveyed Ewenki communities, I compared my results with Vasilevich's data in terms of a) the presence of the same terms in the voiced dictionary entries, own field data and Vasilevich's material, including her Ewenki-Russian dictionary; b) the meaning of the terms in these different sources (see Appendix 4). At this stage of analysis, it became evident that there is a significant difference in meaning between the same geographical terms across the Ewenki dialect area. To further clarify the meaning of each

term, I employed two digital Ewenki text corpora, containing texts recorded in the same communities as the abovementioned dictionary entries and my field data.

Table 4. Area description and linguistic data set (voiced dictionaries)

Settlement	Set of dialects	Climate; type of relief; subsistence	Voiced dictionaries
Tutonchany	Northern, Ilimpii Southern, Stony Tunguska	Severely continental climate (hot short summers and very cold long winters); mountainous taiga; predominantly hunting	4 (2 female and 2 male): D. Khutokogir, D. Khukochar, S. Bondareva, N. Lapuko
Kislokan	Northern, Ilimpii	Severely continental climate; predominantly hunting	2 (2 male): P. Kombagir, A. Mongo
Yukta	Northern, Ilimpii	Severely continental climate; mountainous taiga; predominantly hunting	3 (2 male and 1 female): P. Chimerkan, V. Udygir, E. Chimerkan
Uchami	Southern, Stony Tunguska	Severely continental climate; mountainous taiga; predominantly hunting	1 (1 female): S. Khukochar-Mukto
Khantayskoye Ozero	Northern, Ilimpii	Subarctic, tundra climate (short summers and long severely cold winters); mountainous taiga with the highest peak in the Putorana Plato, tundra area to the south and east; predominantly hunting	2 (1 male and 1 female): I. Elogir, E. Eremina
Econda	Northern, Ilimpii	Severely continental climate; mountainous taiga; hunting and reindeer herding	2 (2 male): E. Kombagir, A. Pankagir
Chirinda	Northern, Ilimpii	Severely continental climate; mountainous taiga and semi-tundra to the north to the settlement, lake district; hunting	3 (2 male and 1 female): K. Eldogir, S. Khutokogir,
Sovetskaya Rechka	Northern, Ilimpii	Severely continental climate; mountainous taiga and semi-tundra in the north; hunting and reindeer herding	3 (2 male and 1 female): V. Saygotin, P. Davinduk, E. Arkadyeva

Belyi Yar	Southern, Sym	Humid continental climate (with warm, humid summers and cold winters); mountainous taiga; hunting	2 (2 male): V. Ivgin, G. Boyarin
Tokma	Eastern, Tokma Upper Lena	Severely continental climate; mountainous taiga; hunting and horse breeding	1 (1 male): G. Gorbunov
Iengra	Eastern, Zeya	Severely continental climate; mountainous taiga; hunting and reindeer herding	1 (1 female): M. Popova
Algazeya	Eastern, Tugur-Chumikan	Severely continental climate; mountainous taiga and coastal area; fishing and reindeer herding	2 (1 male and 1 female): M. Guttenson, N. Struchkova
Torom		Severely continental climate; mountainous taiga and coastal area; fishing	1 (1 male): Y. Porotov
Okha	Eastern, Sakhalin	Continental climate; Northern-Sakhalin plain**,** coastal area; fishing	1 (1 female): K. Machekhina

4.4. Contextual Methods Using Ewenki Digital Corpus

Oral history and folklore, including epic stories, are a good repository for historical and contextual analysis, and soliciting such histories may serve as a method of data collection. These narratives not only reflect the past but also help understand how individuals explain their present experiences by using socially and culturally significant discourses which may be related to the established patterns of explanation. They can also be used to analyse how people interact with the landscape and space in a broader historical perspective (Basso 1996; Cruikshank 2005, Thornton 2008; Aporta 2014). Thus, information about routes and mnemonic techniques of spatial orientation, as well as about important landmarks are transmitted through mythological narratives and stories about particular journeys between the generations. As N.J. Enfield (2008: 251) highlights, “conversational reference to the landscape can both reveal and reinforce conceptual connections, as defined by human activities and

perspectives, beyond the directly perceivable properties of these words' referents." This means, he continues, that corpus materials must play a key role in research on linguistic semantics.

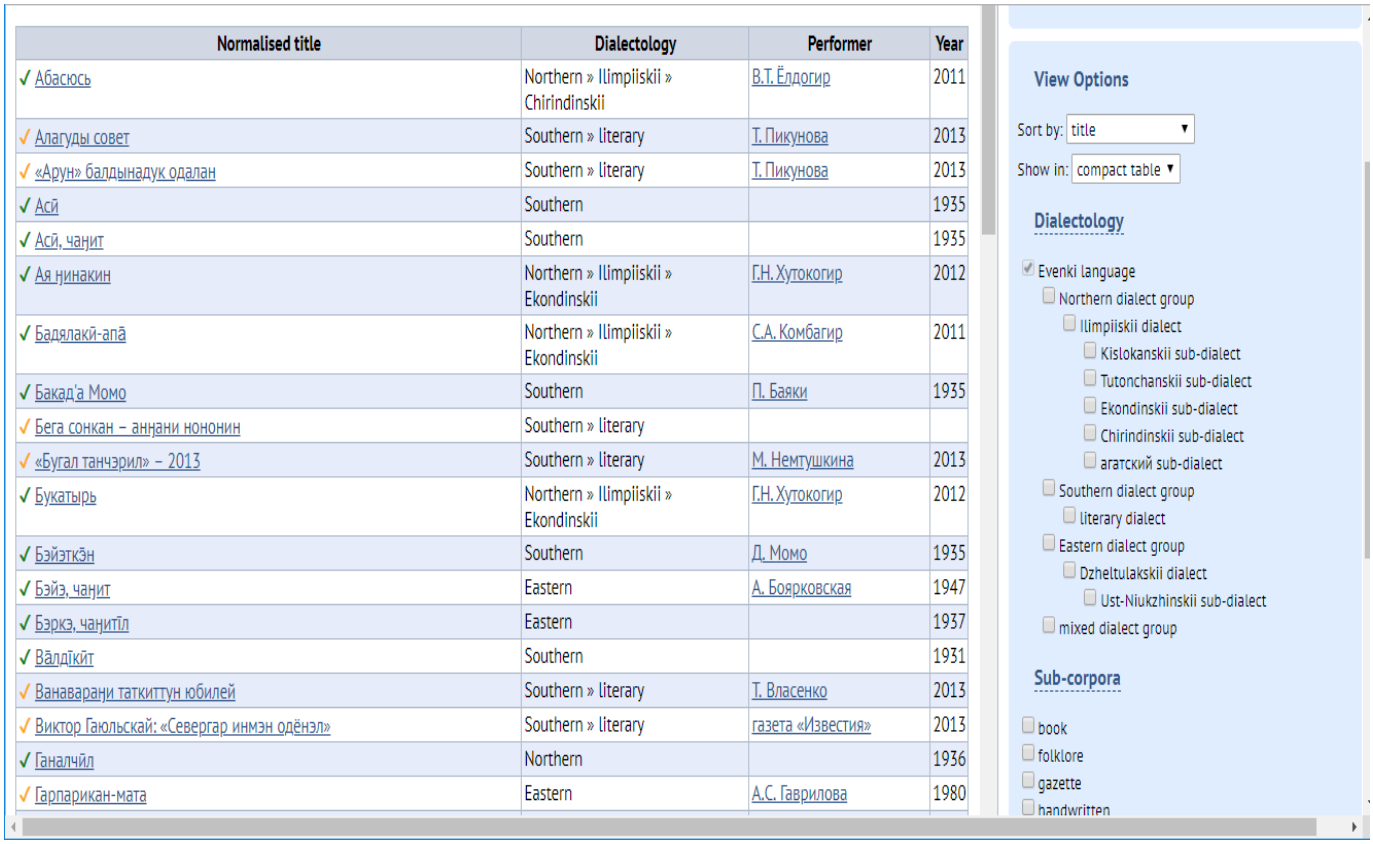
Engaging with the Indigenous language corpus also allowed me to investigate the meaning of landscape terminology and some place names across a range of contexts. For this purpose, I utilised the Text Corpus in the Languages of Indigenous peoples of Siberia (http://corpora.iea.ras.ru/corpora/index.php). This is a collection of both written and oral texts in a number of indigenous Siberian languages developed by researchers of the Institute of Ethnology and Anthropology, Russian Academy of Sciences, including myself. The Ewenki corpus comprises of 138 texts or 11,425 words (120,149 wordforms). From this number, there are 33 texts that I recorded in the Ewenki District over the course of my fieldwork.[7] The rest of the texts, which are currently available for research, were collected by Glafira Vasilevich in a number of Siberian regions between 1930 and 1960 and published in her book on Ewenki folklore (Vasilevich 1966b). Besides, there are three long epic texts documented by two Ewenki scholars, Galina Varlamova and Alexander Varlamov, in the Amur Region and Khabarovsk Krai in the 1980s (see Fig. 3). Regarding dialectology, the texts represent all three groups of dialects. To double check the meaning of the terms I also used another Ewenki digital text corpus (http://corket.ru/), created by linguists of Moscow State University, as it has a slightly different set of texts.

Ewenki narratives can be linked with people living in the past or explain the presence of some unusual geographic features. For example, in the Ewenki District of Krasnoyarsk Territory, there is a mountain located not far away from the abandoned settlement of Agatha from where all the residents were resettled at the end of the 1940s to the river of Lower Tunguska. The Khukochar Ewenki, who speak the Ilimpii dialect and call themselves Agatha Ewenki, believe that long time ago there was a hero named Kartus, their ancestor, who, according to the legend, plucked a huge stone out of the ground, carried it up and put it on the mountain in Agatha. Therefore, the mountain with a big stone

[7] The texts were collected within a project of the Presidium of the Russian Academy of Sciences on corpus linguistics (led by Prof. Dmitry Funk) and my project entitled 'Content Analysis of Folklore Texts in the Languages of the Indigenous People of the North (Ewenki and Nenets)', supported by the Russian Foundation for Humanities.

on its top is associated with this man. The Ewenki easily recognise this place through this narrative. This legend also establishes the links between Khukochar Ewenki and the place that allows them to claim Agatha Lakes as their ancestral territory. In some of those narratives, place names may be used as well (see Vasilevich 1966b: 366).

Figure 3. The content of Ewenki texts stored at the IEA RAS digital text corpus



Normalised title	Dialectology	Performer	Year
✓ Абасюсь	Northern » Ilimpiiskii » Chirindinskii	В.Т. Ёлдогир	2011
✓ Алагуды совет	Southern » literary	Т. Пикунова	2013
✓ «Арун» балдынадук одалан	Southern » literary	Т. Пикунова	2013
✓ Асй	Southern		1935
✓ Асй, чаӈит	Southern		1935
✓ Ая ӈинакин	Northern » Ilimpiiskii » Ekondinskii	Г.Н. Хутокогир	2012
✓ Бадялакй-апā	Northern » Ilimpiiskii » Ekondinskii	С.А. Комбагир	2011
✓ Бакад'а Момо	Southern	П. Баяки	1935
✓ Бега сонкан – аннани нононин	Southern » literary		
✓ «Бугал танчэрил» – 2013	Southern » literary	М. Немтушкина	2013
✓ Букатырь	Northern » Ilimpiiskii » Ekondinskii	Г.Н. Хутокогир	2012
✓ Бэйэткэн	Southern	Д. Момо	1935
✓ Бэйэ, чаӈит	Eastern	А. Бояркoвская	1947
✓ Бэркэ, чаӈитīл	Eastern		1937
✓ Вāлдīкйт	Southern		1931
✓ Ванаваранӣ таткиттун юбилей	Southern » literary	Т. Власенко	2013
✓ Виктор Гаюльскай: «Севергар инмэн одёнэл»	Southern » literary	газета «Известия»	2013
✓ Ганалчйл	Northern		1936
✓ Гарпарикан-мата	Eastern	А.С. Гаврилова	1980

Corpus allowed me to search for specific words, phrases and their concordances, obtain statistical results on the frequency of words and grammatical forms, as well as to compare lists of words from different texts across the dialects or repertoires. Most importantly, it makes it possible to identify significant cultural information in relation to any geographic object and some place names (the latter are rarely mentioned in the texts). This method was utilised to show how the meaning of landscape terms can change depending on context. For example, the following picture shows the response to *bira*, which is an Ewenki general term for river (see Fig. 4).

Figure 4. Response to the Ewenki term bira 'river' (IEA RAS Corpus)



This sort of semantic analysis is based on the approaches developed within ethnopragmatics, an interdisciplinary study that seeks to establish the links between language and other cultural phenomena through the examination of particular linguistic patterns that can be discovered by using corpus techniques (Goddard 2006). The analysis should satisfy the following conditions: 1. substitutability; 2. well-formedness; 3. coherence or wholeness. In other words, all explications have to make sense to native speakers when they are utilised within their context of use and, at the same time, should correspond to entire logics of one's cultural system. It is especially applicable in regard to specific words that Goddard defines as 'culture-rich' and 'translation-resistant'. Usually they include words for emotions, judgements, values that significantly vary from one society to another (see Goddard and Ye 2014). Indigenous landscape terms can also serve as an example of translation-resistant terminology as it is not always possible to find a certain term in European languages to express the same meaning, due to the lack of cultural and geographic context in which they are used.

I finish this section by giving an example of how the terms can be interpreted contextually using the Ewenki digital corpus. The narrative, which was recorded in the 1980s by Galina Shakirzyanova (Tura, Ewenki District), one of my Ewenki interlocutors, and later transcribed by me

in collaboration with a few Ewenki speakers, tells a story of a few girls chased by cannibals. According to the story, when the girls reach a river, they meet *Satan*. The girls ask him to take them across to the other side of the river. In Ewenki mythology, an old woman guards the river leading to the *buni*, the world of the dead. It can be assumed that in this story 'Satan' is in the fact the guard of the world of the dead. *Satan* helps the girls and then tells them to go in the direction of *dy:ski*. *Dy:ski* is a cardinal point and may mean east, upwards, up the hill, or towards the taiga. In this story it should be translated as 'towards the taiga' or 'up the slope', as the opposite direction is identified as *hevelendan*. The name of this place my informants interpreted as being akin to 'tundra', 'valley bottom', 'bottom land':

> "Kele, hurukeldu, guse, eli hoktoli dy:ski. Anngu bidengen, ange, ivelen-de ayadyh, ge bidengen inngama, sijama. Tar sijamava ekeldu eletyne, deginnguve. Anngu, annguva eletykeldu, guse, anngu. Deginngu tavar ho erul, erul sijal." Hurure. Ngenedere-e-e. Tar ngenederektyn tala, ge omngoron, ekinin, ile-ke angdanm gusen, "Annguli-gu, degingnuli-gu?" "Degingnuli, ese!" "E-e, em-ke, gundesen, annguli hevelendanduli." "Hevelendanduli, gundesen, ese-ese, degingnuli, gusen, ngelumek, devuvkendende," nekunmi guse.
>
> ["Follow this path up the slope. The one to the right, that one goes through a nice glade; the second is all overgrown; the wild animals use it. Don't go where the animals are, to the left. To the right, stay to the right," he said. "To the right. To the left, there are very, very bad animals." They left. They wa-a-alk along. As they were walking, the second, the older sister, forgot where to go, and she asked, 'To the right or to the left?" "We mustn't go to the left!" "Hey," [the older sister] answered, "to the right, to the tundra!" "No, to the tundra," she said, "to the left," she said. "It's forbidden, they'll eat us," answered the younger sister. [Translated into English by Brian Donahoe]

In this story we have a very common in Ewenki opposition between the taiga as a good upper land and the tundra as a dangerous lower land. This opposition is analysed in the first paper of this thesis. According to the story, the tundra is located in the left side, which is *deginngu* in Ewenki, in the bottom land or in the north. Once having stepped into the realm of *hevelen*, the girls meet different spirits and spiritual guardians. At the end of the narrative, one of the cannibals turns himself into a wolf, and that is where the wolf clan came from, according to the story. The analysis of this story

shows that only through the knowledge of particular context, which include the dialect, the local interpretation of the terms, the place (particular village) and mythological realm, we may embrace the right meaning of the geographic terms and directions.

4.5. Visual Methods

In this research I utilise a number of visual methods as a means of data collecting, analysing and representation.

4.5.1. Photographs and Landscape Terms

Working with informants to isolate generic landscape and their classificatory meanings presented certain challenges. Over the course of data recording, it was sometimes hard to explain to informants from the elder generation what kind of geographic object was meant due to the fact that some of them were not intimately familiar with Russian terminology or could not find a proper term in Russian. I understood the difficulty well as being a Russian native speaker I had to translate the terms into English. This task required several consultations with English native speakers with a good knowledge of Russian who sometimes found it hard to find the best variants in their native language. Besides, some terms in Ewenki designate not the concrete object but rather a set of objects in the same place, for example, *mar* in Ewenki means a boggy place covered with ledum. This term was borrowed into Russian from Ewenki but is absent in English. Referring to concrete places of the local landscape helped mitigate this problem. However, in some situations it was not possible, for example, because of the age of my core informants. In this case, I used photographs taken around a settlement and from the airplane to better highlight certain features of the relief. This method was used in the Tugur-Chumikan District.

I showed the photographs to people asking them to name the landscape objects that were depicted there (on this method see Mark et al. 2010: 40-41). Sometimes people preferred to draw their own pictures of landscape features to help understand the meaning of the term if there was no possibility to have a look at the object in question. Although it is important to highlight that two-

dimensional, small-scale photographs cannot substitute for three-dimensional participant observation and full-scale experiential learning, in situations when there is not any other possibility of obtaining information *in situ*, they might be very useful. Through discussing of the images, I reflexively learnt about my informants' understanding of the local surroundings.

Panoramic photographs may be an advantageous technique when it comes to place names related to elevations. I showed my informants a series of pictures of the local elevations and asked them to assign the names. Usually these elevations are comparatively large and have a recognizable shape which helps people to describe their location to other community members who must be able to locate these objects easily in the taiga. For example, in Torom village, the residents identify three key mountains: *Surdak* 'frightful' (huge mountain), *Korika* 'seashell' (covered with seashells), and *Uukan* 'saw' (according to its shape). Some mountains can have a specific or unusual colour like *Burdak* 'flour,' a white mountain (Sym Ewenki), or they stand close or far apart from others, like *Angadyakan* 'orphan' (Taymyr Ewenki). These names reflect the most vivid visual characteristics of the key mountains helping people to position themselves in the territory. Although the focus of my research is riverine names, I systematically collected other toponyms which my informants found significant.

4.5.2. ArcGIS and Componential Analysis in Ethnophysiography

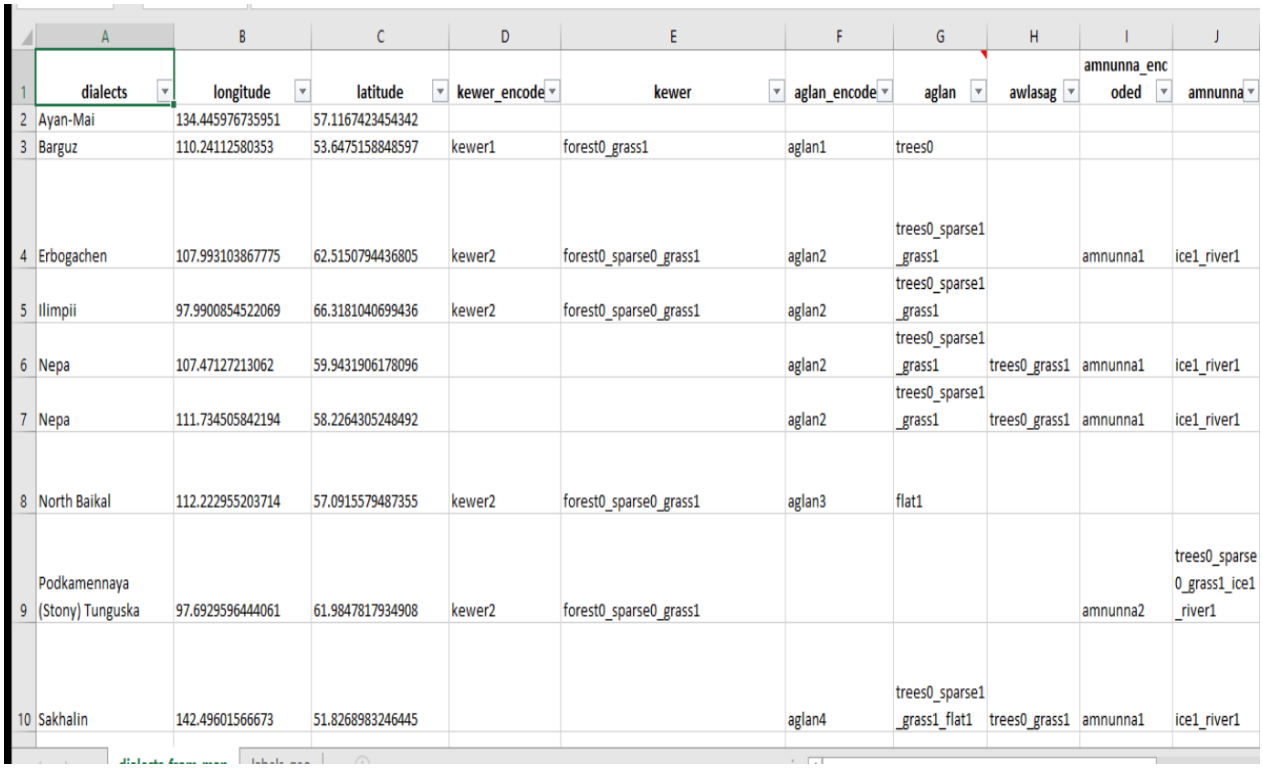
As a tool for data visualisation, I used GIS to bring together linguistic and geographic perspectives. Although GIS has long been a tool of analysis of spatial data only within geography, it can also be used in qualitative research and language-oriented studies (Gregory and Hardie 2011). For example, geolinguistics and linguistic geography use a broad scope of GIS-based methods to examine and visualise language contact and dialect differences, to describe structural diversity among languages and language change, and to establish the links between linguistic diversity and environmental factors (see overview in Hoch and Hayes 2010; Haynie 2014). I utilised such visual methods of data representation as ArcGIS, which is a contextual tool for mapping, to create dialect maps showing the

distribution of landscape terms across the Ewenki dialect continuum and the location of the river systems from Vasilevich's maps.

In order to make a map, first I created the Ewenki dialect areas as polygons in ArcGIS. To draw the boundaries, I used the map of Ewenki dialects published in Vasilevich (1969). Then together with the computational linguist, Elena Klyachko, I mapped out the variation in meaning of the selected landscape terms across the Ewenki dialect area. The created map represents this variation as a combination of visual characteristics, unique for each landscape object (see Fig. 5). To select these characteristics, I carried out a simple componential analysis, which is defined as a systematic search for the attributes or components of meaning (Spradley 1979: 174). The idea of componential analysis is to identify and group these attributes as the pairs of opposites. I used the following characteristics: the presence / absence of vegetation (type of vegetation), the presence / absence of water, distance / proximity to the river, elevation / lowland, light / dark object, open terrain or not, small / extensive. Then I assigned a unique combination of attributes to each selected landscape term. Each combination was marked with a number (e.g., aglan 1, aglan 2, etc.) and a specific symbol.

The idea of mapping was justified by difficulty with translating and interpreting landscape objects from one language to another. Mapping features instead of putting terms on a map or in an enclosed table may help to express the meaning of the terms as a continuum and to avoid the problem of imposing our understanding of terminology upon Indigenous concepts. Potentially, this is a more flexible tool of visualising semantic variation especially in such languages as Ewenki, in which one landscape term may have more than one meaning.

Figure 5. Excel table: the componential analysis of the selected landscape terms



	A	B	C	D	E	F	G	H	I	J
1	dialects	longitude	latitude	kewer_encode	kewer	aglan_encode	aglan	awlasag	amnunna_encoded	amnunna
2	Ayan-Mai	134.445976735951	57.1167423454342							
3	Barguz	110.24112580353	53.6475158848597	kewer1	forest0_grass1	aglan1	trees0			
4	Erbogachen	107.993103867775	62.5150794436805	kewer2	forest0_sparse0_grass1	aglan2	trees0_sparse1_grass1		amnunna1	ice1_river1
5	Ilimpii	97.9900854522069	66.3181040699436	kewer2	forest0_sparse0_grass1	aglan2	trees0_sparse1_grass1			
6	Nepa	107.47127213062	59.9431906178096			aglan2	trees0_sparse1_grass1	trees0_grass1	amnunna1	ice1_river1
7	Nepa	111.734505842194	58.2264305248492			aglan2	trees0_sparse1_grass1	trees0_grass1	amnunna1	ice1_river1
8	North Baikal	112.222955203714	57.0915579487355	kewer2	forest0_sparse0_grass1	aglan3	flat1			
9	Podkamennaya (Stony) Tunguska	97.6929596444061	61.9847817934908	kewer2	forest0_sparse0_grass1				amnunna2	trees0_sparse0_grass1_ice1_river1
10	Sakhalin	142.49601566673	51.8268983246445			aglan4	trees0_sparse1_grass1_flat1	trees0_grass1	amnunna1	ice1_river1

4.5.3. Sketch Maps (Combining Archival and Contemporary Data)

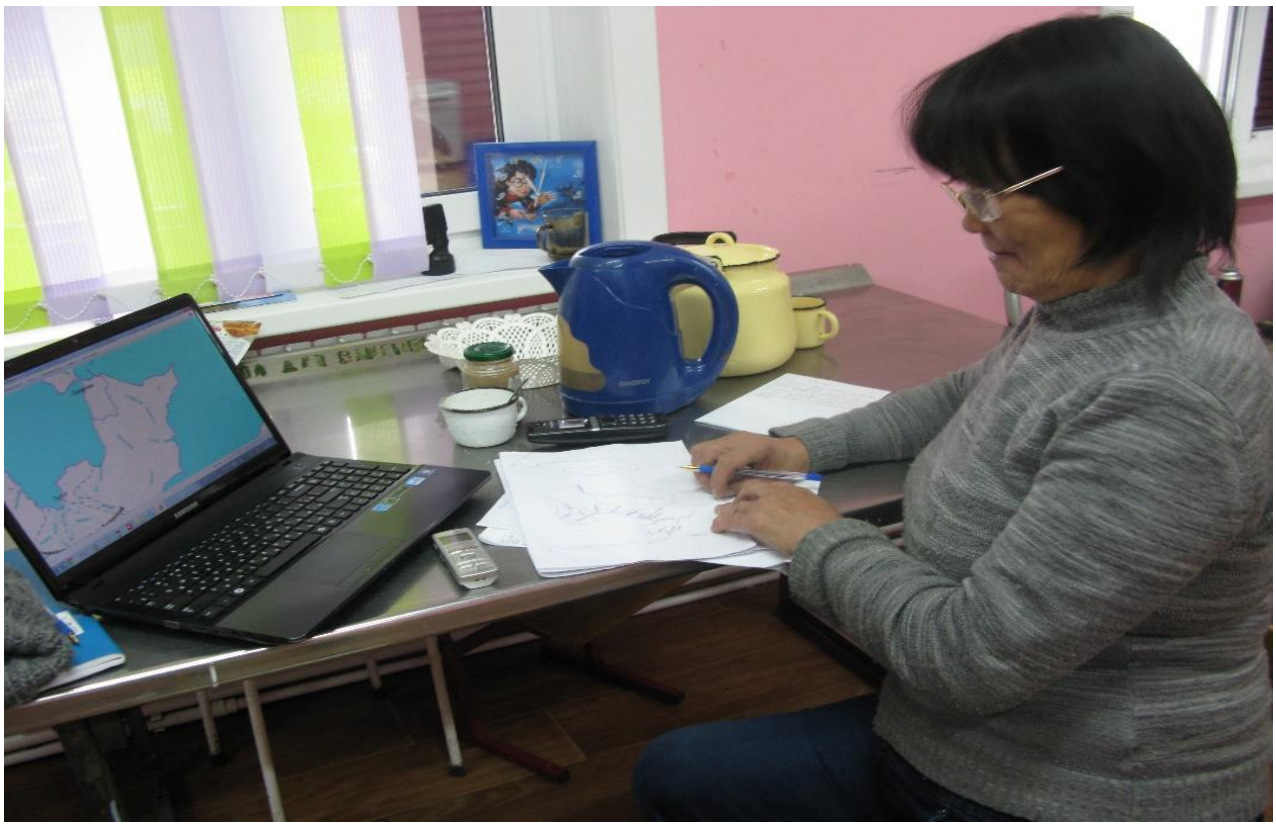
The most important visual method in this research, however, included the creation of hand-written hydrological maps and their further analysis (see Appendix 4). Mapping turns out to be a suitable tool when there is no possibility to collect place names by visiting some remote sites due to a huge territory of their distribution and distance. By mapping I understand a process of transmission of spatial concepts, a form of creative writing designed for spatial relationships (Head 1991: 237). At the same time, it is important to keep in mind that Indigenous maps are not free from political discourse, and quite a few of them have been created in response to those in power. This problem is essential for any research on Indigenous mapping and has long been considered within critical cartographic theory (see e.g., Wood 1992, 2010; Harley 1988; Crampton and Krygier 2006).

Although my current research does not engage with a political side of mapping, I discussed this sensitive issue with my Ewenki research participants. All of them were willing to create sketch maps for me. They were also very keen on Vasilevich's archival maps and wanted to receive a copy. Unfortunately, I was not be able to share the maps with them as the archive was still uncatalogued

(and therefore inaccessible) at that time. The creation of an Ewenki toponymical database, which I discuss later in this chapter, may help to mitigate this problem and provide the Indigenous people with access to their cartographic heritage. This is an auxiliary but significant outcome of my research.

The process of drawing the maps, depicting riverine names and their interpretations by Ewenki interlocutors helped me to examine how the names are produced and used in the surveyed Ewenki communities and shed light on the functioning of riverine names in a comparative perspective (see Pic. 6). The drawing was followed by interview on the depicted riverine names. The process of drawing also gave me an opportunity to observe how the Ewenki people who I interviewed arranged the rivers on the sheet of paper in terms of their spatial order and what kind of geographic information they choose to put on their maps. In two cases I documented the process of drawing with my video camera in order to be able to restore the process afterwards. I collected 12 hand-written maps (10 in Khabarovsk Krai and 2 in Yakutia) with 283 names.

Picture 6. Antonina Gutchenson working on her sketch map. Chumikan, Khabarovsk Krai, 2017. Photographed by N. Mamontova



I observed among contemporary Ewenki a process of drawing similar to that documented by S. Shirokogoroff (1935) and V. Vasilevich (1963) back in the 1920s and 1940s respectively. As a rule, people start making sketches by depicting the key river and then add smaller tributaries later (see Appendix 5.1, Map 15). The scale and orientation are not important. However, the order of the rivers is carefully observed. Two drawings from the Tugur-Chumikan District were, however, distinct. One female informant first drew the sea in the form of a circle and then depicted the rivers flowing into the sea; the other informant, also a woman, asked me to draw a coastline and after that she added the rivers. If people were not sure about the number of the rivers or their order, they consulted other community members. Some of them put mountains on the paper in the form of triangles. If the mountains were the key ones in the area, with particular names representing, for example, their shape, they tried to reflect the shape on paper as well. As a rule, they also included such information as the location of burial sites by using the symbol of a Russian cross, a variation of a Christian cross with two crossbeams.

In Iengra village, I also displayed some Vasilevich's archival maps during interviews with my informants to find out more about the location of the river systems and depicted place names. I selected a few maps from Vasilevich's archive, drawn supposedly in the 1940s, to compare them with a few maps of the same river system made for this research by a few Ewenki informants. This method helped me to prove the variation in place names over time. Next section discusses Vasilevich's collection in more detail.

4.6. Ewenki Place Names' Database from G. Vasilevich's Archive

The work on Vasilevich's archival material constitutes the most significant part of my research. It was a long-term and time-consuming process as most of the maps contain no information in regards to the authorship and location where they were collected. All the names were recorded by Vasilevich in the field and placed on the sketch maps in Ewenki dialects without translation. Yet four published maps from her collection provided me with some key (Vasilevich 1963). I started my archival

research by attempting to find any mention of Vasilevich's cartographic project through careful reading of her field diaries and other related material in the archives of St. Petersburg and Yakutsk, where most of Vasilevich's archival materials are stored. However, this study turned out to be unproductive as I did not manage to find anything related to her work on mapping. Therefore, I had to translate the names and geolocate the rivers using only the information on the primarily sources, as well as in Vasilevich's Ewenki-Russian dictionary (1958b) and published ethnographic material.

4.6.1. Overview of Vasilevich's Maps Collection

Vasilevich's archive contains thirty hand-written sketch maps created by her Ewenki informants from different Siberian regions, including Tomsk Region as the westernmost point and the Amur Region as the easternmost, with the biggest number of the maps obtained from the Republic of Yakutia (Sakha) and Krasnoyarsk Territory. It is likely that most of the maps were accomplished in the period between the 1920s and the 1940s. The earliest recorded year, which appears on several maps, is 1926. This suggests that Vasilevich started to collect maps already during her first expedition to the Ewenki people, immediately after her graduation in 1925 from the Geographical Institute in St. Petersburg. The last date remains open. In her paper Vasilevich (1963: 315) indicates 1961 as the year until which she had been collecting maps. All the maps have place names, except for one map on which the rivers are marked only with numbers. Some maps also contain such important geographic information as, for example, the location of camp sites and reindeer tracks (see Table 5).

Unfortunately, most of the maps lack any metadata making it hard to identify where they were drawn. By using the Russian State Hydrological Register (http://textual.ru/gvr/) I identified the location of the river systems by the name of one of the key rivers on a map, which is usually an official toponym. The following table represents the basic information one can get from the maps in regard to the authorship, the year of accomplishment and the place. The table also shows the number of riverine names on each map

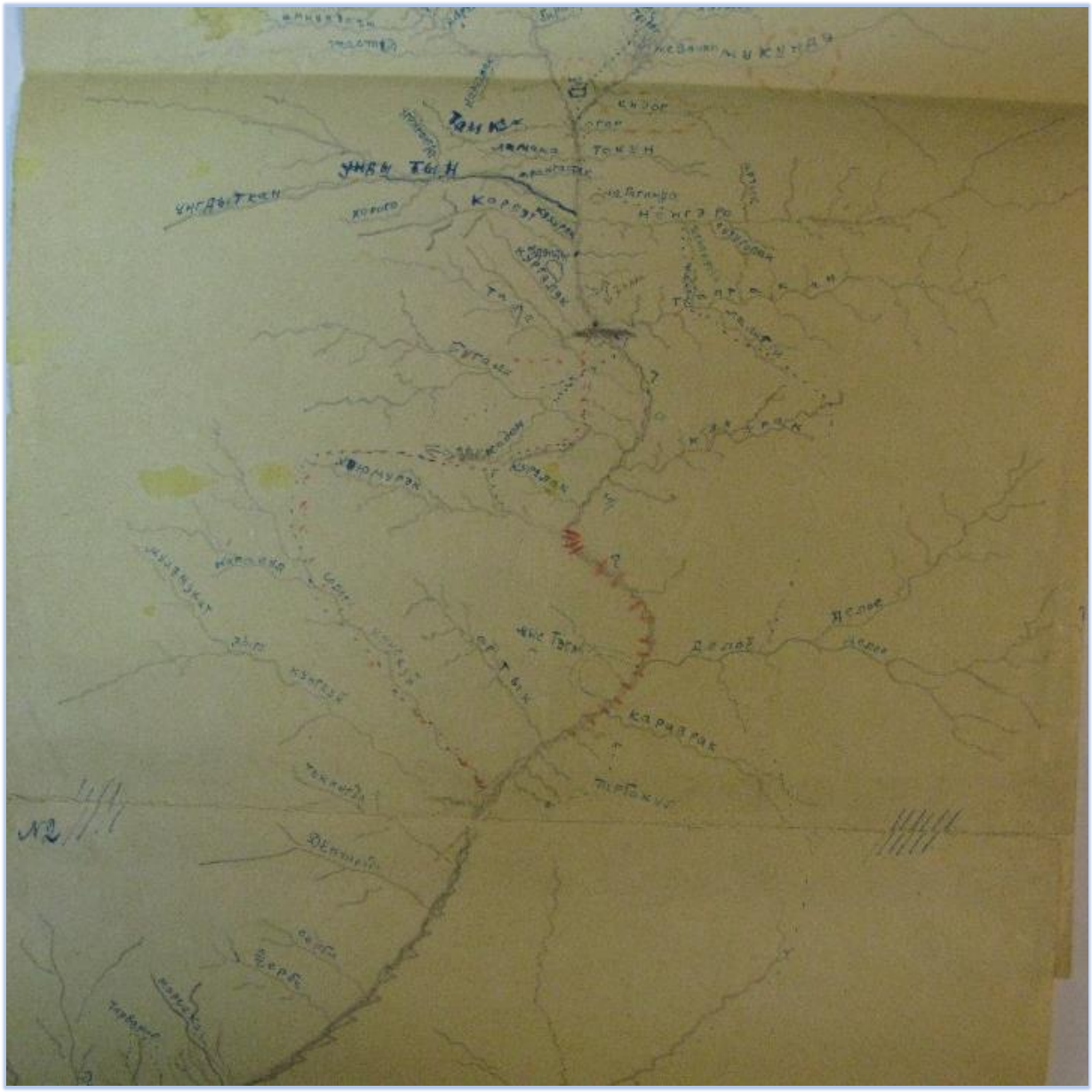
Table 5. Overview of Vasilevich's archival maps

Map №	River System	Metadata	Region	№ of names
1	Kamo, left tributary of the Stony Tunguska River	Absent	Ewenki District, Krasnoyarsk Krai	16
2	The system of Khudum and Algama Rivers, right tributary of the Gonam River	Fedor Nikolaevich Kolesov-Buta, illiterate (1947)	Yakutia	87
3	Gonam and Sutam	Markov Aleks. Gavrilovich	Yakutia	57
4	Gonam and Algama	Mikhail Erem. Naumov and Sergey Nik. Kolesov, Algama, 21-8-47	Yakutia	95
5	The system of Khanu River, the tributary pf the Olekma River	K. Nganagir, 1929	Zabaykalye, Amur Region	27
6	The system of Olekma and Tungir Rivers	Ivan Singalaev, literate, 1929	Amur Region and Zabaykalye	58
7	Two rivers without names (possibly Nyukzha and Olekma) nearby Ust'-Nyukzha village	N. Singalaev, literate, 1929	Amur Region	45
8	Nidym, Taymura	Ewenki course participants, 1936	Ewenki District, Krasn. Krai	15
9	A tributary of the Stony Tunguska River	Nikolay Topochenok, 12/11 1926, reindeer camp on the Chakoe River	Ewenki District, Krasn. Krai	74
10	Taiga River, right tributary of the Stony Tunguska River	Absent	Ewenki District, Krasn. Krai	31
11	Part of the Tychano River's basin, tributary of the Stony Tunguska R.	Absent	Ewenki District, Krasn. Krai	39
12	Kamo, left tributary of the Stony Tunguska R.	Absent	Ewenki District, Krasn. Krai	52
13	Chunya, tributary of the Stony Tunguska R.	Khideul' Andrey Petrovich	Ewenki District, Krasn.Krai	22
14	A tributary of the Stony Tunguska R.?	Safronov Fedot Grigoryevich	Ewenki District, Krasn. Krai	15
15	Stony Tunguska R.	1926-27	Ewenki District, Krasn. Krai	80
16	Stony Tunguska R.	Absent	Ewenki District, Krasn.Krai	
17	The system of Yenisei and Yeloguy Rivers	Absent	Turukhansk District, Krasn. Krai	18
18	The system of Tym and Sym Rivers	Absent	Yenisei District, Krasn. Krai	12
19	The system of Sym and Yenisei Rivers	Absent (N. Kemu, illiterate, 1930 (Vasilevich 1963)	Tomsk Region	31
20	Chunya, Stony Tunguska R.	Absent	Ewenki District, Krasn. Krai	13
21	Kamo, Stony Tunguska R.	Absent	Ewenki District, Krasn. Krai	62

22	The systems of Kalar, Vitim, Muya, Taksima and some other rivers	Absent	Yakutia, Amur Region, Zabaykalye	346
23	Gonam and Sutam	P.A. Markov-Keptuke, illiterate, 1947	Yakutia	3
24	Tungir, right tributary of Olekma	Koekonov Vasiliy Andreevich	Zabaykalye	21
25	Gonam and Sutam	Markov Petr Alekseevich and Keptuke Nikolay (both illiterate)	Yakutia	31
26	Algama, Geltamda, Tuksanni	Fedor Nikolaevich Kolesov, illiterate	Amur Region	67
27	The system of the upper part of Tungir, right tributary of Olekma	Koekonov Vasiliy, literate, 1929	Zabaykalye	32
28	Zeya	Isakov Ivan, Semen's father	Amur Region	22
29	The rivers of Kalar, Chara, Kani and others	Absent	Yakutia, Amur Region, Zabaykalye	31
30	Algama and Sutam	Pudov N.N. (Buta)	Yakutia, Amur Region	44

As the table shows, most of the maps appear to have been created in the field by one or two informants. Map № 8 was sketched by Ewenki course participants whom Vasilevich might have meant the participants of the course on the Russian language and liquidation of illiteracy. In terms of material, 28 maps are drawn on paper with pencil and 2 on parchment (№ 5 and 27). Considering that most of Vasilevich's informants were illiterate at that time, it is likely that the researcher added all the toponyms by herself following the information provided by the draftsmen. In regard to the drafting style, she writes (1963: 317) that Ewenki always started by depicting the main river in the direction towards downstream, carefully adding smaller rivers and tributaries in the course of drawing. The maps normally lack orientation and scale. Yet some river systems have transverse divisions, which might denote a distance measurement of *nulgi* 'one reindeer ride' or 10 kilometers (see Fig. 6).

*Figure 6. Fragment of map № 4 with distance measure (red divisions), 1947**



*Riverine names on the map: 1. Sudet (unknown), 2. Algoma ‘running along sunny places’, 3. Chichakun ‘wagtail’ (*Motacilla*), 4. Aririkta ‘only anabranches’ (from *ari* ‘anabranch’?), 5. Guvkune (unknown), 6. Longdor ‘rocks’, 7. Tala ‘salt-lick’, 8. Kilachi ‘with an open valley at the river delta’, 8. Kilachi (see 8), 9. Chakataj (unknown), 10. Tokakun ‘small rogue’, 11. Helangda ‘grey partidge’ (*Perdix perdix*), 12. Oldongdo (Yakut), 13. Artyk (Yakut), 14. Hutumuk (unknown), 15. Nepen Horongityn ‘the upper reach of the Nepa river’, 16. Tarinak (unknown), 17. Ujalak (unknown), 18. Burgali ‘island’, 19. Artyk (Yakut), 20. Gerunge

(unknown), 21. Tuksani ‘hare’ (personal name), 22. Satmarani ‘bear’, 23. Amnundachi ‘with an aufeis’, 24. Tasteja ‘fishing sinker’, 25. Taik ‘polynya’, 26. Ogekta (unknown), 27. Birandja ‘large river’, 28. Abirir (unknown), 29. Niruchi ‘with grayling’ (*Thymallus*), 30. Chajdak ‘grus’ (Yakut), 31. Kulikan ‘snake’, 32. Nalurak ‘fishing rod’, 33. Des ‘the upper part of the mountain rage’ (Zeya in Rus.), 34. Des (see 33), 35. Nalurak (see 32), 36. Uduguj (probably Yakut), 37. Itmatakan ‘small aufeis’, ‘yellow water from salty springs’, 38. Itmatandja ‘large aufeis’, 39. Heglan ‘Ursa Major’, 40. Geltamda ‘clear’ (?), 41. Murtydag (probably Yakut), 42. Mevachan ‘Heart’, 43. Mukunde ‘musk deer’ (*Moschus moschiferus*), 44. Arangastak ‘wooden storehouse’ / ‘labaz’ (Yakut), 45. Kehurak (Yakut), 46. Kurgelek ‘burnt out place’ (Yakut ?), 47. Tala ‘salt-lick’, 48. Artyk (Yakut), 49. Njongero ‘stubborn’, 50. Suturolak (Yakut ?), 51. Dengkerbe (unknown), 52. Mangus (unknown), 53. Karejalak ‘old parka’ (a coat lined with fur), 54. Taik (see 25), 55. Lamaka ‘stinky’ (?), 56. Sidor (personal name, Rus.), 57. Ogor ‘elevation’, 58. Tokun ‘rogue’, 59. Ugengangde (unknown), 60. Undy (unknown), 61. Tyn (unknown), 62. Horogo ‘lek’, 63. Karpet (personal name, from Rus. Karp), 64. Taptakan (unknown), 65. Laligi (uknown), 66. Bugali ‘double’, 67. Kodon (unknown), 68. Kurglak (see 46), 69. Hejumurek (unknown), 70. Karavul ‘crane’, 71. Sologi ‘upper’, 72. Kungjuj ‘bear’, 73. Mulemukit ‘the place where [people] take water from’, 74. Edigu ‘lower’, 75. Kungkuj (see 72), 76. Tokingda ‘moose’, 77. illegible, 78. Serbi (unknown), 79. Cherbi (unknown, same as 78), 80. Marsaka (unknown), 81. Tarbakil ‘gloves’, 82. Tarbakil (see 81), 83. Karavrak ‘crane’, 84. Delojo ‘stony’, 85. Algoma (see 2), 86. Kehurak (Yakut), 87. Taptakan (unknown), 88. Mavruchi (unknown), 89. Deengdo ‘blade’, 90. Mekechu ‘cunning’ (?), 91. Kinahurek (Yakut), 92. Udum (unknown), 93. Agavytatak (Yakut), 94. Ngonam ‘long’.

At the time when Vasilevich started her cartographic project, Ewenki was an oral language. The rules of spelling had not yet been elaborated. The project of Latin-based alphabet for this

language was proposed in 1930 and largely developed by Vasilevich herself. In 1931, when a Cyrillic script based on the Unified Northern Alphabet was introduced, the Ewenki language was standardised along with the rest of Siberian Indigenous languages. On the earlier maps, the place names are written either in Latin or Cyrillic, or in both scripts altogether. Vasilevich also used some Latin phonetic symbols to better express the pronunciation of place names (see Fig. 7). The lack of standard writing system led to the same names occasionally written differently. Long vowels are never marked. To unify the spelling and to make the names accessible for Ewenki speakers, I wrote down all the names using Cyrillic alphabet. In the following section, I discuss the process of the names' analysis and the creation of an Ewenki toponymical database.

*Figure 7. Fragment of map № 7 with the riverine names in Latin, 1929**



*Riverine names on the map: 1. Igigin 'bowstring', 'fishing net rope', 2. Cherekelek (unknown), 3. Tovok (unknown), 4. Devenek 'minium', 5. Devenok (see 4), 6.

Kerdystuges (unknown), 7. Changnuli (unknown), 8. Dydyche (unknown), 9. Narbaj (unknown), 9. Loglovos (unknown), 10. Loglovos (see 9), 11. Dzelu ‘stony’, 12. Duranga (unknown), 13. Cheremkelek (unknown), 14. Belgiktakan ‘dwarf cedar trees’ (*Pinus pumila*), 15. Behurujo (unknown), 16. Tetyngnok ‘poplar tree’, 17. Sarsakat (unknown), 18. Chopkokon ‘with small pits’, 19. Ampardak ‘camping place’, ‘hut’, 20. Balyktak ‘fishing place’ (Yakut), 21. Marekta ‘tundra-like place covered with lichen and bushes’, 22. Belgikta ‘dwarf cedar trees’, 23. Buhurak (unknown), 24. Karejakan ‘old parka’, 25. Umkurkej (unknown), 26. Ahingichi ‘with a female animal’, 27. Kareja ‘old parka’, 28. Kareja (see 27), 29. Katyrgachi (unknown), 30. Nukakto (unknown), 31. Syvelge (unknown), 32. Syvelge (see 31), 33. Buhunar (unknown), 34. Dzehovul (unknown), 35. Ulungon (unknown), 36. Davan ‘mountain pass’, 37. Davan (see 36), 38. Tungon ‘snow crust’, 39. Chopkokon (see 18), 40. Talema ‘birch bark’, 41. Namurak ‘the place with a steep slope’, 42. Sevenak ‘the place with a seven (wooden shamanic figurine)’ (?), 43. Tepkun ‘sack’, 44. Dzuktoli ‘double’.

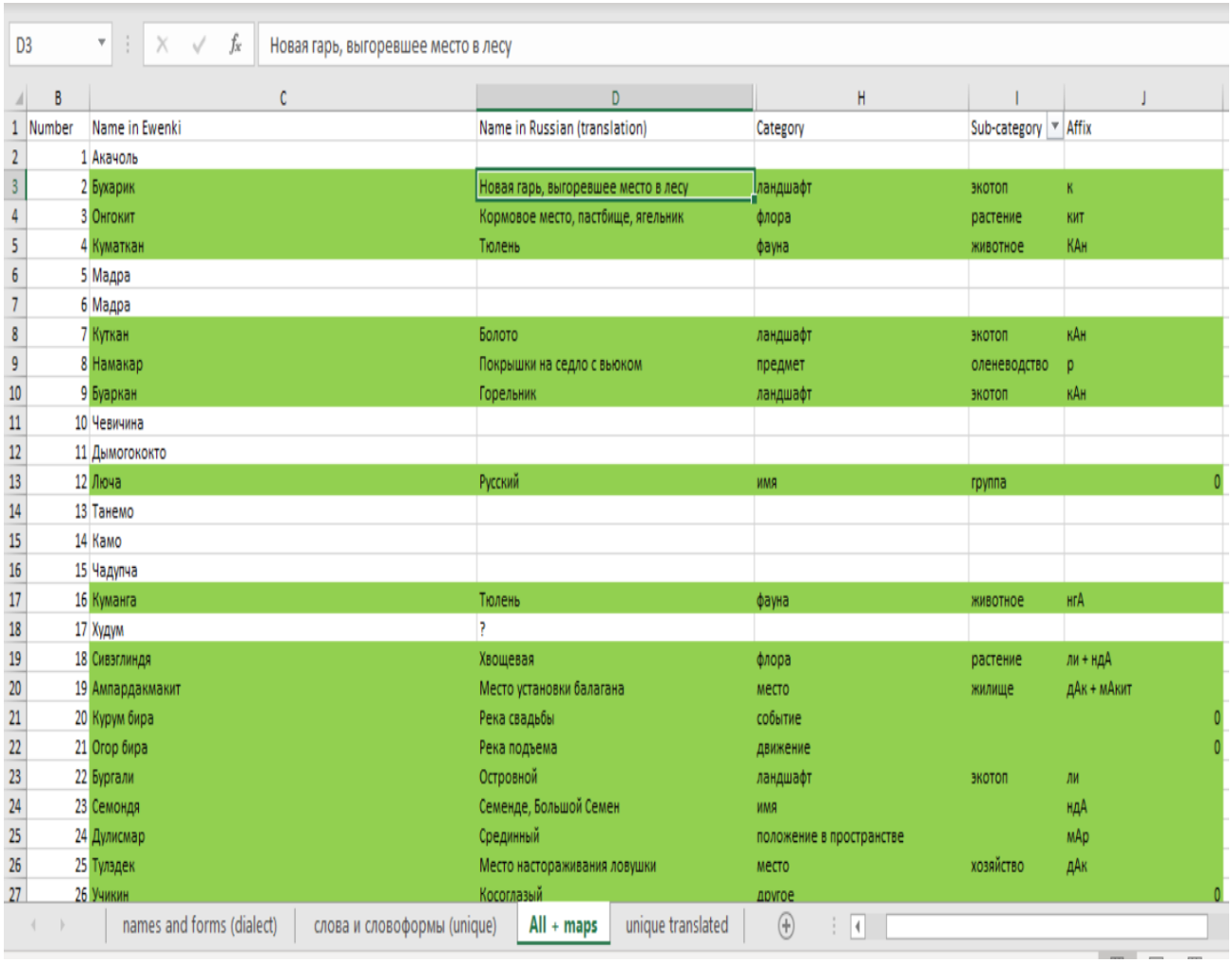
4.6.2. Analysis of Place Names and Ewenki Toponymical Database

Data analysis included the following steps. First, I made a single list of all riverine names (1416 names) from the maps and translated them into Russian using the Ewenki-Russian dictionary. Vasilevich’s (1958b) dictionary occasionally discusses some place names. I also consulted some toponymical dictionaries and published research on Ewenki place names (Evdokimov 1961; Yurgin 1970; Boldyrev 1978; Melkheev 1986, 1995). Translations were then discussed in the field with Ewenki native speakers. Second, I reduced the general list of the names to a number of unique names, including their grammatical forms, by leaving out all dialectal variations of the same name. As a result, there were 995 names left on the list. Of this number, I further excluded the names of unknown

etymologies and finally got 610 names. This list was named as List 1 (‘Unique names’). By ‘unique names’ I understand that each name on the list represents a single category.

Second, the names on List 1 were divided into 19 conceptual categories: Flora, Fauna, Persons’ names, Foreign names, Landscape terms, Place, Object, Physical features, Movement, Position, Anatomical references, Dwelling / Building, Nomadic circle, Sacred terms, Event, Assessment, Nature phenomenon, Material and Kinship terms. These are somewhat arbitrary choices for categories, and the names can be easily grouped in a different way. Some categories were further divided into sub-categories. In each category, I analysed the prevalent names together with their affixes by using the grammatical categories and criteria suggested by Vasilevich in her unpublished research, which were extended and refined in the light of analysis of my own field data. The same principles of analysis were applied to the general list of the names (Fig. 8).

Figure 8. Excel table: Ewenki place names database (general list)



	B	C	D	H	I	J
1	Number	Name in Ewenki	Name in Russian (translation)	Category	Sub-category	Affix
2	1	Акачоль				
3	2	Бухарик	Новая гарь, выгоревшее место в лесу	ландшафт	экотоп	к
4	3	Онгокит	Кормовое место, пастбище, ягельник	флора	растение	кит
5	4	Куматкан	Тюлень	фауна	животное	КАн
6	5	Мадра				
7	6	Мадра				
8	7	Куткан	Болото	ландшафт	экотоп	кАн
9	8	Намакар	Покрышки на седло с вьюком	предмет	оленеводство	р
10	9	Буаркан	Горельник	ландшафт	экотоп	кАн
11	10	Чевичина				
12	11	Дымогококто				
13	12	Люча	Русский	имя	группа	0
14	13	Танемо				
15	14	Камо				
16	15	Чадупча				
17	16	Куманга	Тюлень	фауна	животное	нгА
18	17	Худум	?			
19	18	Сивэглиндя	Хвощевая	флора	растение	ли + ндА
20	19	Ампардакмакит	Место установки балагана	место	жилище	дАк + мАкит
21	20	Курум бира	Река свадьбы	событие		0
22	21	Огор бира	Река подъема	движение		0
23	22	Бургали	Островной	ландшафт	экотоп	ли
24	23	Семондя	Семенде, Большой Семен	имя		ндА
25	24	Дулисмар	Срединный	положение в пространстве		мАр
26	25	Тулэдек	Место настораживания ловушки	место	хозяйство	дАк
27	26	Учикин	Косоглазый	другое		0

Third, with co-author, Elena Klyachko, I designed an Ewenki digital database with open access allowing us to organise and analyse the distribution of the names cross-regionally and examine the correlation between each category and affixes (see Fig. 9; see Appendix 6).

Figure 9. Digital database of Ewenki place names from Vasilevich's archive

« < 5 6 7 8 9 10 11 > » Page size Record Count: 1013

	Name	Translation (Russian)	Translation (English)	Motivation (Russian)	Motivation (English)	Comment	Area it belongs to (Russian)	Area it belongs to (English)
	Болгик	Стланик	NA	флора	flora	куст	None	None
	Болгикта	Стланик	NA	флора	flora	куст	None	None
	Болгиктакан	Маленький стланик	NA	флора	flora	куст	None	None
	Болдикта		NA	неизвестно	unknown		None	None
	Болодёкит	Осенняя стоянка	NA	круг кочевания	nomadic circle		None	None
	Болсоира Тугульчес		NA	иноязычное	foreign language	кет	None	None
	Бохорук		NA	неизвестно	unknown		None	None
	Буӈунар		NA	неизвестно	unknown		None	None
	Буарик	Горелое место	NA	ландшафт	landscape	экотоп	None	None
	Буарикта	Горелое место	NA	ландшафт	landscape	экотоп	None	None

This task required the uniting of similar and overlapping river systems in order to exclude the possibility of counting and analysing the same names multiple times. Using this database, we generated a list of duplicate names and possible connections between the rivers in terms of both the number of identical names and the possible location of the river systems. As a result, all the maps were united into 13 river systems (see Table 6). At this stage, it was essential to differentiate duplicate names from identical names. If there were both duplicate and identical names in the same river system, I counted them separately and then summed up (e.g., if on two maps of the same river system there were 3 identical names altogether (2 on the one and 1 on the other), then two of the names were counted as duplicates or just as one name. The total number was recorded as ‘2’). The complete list was named ‘The united river systems’ or List 2.

Table 6. The united river systems from Vasilevich's archival maps

№	River system	Maps №	Region
1	Podkamennaya (Stony) Tunguska river, incl. the system of Tychano river, tributary of the Chunya river	9, 11, 15	Ewenki District, Krasnoyarsk Territory
2	Kamo and Tayga rivers, Podkamennaya Tunguska river system	1, 9, 10, 12, 21	Ewenki District, Krasnoyarsk Territory
3	Chunya river, Podkamennaya Tunguska river system	13, 20	Ewenki District, Krasnoyarsk Territory
4	Nidym and Taymura rivers, Nizhnyaya (Lower) Tunguska river system	8	Ewenki District, Krasnoyarsk Territory
5	Algoma River, Gonam river system	2, 4, 26, 30	Yakutia
6	Sutam and Gonam Rivers, Gonam and Uchur river systems	3, 22, 23, 25, 30	Yakutia
7	Olekma and Tungir Rivers, Lena and Olekma river systems	6, 7, 22, 24, 27	Yakutia, Amur Region and Zabaikalye Territory
8	Muya River, Vitim river system, and Khani river, Olekma river system	3, 22, 24, 29	Amur Region and Zabaikalye Territory
9	Zeya River, Amur river system	28	Amur Region
10	Eloguy, Yenisei river system	17	Yenisei District, Krasnoyarsk Territory
11	Tym and Sym rivers, Yenisei river system	18	Yenisei District, Krasnoyarsk Territory, Tomsk Region
12	Sym river, Yenisei river system	19	Tomsk Region
13	Tributary of Tunguska River?	14	Possibly Ewenki District, Krasnoyarsk District

Fourth, in order to analyse the correlation between the names and affixes, I carried out simple morphological analysis dividing each name into a stem + an affix (562 wordforms) (see Table 7). On the bases of this table the database generated a number of graphs showing the following parameters:

1. The distribution of the selected categories of riverine names in each river system;
2. The distribution of the categories from the united list of the river systems (L2);
3. The number and percentage of each category of affixes on L2;

4. The correlation between the most commonly used affixes and the categories of names on L2.

Table 7. Morphological analysis of the riverine names (fragment)

Geoname_id	Geoname	Affixes	Grammatical Category
9	Ʒyukto-li	Li	Relative clause
16	Awlaka-r	R	Plural
17	Awsa-t	T	Instrumental (?)
18	Awungnu-kit	Kit	Relative clause
26	Alan-makit	MAkit	Relative clause
27	Alat-kit	Kit	Relative clause
28	Alat-kit-kan	Kan	Diminutive
28	Alat-kit-kan	Kit	Relative clause
29	Algo-ma	MA	Adjective (quality)
34	Amnunda-či	Či	Possessive
35	Amnunna-ka-či	Či	Possessive
35	Amnunna-ka-či	Kan	Diminutive
36	Amnunna-kta	KtA	Dispersive

4.6.3. Limitations

There are several limitations to this methodology, which are important to highlight, even though they do not appear to have had a significant impact on the results. The first limitation relates to the poor quality of some of the maps, which meant that about 1% of names from Vasilevich's maps had to be excluded from the analysis due to their illegibility. A second limitation relates to analysis of the morphological peculiarities of transcription. Since there was no metadata and the names were written without indicating long vowels, it was sometimes hard to separate the stem of the word from the affixes that followed. Similarly, unknown etymologies and the foreign origin of some names made classifications more difficult; since the number of such names is significant, there should be further separate research on their possible etymologies. I grouped all the names of foreign origin under the heading of 'foreign names'. Finally, there are some limitations related to typology itself. The fact that the names on the Vasilevich maps are not provided with translations, except for those which she

published in her paper, might potentially lead to the selection of particular names for the analysis over others. For example, the names with the meaning of animals are easy to identify and translate, and they are rather universal across the dialect continuum. In contrast, participles as place names, foreign names and the names of unknown etymology, and some persons' names can pose a problem when it comes to their interpretation. This problem ultimately reduces confidence levels in the statistical analysis, because of the large body of unknown names. Although I attempted to translate as many names as possible and the sample is representative, the category of 'unknown names' remains huge. Finally, I had to exclude a small number of the names referring to forest types, elevations and lakes. Despite their importance for Ewenki, this research primarly focuses on riverine names which dominate other categories of names.

4.7. Data Protection and Management

Research ethics constituted a significant part of my field research. To work among Indigenous people in Russia there no special permission is required. I have an established protocol of consent (via CUREC) for individual informants (individual reference number: SOGE 17A-199) (see Appendix 7). In the course of the research, I have acted according to the guidelines of the Association of Social Anthropologist of the UK and Commonwealth and the Association of American Geographers Statement on Professional Ethics.[8] I preserve anonymity of most of the research participants by not using their original names in my thesis and research papers except for a few Ewenki informants who drafted the maps for my research and some key informants and story-tellers. All copies of transcripts, audio recordings, photographs, and field notes are kept secure in my files. Before each interview I asked permission to use any images and personal data I would obtain during my fieldwork (e.g., old photographs, copies of documents, records, maps and so forth). I did not visit any sacred or other sites of cultural significance, including local cemeteries, without permission. Their documentation was

[8] https://www.theasa.org/downloads/ethics/Ethical_guidelines.pdf
http://www.aag.org/cs/resolutions/ethics

carried out only when the community members agreed with it. For example, in Khabarovsk Krai, I was allowed to geolocate a few burial places in the forest by using my GPS device. Although there was not any significant risk for community members to participate in my research, language documentation in general and the documentation of landscape terminology in particular were a rather time-consuming process during which some of them, especially the elders, got tired. Being well aware of this problem, as I had already experienced it before during my work on language documentation in Central Siberia, I tried to arrange my sessions with the informants in the most convenient way for them. I gave people a compensation for their work (small amount of money and gifts). I also did breaks during long interviews and combined linguistic work with other activities.

4.8. Concluding Remarks and Summary

In this research, I used a mixed method approach to address the nuances and fluidities of landscape cognition. Although the research was largely field-oriented, I utilised a number of geospatial (ArcGIS and mapping), linguistic (contextual and semantical analysis using the Ewenki digital text corpus, recording and analysing voiced dictionaries, sociolinguistic survey), visual (taking and discussing photographs of landscape objects, dialect and sketch maps), archival research (Vasilevich's cartographic project) and statistical methods (analysis of some correlations between toponymical suffixes and categories using the Ewenki toponymical database) to carry out the analysis. The following table summarises the key methods and data.

Table 8. Summary of key methods and data set

Method of data collecting and analysis	Data and content source	Location
Interviewing	Around 50 interviews. Of this number, there are 39 in-depth interviews with Ewenki informants (23 women and 16 men). Each interview lasted from 1 h to 4 h with intervals	Khabarovsk Territory (2017) and Yakutia (2018)
Survey	11 filled questionnaire forms followed by in-depth interviews (6 from women and 5 from men); questionnaire form contains 70 landscape terms in Russian. The terms were translated into Ewenki and discussed with each informant	Khabarovsk Territory (2017) and Yakutia (2018)
Language documentation / Voiced dictionaries (‘landscape terminology’ section)	28 selected dictionaries recorded in the field (19 from men and 10 from women)	Taimyr Dolgano-Nenets and Turukhansk districts of Krasnoyarsk Territory, Irkutsk Region, Khabarovsk Territory, Tomsk Region, and Sakhalin (from 2005 to 2018)
Archival search	30 Ewenki hand-written maps with 1446 riverine names from Vasilevich’s unpublished collection	Tomsk Region, Krasnoyarsk Territory, Amur Region, Zabaykalye, Yakutia and Buryatia; collected between 1920s and 1960s and stored at the Museum of Anthropology and Ethnography / Kunstkamera in St. Petersburg
GIS	2 dialect map with the distribution of landscape terms across the dialect continuum 1 map depicting river system from the archival maps	Stored in ArcGIS (via Oxford University)
Indigenous mapping	12 hand-written maps with 283 place names	Khabarovsk Territory (2017) and Yakutia (2018)

Content analysis using Ewenki digital corpora	138 texts or 11,425 words (120,149 word forms). From this number, there are 33 texts recorded in Krasnoyarsk Territory in the period between 2011 and 2014 Ewenki texts collected between 2005 and 2018	Institute of Ethnology and Anthropology, Russian Academy of Sciences http://corpora.iea.ras.ru/corpora/texts.php (open access) Moscow State University
Data analysis using the Ewenki toponymical database	1446 Ewenki riverine names From Vasilevich's collection and 283 names from my own material	http://gisly.net/toponymic_db/

5. Structure and Papers Outline

Structurally, this thesis is organised into five main parts. Following the 'three paper' route, the required papers are presented in the main body of the thesis. Evidence of submission of the three papers is provided in Appendix 2. Other substantive parts include introduction, literature review, methods and data, and conclusions.

In the introductory section, I set out my research aims, explain the key hypotheses and significance of my research to the contemporary debates in human geography and ethnophysiography over the concepts of place, space and landscape in Indigenous cultures and languages. This section contains a comprehensive description of the Ewenki people in terms of their language classification and general characteristics, ethnic names, subsistence and traditional calendar, modes of orientation and patterns of movement, as well as the notions of place and space in Ewenki ontology. At the end of this section, I locate my research within the fields of ethnophysiography, humanistic geography, place and space studies and geosemiotics and explain the research gap.

Subsequently, section 'Spatial Cognition, Landscape Terminology and Place Names: Review of the Literature' represents a literature review of key works in the fields of mobility studies, space and place studies, and ethnophysiography with a focus on comparative research on Indigenous landscape terminologies, geospatial concepts and traditions of place naming. This section discusses the necessity to include the ideas of mobility and movement into the analysis of nomadic patterns and strategies of naming places and Indigenous people's conceptualisations and lexicalisations of geospatial concepts and landscape terms. This section ends by embracing the research gap in the corresponding literature and the possible contribution of my research to this literature.

The section entitled 'Material, Methods and Data Analysis' addresses field and research methods that I employed to collect and analyse the data. This section explains my methodological choices, including the selection of the Ewenki communities for this research. It also explains in detail how I used the methods of participant observation, interviewing, photographs of landscape objects, ArcGIS and componential analysis, contextual analysis, participatory mapping and archival research.

The substantial part of this section deals with Ewenki hand-written maps from Vasilevich's unpublished archive and discusses how the work on the maps was organised and implemented. The section concludes with consideration of some limitations of this research approach.

The main body of this thesis consists of three papers.

In the first paper '"The Track is Never the Same": The Fluidity of Geographic Terminology and Conceptualization of Space among the Ewenki People', I discuss Ewenki landscape terminology by focusing on three key conceptual categories: 'mountain' / elevation, flat terrain, and river terms. This paper is based on linguistic data obtained from fourteen Ewenki communities across large geographic terrain. I utilise the methods of contextual and semantic analysis, interviewing with key informants, including discussing geographical objects on photographs, componential analysis and data visualisation by the means of ArcGIS. I demonstrate that the system of landscape terminology in Ewenki is heterogeneous with significant variations in the meaning of landscape terms and categories one can observe across the dialect continuum. The relationships between the meanings of the terms across the dialect continuum are considered within the ethnophysiography and ontology of the geographic domain.

The second paper 'The Multiperspectival Nature of Place Names: Ewenki River Naming and Walking Relationships with Animals, Spirits, and Landscapes' examines the process of production, use and change of riverine and other place names in Ewenki. This paper is based on data collected in 2017 among the Okhotsk Ewenki in the Tugur-Chumikan District, Khabarovsk Territory. It discusses how riverine names, and knowledge of hydrological systems in general, are embedded in Ewenki people's foundational understandings and perceptions of space and place and function in tandem with their mobility, navigation skills, and relationships with animals and non-human beings to render landscapes meaningful and negotiable.

The final paper 'Rivers and Mobility in Siberia: Semantics and Fluidity of Ewenki Riverine Names' is a result of my work on the ethnogeographical maps from Vasilevich's archival collection. Methodologically, this paper is based on Indigenous participatory mapping and archival research

examining a sample of Ewenki hydrological maps collected by Vasilevich in tandem with my field mapping and ethnogeographic data, including contemporary place names. Comparative field data for this research was obtained in the Ewenki communities of the Tugur-Chumikan District, Khabarovsk Krai, and the Neryungry District, Yakutia, in 2017 and 2018 respectively. In this paper, I explain the significance of Vasilevich's archive for the field of Indigenous place names studies. I also present the first comprehensive typology of Ewenki riverine names and explain how toponymical affixes match with different categories of names cross-regionally. The results show the highly variable nature of Ewenki place names in terms of their meanings, yet the same patterns of naming are applied in every surrounding inhabited by Ewenki. In addition, through the comparative analysis of place names collected in the same region but in different periods, I demonstrate that the names are not only passed across the generations but also produced to make sense of the locales.

Finally, in the conclusion section, I introduce the key findings and explain how three papers are related to each other. I also discuss some limitations and suggestions for further research.

Table 9. Structure of research papers

Paper	Theoretical Framework	Methods	Data and Locale
Paper 1	Ethnophysiography (Burenhult and Levinson, Mark and Turk), place and space studies (Haugen, Hunn, Kari, Thornton, etc.), language ontology of geospatial domain (Kuhn)	Fieldwork (language documentation, interviewing, survey), dictionary entries analysis, content analysis, GIS	28 voiced dictionaries recorded in 14 Ewenki communities in the Ewenki, Taimyr Dolgano-Nenets and Turukhansk districts of Krasnoyarsk Territory, Khabarovsk Territory, Tomsk Region, Irkutsk Region and Sakhalin in the period between 2005 and 2018; 11 questionnaires; Ewenki digital corpus; archival material (Vasilevich's unpublished archive); interviews with key informants
Paper 2	Ethnophysiography, place and space studies, mobility studies, phenomenology (Gadamer, Ingold), semiotics (Peirce) and ecoontology (Kohn), semiotic theory of interpretation in social anthropology	Fieldwork (place names documentation, interviewing, participant observation); visual methods; Indigenous cartography and participatory mapping, comparative analysis	29 interviews collected among the Okhotsk Ewenki in Khabarovsk Territory in summer 2017; 10 indigenous maps with 186 place names
Paper 3	Place and space studies, ethnophysiography, Indigenous cartography, semiotics	Fieldwork (place names documentation, interviewing, translation and interpretation of place names from the maps); archival work in Yakutsk and St. Petersburg; semantic and content analysis, creation of Ewenki toponymical database	Collection of indigenous maps from Vasilevich's archival (30 maps); interviews and hydrological maps collected in Khabarovsk Territory (10) in 2017 and Yakutia (2) in 2018; interciews with key informants; Ewenki toponymical database

5.1. Paper 1. "The Track is Never the Same": The Fluidity of Geographic Terminology and Conceptualization of Space among Ewenki

Keywords: Ewenki, Siberia, ecotopes, ethnophysiography, landscape terminology, language ontology

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Abstract: This paper analyses landscape terminology in Ewenki, one of the Tungusic languages spoken by Indigenous hunters and reindeer herders in Siberia, using examples of three key conceptual categories: 'mountain' / elevation, flat terrain, and river terms. Based on linguistic data obtained from fourteen Ewenki communities across a large, diverse geographic terrain, semantic analysis suggests that the system of landscape terminology in Ewenki is heterogeneous with significant variations in the meaning of landscape terms and categories one can observe across the dialect continuum. The uniqueness of the Ewenki landscape terminology lies in the fact that the same term can be linked to completely different landscape features, remaining semantically reference to all of these objects. This variation in meaning is especially evident in terms for 'plains', as this type of landscape is particularly prone to transformations in their Siberia homeland. These changes reflect the Ewenki people's unique nomadic engagement with the land, their flexible adaptation to new ecosystems and their perception of landscapes as being constantly changing or fluid. The relationships between the meanings of the terms across the dialect continuum are considered within ethnophysiography and ontology of the geographic domain.

1. Introduction: Landscape and fluidity

Landscape terminology has long been a focus of research on Indigenous peoples, with most of the published works coming from studies focusing on native peoples of North America (Kroeber 1916; Boas 1934, 1940; Hunn 1996; Aporta 2004, 2005; Thornton 2008, 2011; Davidson-Hunt & Berkes 2010; Johnson 2010a, 2010b; Holton 2011, 2013; Kari 2011 and others). Publications discussing landscape cognition and lexicalization in other cultures are also growing (eg, O'Meara & Bohnemeyer 2008; Williams et al 2012; Feng & Mark 2017; see also Johnson & Hunn 2010). Yet, most studies to date highlight the uniqueness and richness of landscape terminologies, which can make finding comparable words and meanings in a different language a serious challenge (see Mark 1993; Burenhult & Levinson 2008; Mark et al 2010). Correspondingly, the way people build and perceive relations between words, sounds, and visual manifestations of a landscape can be extremely diverse. Surprisingly, such a huge and linguistically miscellaneous area as Siberia has remained largely blind to ethnogeographic studies (but see Istomin 2011; Jordan 2011; Lavrillier & Gabyshev 2017). This research aims to fill in this lacuna by analysing Ewenki landscape terminology and its variation across the dialect continuum as a first step towards a

comprehensive portrayal of human-landscape relationships in this expansive, geographically diverse community. In particular, we focus on the phenomenon of variation in meaning of some basic landscape terms in comparative perspective and how it may be interpreted from recent phenomenological approaches to the study on language-landscape relationships.

The uniqueness of the relationships between the Ewenki and the landscape they inhabit lies in the fact that this minority Indigenous community of only 37,843 people (Census 2010) is the most widely spread in Eurasia (Vasilevich 1969; Janhunen 2012). Their endangered language is a member of the Tungusic branch of the Altaic language family. Considering that language is one of the key technologies for organizing, classifying, and recalling geographic information, the Ewenki case is an opportune one to chart the unity and diversity of geographic terminology across a wide area of traditional settlement (cf with Athabaskan in Kari 1989; 2011). This area stretches for several thousand kilometres from the Yenisei River in the west to the Okhotsk Sea in the east, from Taimyr in the north to Lake of Baikal in the south, with a few communities living beyond this area in Western Siberia (see Map 1). While a few works have examined Ewenki geographic terminology (Shirokogoroff 1928; Vasilevich 1963, 1965; Lavrillier & Gabyshev 2017), none discuss this terminology in comparative perspective, using contextual methods of data collection and analysis.

The Ewenki ecumene consists of more than fifty dialects which are traditionally classified into three sets (see Atknine 1997). This classification of dialects reflects the Soviet approach to dialectology and is an outcome of language policy, within which diverse and scattered Indigenous communities were grouped and “simplified” into a manageable number of linguistic and ethnic categories (see Mamontova 2016). Recent research (Whaley et al 1999) challenges the generic classification of Tungusic languages, advocating for a ‘bottom-up’ approach to grouping dialects that considers as many features as possible, as well as presenting variation as a continuum rather than discrete essentialist categories. Our approach further critiques the essentialist stance to languages and dialects (Pennycook 2010) by emphasizing the relations between landscape and language, neither of which are homogeneous entities.

Being widely dispersed across a variety of terrains, Ewenki demonstrates significant variation in the system of landscape categorisation that can be analysed from a cultural

and environmental perspective. Ewenki inhabit diverse ecosystems—taiga, semi-tundra, coasts and steppes—and have evolved a sophisticated and rich system of landscape categories (Vasilevich 1940:171-173; 1963). Their hunting and reindeer herding nomadic lifeways necessitated both detailed geographic knowledge and expert navigation skills to traverse diverse landscapes and negotiate their various affordances. Hence, the analysis of landscape terminology in Ewenki may illustrate how this nomadic people come to cognize space and landscape across diverse terrains.

In order for a language and its geographic nomenclature to accommodate new landscapes, it should be flexible in regard to both a) the possibility of including new geographic concepts into the established nomenclature and b) adapting the existing geographic terms to changing landscape conditions. We hypothesize that, while the system of geographic terminology appears to be more or less homogeneous across the Ewenki dialect continuum in its most basic landscape categories and their linguistic means of expression, the meaning of some geographic terms varies significantly. This phenomenon can be defined as a semantic variation of cognates rather than polysemy, as the speakers of different sub-dialects recognize only one meaning of the same term as 'correct.' Yet the transition from one meaning to the other normally involves a phase of synchronic polysemy in which a lexical form may hold several meanings simultaneously (see Zalizniak et al 2012). The nature and extent of this synchronic polysemic phase may vary considerably depending on a concatenation of cultural and geographic factors.

We argue that this semantic variation is a result of adaptation to new surroundings and builds not only on the incorporation of novel landscape features and experiences but also on interpretations encoded in Ewenki ontology of the geographic domain. We suggest considering this variation as a dynamic continuum, reflecting the idea of changing or fluid landscapes. Finally, we demonstrate that relational context is crucial for understanding the meaning of Ewenki geographic terms.

In ethnophysiography, ontology is the study of reality that determines what kinds of categories and entities, including landscape objects, can exist and why (Mark & Turk 2003; Kuhn 2011). From this standpoint, the unique experiences of a given speech community are vital to the process of conceptualizing and distinguishing environments. Ontology also highlights the agency of landscapes as having their own history and power to constrain the way people interact with them. Research demonstrates that for Ewenki environmental

perception is linked with mobility, an engagement with landscape that lies at the heart of this nomadic, pastoralist people's way of being in the world (Vasilevich 1969:4-5; Safonova & Sántha 2010; Oeterlaar et al 2013; Brandišauskas 2017). Not only do people move from one place to another, but the landscapes they inhabit and traverse are also changing under the influence of both human activities and environmental processes. Mobility thus cannot be reduced to physical movement but must also include an understanding of landscape perception from a mobility perspective (cf Ingold 2000). Thus, we examine landscape terms not as a fixed coordinate system, but rather as emergent from relational contexts, experience and engagement of the land.

2. Methods and data

In order to present how Ewenki speakers may interpret the same landscape terms differently, we used both published (Vasilevich 1958, 1963, 1969) and contemporary linguistic data. The latter was collected by the members of several expeditions, including E. Klyachko and N. Mamontova, within the ongoing Indigenous languages documentation project in Siberia.[9] Linguistic data were used from Ewenki, Taimyr Dolgano-Nenets and Turukhansk districts of Krasnoyarsk Territory, as well as from Tomsk and Irkutsk Regions, and Sakhalin Island in the period between 2005 and 2018. The terms were recorded in the field in the course of voicification of dictionary entries (see Appendix 3). The geographic categories on the vocabulary list included Ewenki words for the following topographic units: 'river' and 'river bank', 'forest' (relatively large treed area, including boreal forest), 'mountain' (elevated features varying in size), 'lake' (localised inland water separated from rivers and surrounded by land), 'swamp' (marshy places), 'tundra' (extensive treeless area; Arctic tundra), 'plain' (flat landscapes varying in size and location, characterized by an absence or sparseness of vegetation) and all related words for many distinct features and qualities of the landscape (about 70 dictionary entries in total). In this paper, we examine three major categories of terms for a flat landscape, elevations and river terminology, and consider mainly those concepts that can be comparable in different Ewenki communities. The aim of this focused comparison is to bring attention to the phenomenon of variation in a single language, or intra-ethnogeographic diversity. We have also documented a number of terms for different forest types and patches which are beyond the scope of this analysis, and will be discussed separately, along with vegetation terminology.

[9] The project is led by Dr. Olga Kazakevich. The data is stored in the archive of the Computing Centre of Moscow State University. The following web-site contains detailed information about the goals, participants, Ewenki informants and the settlements: http://siberian-lang.srcc.msu.ru/en/glavnaya

Structurally, we assembled a vocabulary list containing Russian terms in one column and corresponding Ewenki equivalents found in various sources in the other. We first asked our interlocutors to give an Ewenki term for a corresponding Russian geographic concept and then clarified the meaning of other Ewenki terms from the same cohort. For example, some Russian terms appear to relate to more than one Ewenki equivalent. We first recorded an Ewenki term for a given Russian word and then elucidated the meaning of each Ewenki term in conversations with native speakers, as evidenced below. Most of our interlocutors were Ewenki-Russian bilingual speakers over 50 years old who were able to fluently discuss Ewenki terminology in Russian which served as a metalanguage. In addition, in 2017 we carried out more in-depth field research among the Tugur-Chumikan Ewenki in the Khabarovsk Territory, including the collection of 220 place names and 11 questionnaires on landscape terms (Mamontova & Thornton 2019).

Working with informants to clarify the meaning of landscape terms presented certain challenges, as some Ewenki terms designate not a concrete geographic feature, but rather a set of objects, a type of landscape, and the local vegetation all together as a gestalt. For example, *mar* in Ewenki means a boggy place or a sphagnum swamp covered with ledum. This term was borrowed into Russian from Ewenki, but is absent in English. This quality makes the terms to some extent resistant to disappearance within the increasing displacement of Ewenki by Russian, as people continue to use some of them to refer precisely to geographic objects that lack comparable terms in Russian. Referring to concrete places of the local landscape *in situ* or with the photographs helped mitigate this problem but was not always possible.

To compare the terms, we selected 14 Ewenki communities on the bases of two main criteria: 1) geographical diversity (westernmost, central, and easternmost communities corresponding to different geographical areas and environments, such as mountainous taiga, semi-tundra, and coastal areas); and 2) linguistic diversity–representing the Northern (Ekonda, Chirinda, partly Tutonchany, Yukta, Kislokan, Khantayskoye Ozero, Sovetskaya Rechka), Southern (Uchami, partly Tutonchany, Belyi Yar), and Eastern (Iengra, Okha, Tokma and all Tugur-Chumikan communities, including Torom and Algazeya) sets of dialects. To avoid language-landscape determinism, we included not only communities in contrastive environments but also several linguistically diverse communities living along the Lower Tunguska River (see Map 3). Apart from primarily

coastal fishing Tugur-Chumikan Ewenki, with a few reindeer herding families in Algazeya, the rest of the communities are all involved in hunting and–in Ekonda, Sovetskaya Rechka and Iengra–in the nomadic, pastoralist reindeer economy. In total, 46 full voiced dictionaries (about 2000 entries each) were collected in these communities. In this paper, we use linguistic examples from 28 most comprehensive dictionaries (19 from men and 9 from women).

To further triangulate the meaning of each term, we analysed epic stories and narratives recorded in the same communities as dictionary entries and stored in two digital Ewenki text corpora (see http://corpora.iea.ras.ru/corpora and http://gisly.net/corpus/). These texts provide important ethnogeographic context concerning the deployment of specific landscape terms, which is crucial for understanding their relational and nuanced meanings in cultural settings (cf Basso 1996; Cruikshank 2005; Thornton 2008; Kari 2010). In the process of adaptation to new landscapes, the context and semiotics of existing linguistic terms inevitably change or transform. The absence of cultural context makes it well-nigh impossible to understand the sources of variation in meaning, in particular when the same terms are interpreted differently by informants or in published sources. A mix of linguistic and ethnographic methods to flesh out the geographical, semiological, and ontological contexts of landscape terminology and experience was therefore essential to testing our hypothesis.

3. Ewenki ecotopes: General description and analysis

Landscape perception is generally defined with respect to the earth's surface as it is viewed from the human perspective (Cresswell 2004:10), and ecotopes are "the smallest ecologically-distinct landscape features in a landscape mapping and classification system" (Hunn & Meilleur 2010:15). However, these categories and definitions need to be reconsidered when it comes to Indigenous people who use distinct categories in different ways (Johnson & Hunn 2010; Holton 2011; Burenhult et al 2017). The Ewenki language, for example, makes no semantic contrast between 'space', 'landscape' and 'world', as all of these are termed *dunnə/dundə* or *buga* which also means 'earth' and 'environment'. However, the term *dunnə* attaches concrete terms to identify what *kind* of place or space is meant, for example, *dunnə urəgəːsəːn* 'mountainous area' or *hərguː dunnə* 'lower world' in mythology. Ewenki speakers do not use this term separately but usually in conjunction with a specifier to convey the quality of a particular landscape or place. Analysis becomes even more complicated when parsing generic landscape terms. Integrated examination of Ewenki

concepts of elevation, plain, and river / river bank shows how landscape categories overlap and vary in meaning in different dialect communities and settings.

3.1. Elevations vs tundra

Elevations are among the most significant features in Ewenki geography. People orient themselves according to the location and direction of mountains slopes, or *kaltir* (see Vasilevich 1963:307-308; Mamontova & Thornton 2019). Some Ewenki communities, for example in Zabaykalye Province, have the terms for different sides of a mountain slope *kaltir* to mark cardinal points. Sergey Shirokogoroff (1928) points out that the cardinal points in Ewenki include the idea of movement and the relation in space. Hence, these terms are usually culturally and geographically specific, and thus vary from one community to another. Ewenki has a rich terminology designating different types of elevations according to their size, location, and shape. Most prominent elevations usually possess specific names.

Since mountainous landscapes constitute the ordinary environment, informants tend to make no distinction between such terms as taiga, mountainous taiga, and forest. They refer to all of them using such terms for forest as *moːha* / *moːsa*, *agiː*, *hargiː, diːləː* 'taiga on the slope' or even *urəl* . The latter is a generic term for any salient elevation covered with forest. *Urə* differs from, for example, *t͡ʃuwakaːn* 'hill' in size. In the meaning of 'forest on the mountain ranges' the tern *urə* can be regarded as a semantic generality. Yet a typological shift from 'mountain' to 'forest' is common in other languages as well.[10] People also widely use the Russian word "taiga". Yet, different parts and patches of the forest are differentiated (see Mamontova 2020). However, people utilize a variety of words and expressions for mountainous landscapes, among which are: *urədi dunnəːk* 'mountainous land', *dunnə urəgəːsəːn* 'the land resembles a mountain', *ihəgdəl* 'stones', 'mountains', *t͡ʃuwakaːn* 'hill', *kadar / kadaɣa* 'rocky mountain', *kamniːgaː* 'cliff', 'rocks standing close to each other' (see Table 10).

Three words are commonly used for elevation: *urə, jaŋ,* and *ŋəːkə*. These terms feature in Ewenki epic stories (I.) and can be analyzed through the movements of the main hero. In one popular narrative, recorded in a number of variations, the hero and his enemy (in swan form) struggle to determine who is stronger (Mamontova 2015). A mountain, or *urə*,

10 The Catalogue of Semantic Shifts (http://datsemshift.ru/meanings_sense=mountain)

plays a key role in this narrative as the battle takes place either on the top of the mountain or nearby (1).

(1) *bəjə-ŋi-l-tin* *guːn-dʼərə-0* *"əːkur* *gaːgi-l-tin*
man-INDPS-PL-3PL.POSS say-PRS-3PL what swan-PL-3PL.POSS

dəgi-ktə-dʼərə-0 *urə-duː?* *məː-r-tin* *bagdama-l* *tətigə-l-tin"*
fly-DSPRS-PRS-3PL mountain-DATLOC oneself-PL-3PL.POSS white-PL cloth-PL-3PL.POSS

‘People say, "Why do the swans fly on the mountain? They have white clothes."’ (E., IEA Corpus, recorded by N. Mamontova, 2011)

After the murder of the hero his son goes to the enemy's camp to take revenge. Usually the exact location of the camp is not revealed. However, from the narrative it becomes clear that the enemies live outside the Ewenki space, as the hero's son has to undertake a long journey before he reaches their place "on the edge of the world" (*dundə tar səsəːduːn*). He finds his father's murderers in the huge tundra *hoːjikaːkun* by following the marks, apparently the opposite of *moːha* ‘taiga’, where the Ewenki reside (2).

(2) *tar* *ilkə-həl-wə-n* *uːdʼa-dʼa-na* *hoːji-kaːkun-ma* *bargiː-it*
that mark-PL-ACCD-3SG.POSS follow-IPFV-CVB.SIM tundra-INTS-ACCD opposite.side-ELAT

dʼuː, *dʼuː-l* *bi-dʼərə-0,* *dʼukchaː-l*
tipi tipi-PL be-PRS-3PL tipi.carcass-PL

‘And he followed the marks. In the opposite side of the huge tundra, there are tipis, carcasses of the tipis.’ (Ch.; IEA Corpus, recorded by N. Mamontova, 2011)

Tundra, the vast treeless Arctic area, is an almost unfamiliar landscape to Ewenki. Only a few communities inhabit non-taiga areas which can be defined as semi-tundra. Some western Ewenki-speaking communities even use the word *moːra* for tundra (P.T., I.), a loanword from Russian meaning ‘sea’ (Vasilevich 1958:257). Yet this landscape type has the largest number of recorded words related to it. The basic words for tundra are *hoːj* and *dət.* Both reference ‘swamp’ and define a kind of marshy place, but the exact difference between tundra and swamp is sometimes unclear and seemingly context-dependent. Among other words which the Ewenki interlocutors associated with *hoːj / dət* were *kuta* ‘swamp’, *buləːl* ‘boggy places’, *jaku* ‘stagnant water’, ‘grassy swamp’, *ləwəre / ləwə / lowo* ‘peat swamp’, ‘muggy area at the upper reach of the river’, *nirəː* ‘swamp with small tussocks, vegetation-free’, *muːʃu* ‘swamp with big tussocks and with vegetation’, and some others. Among Tugur-Chumikan and some other easternmost groups, however, the word

ho:j is not attested. When asked about tundra, they usually say *mar.* Any flat and damp landscape covered with wild rosemary (*Ledum palustre*) and moss is also called *mar* (see Pic. 7). Although in this community ***dət*** is used as a synonym for *mar*, ***dət*** is less frequent. Contextual analysis of this ecotope helps flesh out the conceptual boundaries of mountainous taiga versus tundra; as in the narratives the hero always goes in the direction of the tundra, ultimately finding the alien enemies.

Picture 7. Mar *type of landscape. Nearby Algazeya village, Tugur-Chumican District. Photographed by N. Mamontova, 2017*



Journeying on the tundra, the hero spots the enemies from ***jaŋ*** 'high bare rock', which is the most visible elevation in the area with snow on top. This is the point where ***dundə*** 'land' as the speaker knows ends. The term ***dundə*** describes space which the speaker can observe and directly experience. It is common when people say ***dundə*** referring to the taiga. In the narrative, the hero sees tipis of the reindeer people standing ***hərgiski:*** 'down the hill' or 'at the foot of the mountain' (3).

(3) *ərdələːn, ərdələːn dundə miho:-sə, tar ilkə-həl-bə*
completely completely land disappear-PTCP.ANT that mark-PL-ACCD

uːďa-ďa-na. iːduː-wəl tar dundə tar səsəː-duː-n
follow-IPFV-CVB.SIM where-INDF that land that edge-DATLOC-3SG.POSS

isə-sə: jaŋ-duk, urə-duk isə-sə: hərgiskiː ďukchaː-l
see-PTCP.ANT rock-ABL mountain-ABL see-PTCP.ANT down.the.hill tipi.carcass-PL

ilit-t͡ʃariː-l-ba, orolo:-hol bəjə-l-bə
stand-PTCP.SIM-PL-ACCD herder-PL man-PL-ACCD

‘Completely, completely the land disappeared [from his view] when he followed those marks. Somewhere on the edge of the earth he spotted something, from a high rock, from a mountain he recognized the tipis of the reindeer people standing down the hill.’ (Ch.; IEA Corpus, recorded by N. Mamontova, 2011)

Normally *hərgiskiː* is used to identify that something is located downwards, on the bottom, or on the lower part. Along with *neːskiː,* it can also mean ‘the lower reach of the river’. Importantly, the narrator stresses that the enemies do not live in the taiga. This opposition between the mountainous taiga and the tundra is again illuminated by the use of the semantically related word *hərəlgən* in the meaning of ‘tundra’, ‘valley bottom’, ‘bottom land’, whereas the taiga is described as an ‘upper place’. Thus, the word *diːskiː* ‘up to the mountain’, ‘upwards’, ‘east’ is also frequently used to define the movement in the direction of the taiga. In the following story of two girls, who are chased by cannibals, *diːskiː* is used as the opposite direction of *həwələndaːn,* a mythical land. The name of this place our informants interpreted as being akin to *hərəlgəːn* ‘tundra’, ‘bottom land’ (4).

(4) “kələ, huru-kəldu, gu-sə: ə-liː hokto-liː diːskiː
well, go-IMP2PL say-PTCP.ANT this-PROL path-PROL up.the.slope

anŋuː bi-ďəŋəː-n aŋe iːwələn=də aja=dih.” <…> “Ə, əm=kə,
right be-FUT-3SG DM glade=FOC nice=FOC INTJ NEG=FOC

guːn-ďə-səː-n aːnŋuː-liː həwələndaːn-duliː.”
say-IPFV-PST-3SG right-PROL tundra-PROL

‘“Follow this path up the slope,” he said. <…> The one to the right, that one is a nice glade.” “Hey,” [the older sister] answered, “to the right, to the tundra!”.’ (Ek.; IEA Corpus, recorded by G. Shakirzyanova, transcribed by N. Mamontova, 2011)

This contrast between mountainous taiga and tundra also explains why the Ewenki occasionally use the same term to refer to tundra, swamp, lower area, and plain. The three concepts share the same characteristics, namely all depict a kind of flat and wide landscape with few visual obstructions or landmarks —"only stones covered with moss", as one Ewenki speaker (Uch.) describes it, in contrast to a landscape erupting with trees or mountains.

The third common term for mountain *ŋəːkə* is usually used to describe a rather high and separate elevation in the area. The Tugur-Chumikan Ewenki use the term *ŋaːka* to refer to a steep and high river bank. Another word for this ecotope is *kerain*, which is not attested in the dictionaries recorded among Western Ewenki. The difference between *ŋaːka* and *kerain* is in size and shape, the latter being lower and flatter (Alg., Ien., Tor.).

Thus, Ewenki general terms for elevations should be analyzed with contrastive terms for tundra-like landscapes, as such comparisons reveal the fluidity and nuances between geographic terms by putting them in a pragmatic cultural and perceptual context. This approach mirrors the Ewenki way of observing the land from an elevation (above) in order to optimally perceive, conceptualize, memorize, and navigate the landscape (below). In this regard, the logic of the taiga as a kind of high place, affording perspectives of elevation, becomes legible as a means of understanding, wayfinding and other interactions between Ewenki and their surroundings.

Table 10. Geographic terms for elevations provided by G. Vasilevich (1958, 1965; see also Appendix 4)

Name in Ewenki (Latin)	Translation	Dialects
d'ugdir	Mountainous area with bare rocky and sharp peaks	Z., Ald., Uchr., Chum., Urm.
əmkər	High and steep river bank	N., E., Sym, N.B., Tng., Z., Ald.
he:ksa / e:ksa / e:ha (also he:ha, he:kʃa)	Cliff	P.T., N., E., I., Z., Sym, Ald., Tkm., Khng.
hisə (also isə, iʃə)	Cliff or stone located on the shore	P.T., N., E., I., Tkm., Z., Ald., Sym
ilukta / ulukta	High and steep river bank	P.T., I., N., E.
Jaŋ	Bare rocky peak, high salient 'mountain' with snow on top	All
kadar	Rocky mountain	P.T., N.B., Brg., Nerch., Tng., Z., Ald., Khng., Uchr., Urm., Chum., Sak.
kamniga	Rocks standing close to each other	P.-T., N., I., U.-L., N.-B., Nerch., Sak., Sym

kerain	High river bank	Chum.
ŋə:**kə** / **ŋə**:**ku** / **ŋa**:**ka**	Small bare elevation standing beside the river bank	P.T., N., E., Uchr., Urm., Chum., Sak.
	High and steep river bank	Chum.
uksi / uksikta	One of the two high steep banks of the river with a gorge in between	P.T., E., Uchr., Nerch.
Urə	Elevation covered with trees, mountainous taiga	All

3.2. Open and flat terrains

Open and extensive treeless areas do not rank among the most salient Ewenki landscape types because most people live in mountainous areas. Nevertheless, the idea of a plain as a flat surface is an important relational concept. In the taiga or along river banks, this kind of landscape is convenient for camping. Most terms relating to a flat landscape are complex ecotopes signifying multiple traits, including: 1) type of landscape, 2) character of vegetation, and 3) proximity / distance from the river and other features. We suggest that this quality makes them fluid in meaning; people in different communities tend to choose a particular dominant feature to identify the ecotope. Ewenki interviewees most commonly use the following terms: *aglan / awlan* 'low / flat land', *pollaka* 'area without trees', *dət* / *hoːj* 'swamp', 'tundra', *kəwər* 'wide open and dry place with vegetation', *kuŋtikəː* 'dry sphagnum tundra-like place, slightly higher than the surrounding surface', *dəwsən* 'plain', 'wide area in the forest without vegetation', *nit* 'plain without forest located in the mouth of the river / by the sea', 'floodplain', 'flat river bank', and *hərəlgəːn* 'tundra', 'valley bottom', 'bottom land' (see Table 11).

As noted above, the Ewenki tend to perceive *dət* as a plain marshy space located beyond their dwelling area on the edge of the earth and inhabited by non-Ewenki people. In referring to swamps, a more mundane yet still marginal plain, this ecotope appears to be more neutral (5 and 6). In this regard, this is not a reference used in the parts of the taiga occupied by the Ewenki themselves. This is further substantiated by the Ewenki corpus, wherein *dət* appears, for example, in the mythological stories about *t͡ʃaŋit*, evil creatures resembling humans that reside in boggy areas, abandoned, forbidden or otherwise unoccupied by Ewenki.

(5) *t͡ʃaŋiti-l* *dət* *dulin-duː-n* *taːŋəl-t͡ʃa-l*
changit-PL swamp middle-DATLOC-3SG.POSS take.rest-PTCP.ANT-PL

‘The changits were taking a rest in the middle of the swamp.’ (P.T.; IEA Corpus; recorded by G. Vasilevich, 1931)

But:

(6) *taripti-duk* *tar* *dət-wə* *Oluwul* *dəti-n* *guni-wkiː-l*
that.time-ABL that tundra-ACCD Oluwul tundra-3SG.POSS say-PTCP.HAB-PL

bira-kaːn *Dətkən* *dərən-duː-n*
river-ATTEN Dətkən head.of.the.river-DATLOC-3SG.POSS

‘Since that time that tundra is called Oluwul tundra, [located] at the head of the small river of Dətkən ‘small tundra’.’ (I.; IEA Corpus; recorded by G. Vasilevich, 1957)

Among the most variable terms for a flat kind of landscape is *awlan* / *aglan* ‘a lower kind of area’, ‘depression’, ‘flat terrain’. This term is known in most of the dialects and is one of the most interesting ecotopes in terms of its variation across the dialect continuum (see Map 4). The meaning of this term ranges from a vegetation-free plain space near a river, to a flat and wide surface, to a clearing in the forest, and finally to a sparse forest. This example shows how some landscape terms may significantly vary and possibly have changed from initial meaning, having been adapted to new realms.

There are many more Ewenki terms designating “flat” landscapes than can be analyzed here. Unlike the terms for elevations, this terminology is more variable in meaning and more context-dependent, especially when it comes to differentiating swamp and tundra. These two concepts are easily confused in the Ewenki corpus and can be quite dynamic and fluid in subarctic climatic contexts. Other terms for plain surface landscapes demonstrate a high degree of variation across the Ewenki dialect continuum, reflecting the idea of changing landscapes, with a plain being a kind of empty space prone to change and transformation. Their meaning is usually bound to the predominant vegetation, size, location, and surrounding landscape features.

Table 11. Selected terms describing a flat landscape

Name in Ewenki (Latin)	Translation	Dialects (Vasilevich 1958)	In surveyed communities (voiced dictionaries)
agi:	Forest	Most	T., Uch., Y., Ien., Tor., Alg., Okh.
	Steppe	Brg.	
	Field	Ald.	
amnunna / amnunda	Grassy place in the taiga	P.T., N., E., Tng., Z.	
	Frost on the river	Urm., Sak.	Ien. (frozen river)
	Agglomeration of stones at the mouth of a mountain river where ice does not melt	Bnt., Z., Ald., Uchr.	
	Valley; wide and flat area (in the river basin) covered with low vegetation (lichen and blueberries)		Ien., Tor.
	Treeless flat place along the river bank with huge stones and low vegetation		Alg.
awlan / aglan	Open terrain covered with grass, meadow	Tng., Z., Ald., Uchr., Urm., Chum., Sak., N.B., Brg., N., E., I., Bnt.	K., Ien., Tor., Alg.
	Sparse forest, semi-tundra	Ald.	S.R.
	Glade in the forest		S.R.
	Depression, low kind of land		T.
dət	Plain surface in the taiga covered with sphagnum		Uch.
	Tundra	P.-T., N., E., Sym, Z., Urm., Chum., Sak	K., T., E., Y., Tor., Sak
	Swamp		
dəwsən	Wide area in the forest without vegetation; peat swamp	P.T.	B.Y., T., Uch., Ch.
hərəlgə:n	Depression, valley bottom	P.T., N., E., I., Ald.	T., E., Ch.
	Foot of the mountain		Ch.
	Bottom land, tundra		Y., Ch.
ho:j	Tundra		S.R., T., Y., E., K., Ch., Ek., Uch.,
	Swamp		B.Y., T., K., Uch., Y., Ch., E.

kila / killand'a	Plain surface at watersheds covered with moss; mountainous tundra	Z., Ald., Uchr.	—
	Grassy swamp on the top of mountainous ranges	Urm.	—
kəwər	Wide open and dry place with vegetation / grazing grass	P.T., N., E., Sym, N.B., Brg,	E.
	Steppe	Brg., Nerch.	
	Swamp / dump place covered with grass and sparse forest	Z., Ald., Uchr.	Ien.
	Mountainous tundra	Ald.	
kuŋtikə:	Dry sphagnum tundra-like place in the taiga, slightly higher than surrounding landscape	Z., Uchr., Sak.	Ien., Alg., Tor.
	Glade on the river bank	Uchr.	
	Hillock	P.T., Brg.	
Nit	Plain without forest located in the mouth of the river / by the sea, floodplain		Alg., Tor.
	Flat river bank	Chum., Sak.	

3.3. River terminology and types of river banks

River systems occupy a special place in Ewenki life and ontology. People's sense of orientation and movement are largely linked to hydrology (Vasilevich 1963, 1969:182; Oetelaar et al 2013:235). Unlike other geographic features, there are not so many basic terms for types of rivers and waterways; rather each river has its unique name representing its distinguishing feature. The name for the key river can be used as a synonym for a large river. For example, instead of *həgdi bira* 'large river' the Ilimpii Ewenki can say *Tuŋuska* or *Kataŋa*. The latter is a proper Ewenki name for the Lower Tunguska River. The word *bira* and its variations also serve as a place name in many parts of the Ewenki territory. Such terms as *bargida:* 'opposite river bank', *daptu* 'mouth of the river', *dərə:n* 'head of the river', *ajan* 'backwater', *arba '*sandbank' and some others are similar in the surveyed communities. The terminology for river banks (*d'apka, ugu* or *kerain* depending on the dialect*)*, in contrast, is rather diverse, with the Ewenki classifying them according to their shape, altitude, and location. In some cases the terms designating river banks overlap with those for other landscape forms, especially cliffs. We consider river banks as ecotopes, as their Ewenki terms convey important information in relation to navigation and resources.

Ilimpii Ewenki interlocutors generally do not distinguish between a high steep river bank and a flooded river bank, naming both of them *ulukta*. Occasionally people use the term *təŋkə* to designate a flooded river bank. This word typically means a bank inundated during rainy seasons. This could be the same category due to variable water levels and the fluid perception of this ecotope as a river bank sliding into or succumbing to water. Yet, in one of the Ewenki dialects spoken in Yakutia the word *təŋkə* has begun to mean a dense forest on a river bank (Lavrillier & Gabyshev 2017:87; also in Y. And Tok.) or a river bank covered with bushes. The same pattern of variation is evident in the closely related term *təːn*, meaning either a smooth passage between two mountains or a forest located in the flat watershed, or just a plain in the watershed (Vasilevich 1958:422). This is another example of the phenomenon of transformation of a quality of a landscape into an object feature, such as, for example, with *aglan*. Exactly the same semantic variation has occurred in the meaning of the word *burgan* among the Eastern Ewenki, which varies from a river bank, inundated during rainy seasons (Ald., Uchr., Urm.), to an island located in between river passages (Urm.), to a river bank covered with bushes (Urm., Sak.), and, finally, to a spruce and dark patch of the forest (Chum.). As for a steep river bank, among the Eastern Ewenki the term is *əmkər*. All of these examples represent the semantic variation of cognates.

There are also two documented words with the meaning of a plain surface related to the river: one is *amnunna / amnunda* ‘wide and flat area in the river basin’, and the other one is *nit* ‘wide and flat area in the mouth of the river / by the sea’. The term *amnunna / amnunda* has several meanings. In some dialects, it means ‘grassy place in the taiga’, or ‘frost on the river’, or ‘agglomeration of stones at the mouth of a mountain river where ice does not melt during warm seasons’. Hence, it can also stand for ice in general (Vasilevich 1958:29). In addition, the word is commonly used for a river containing good camping terrain. Hence, when it comes to place names derived from ecotopes, among the Tugur-Chumikan Ewenki, the river *Amnunnak* denotes an open flat terrain located along the river banks in accordance with the related ecotope. However, among the Iengra Ewenki, who speak several sub-dialects, the name *Amnunna* has two different ecotopic meanings: a clear place with low vegetation near the river and a frozen river. The other term, *nit*, is normally translated as a flat river bank in two dialects spoken in the east, Sakhalin and Chumikan (Ibid:296). However, as the field data collected among the Tugur-Chumikan Ewenki shows, the meaning of this term has shifted. Nowadays, it designates a wide and flat area, located in the mouth or delta of the river, which is covered with grass.

In sum, the differences between river, elevation, and plains terminology reside in the relative stability of the former terms throughout the entire dialect continuum. The terms for river, its head, mouth, and arms, and for smaller creeks, springs, and river passages, not considered here, are more or less identical across the Ewenki territory, and in most of the cases hold the same meaning. Most importantly, Ewenki landscape terminology exhibits significant variation in the meanings of the ecotopes for plains landscapes.

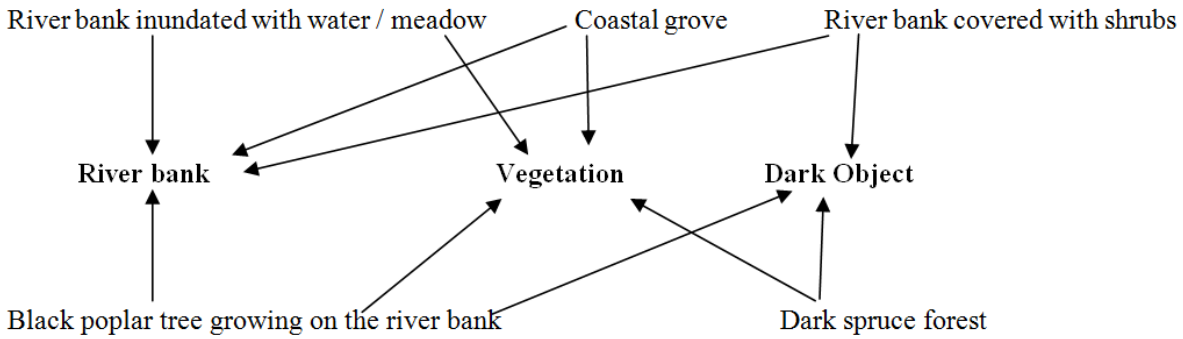
5. Discussion: Ontology and fluidity of Ewenki geographic terminology

Our research demonstrates that Ewenki people living in the mountainous taiga do not make simple categorical distinctions between forest, taiga, and mountainous taiga, but rather, use contrastive terms to locate specific affordances and communities of beings, both human and non-human, in a particular landscape. Contrastive or relational terms may be deployed, especially to identify domestic (safe) space versus an alien or dangerous environment, or to orient other communities to one's home group (cf Burenhult et al 2017). Among the Western Ewenki, this is highlighted by the frequent use of the word *dunnə / dundə* 'land', 'earth', 'place' when referencing taiga. All Ewenki communities in general, and Ilimpii communities living in the semi-tundra areas in particular, make a clear distinction between the taiga and the tundra. The latter appears to be one of the most culturally grounded ecotopes, surrounded by mythological stories associated with non-human and alien beings. Along with these terms the Ewenki utilise a variety of terms for a tundra-like landscape that also include terms for boggy places and grassy swamps, which are classified as being akin to tundra and occasionally used as synonyms. However, as the Ewenki geographical narratives demonstrate, the main phenomenal difference between proper Arctic tundra and other related categories is that tundra is perceived as a space outside the Ewenki ecumene.

The dictionary entries show that among the most stable and homogeneous ecotopes are those for river and its parts, but excluding river banks as their terms slightly vary. We suggest that this homogeneity is due to the special role which river systems have played and still play in Ewenki subsistence practices, mobility, and navigation, as well as in their broader migrations across and within Siberia (see Vasilevich 1963; Ermolova 2007; Janhunen 2012). The hydrological systems represent a collection of unique riverine names which should be analysed in separate research as their distribution across Siberia may shed light on the ways the Ewenki people came to inhabit this area.

Unlike river terminology, the terms for a flat landscape are more changeable and fluid in meaning across Ewenki communities (see Map 4). The meaning of some landscape categories can be modified to fit the particular landscape or generalised from a particular dominant feature such as a forest, steppe, or tundra. For example, along with abovementioned terms *amnunna* and *awlan*, another striking example of cross-dialectal differences is the word *kəwər*. The basic meaning of *kəwər* is a wide field covered with grazing grass. However, in the steppe area the meaning has predictably changed to steppe. In other dialects, *kəwər* means a grassy swamp, and since there is a connection between swamp and tundra, as discussed above, another meaning of this term is mountainous tundra (Vasilevich 1958:227). This concept initially may have represented a kind of wide area covered with vegetation, but has since evolved to cover other landscapes as Ewenki expanded their physiographic range. Since similar variation of semantic cognates across the dialects is observed in the case of other landscape terms, we suggest that particular terms designate not only landscape objects themselves but also their salient qualities and contrastive features. Landscape features can also be conceptualised as assemblages (see Pennycook 2017). Accordingly, a particular feature of an assemblage may be attached to a different assemblage to produce a new meaning. Hence, the quality of a landscape object may remain the same whereas the physiographic meaning of the term can vary, thus contributing to the fluidity of ecotopes. How a key feature's meaning may change several times, even within the same dialect group, is well illustrated by the term *burgan*, as mapped in Fig. 10.

Figure 10. The semantic variation of the term burgan as a combination of the following elements: river bank, vegetation, and dark object / darkness



This and other similar variations in meaning raise the issue of ontological relations between an object and its qualities which can be considered within a qualitative topology (Mark et al 1999). The impossibility of establishing boundaries of a certain geographic object across the dialect continuum further challenges classificatory systems based on static landscape features within a single language. Our analysis of Ewenki shows that even the most basic landscape terms may characterize different types of landscapes.

Analysis of the qualities and resemblances of geographic features that are described by the same term may shed light on the structure and development of landscape terminology not only in Ewenki but in other languages and spatial cognition systems. We further suggest that the best way to understand this fluidity in landscape terminology is not simply through linguistic and ethnographic investigation, but also through consideration of ontology in language itself, as suggested by Werner Kuhn. Kuhn (2011:371) posits that the purpose of ontological specification is to treat meaning as a process to be constrained, rather than as an object to be defined. It is the people who mean something when they use words rather than the words having the meaning. By applying this principle to landscape terminology, it can be argued that it is not a particular geography that determines the meaning of its constituent landscape terms, but rather the speech communities that conceptualise these landscape features and define the meaning of landscapes based on both continuity and changes in their engagements with the land. However, they do it in response to the changes in the environment. One interviewee expressed this idea well in response to a question about why Ewenki are believed never to follow the same path twice:

> *First of all, the track is changing all the time. Whether you go along this way in spring or autumn, or even in summer, it is different, because fresh verdure grows. It grows differently in different places (...). Some trees grow very fast. Second, there can be a water flood, a boggy place appears somewhere. An Ewenki person forms a map. When he has passed by a place, he mentally takes a picture of this landscape* (Struchkova Valentina, Tugur-Chumican District, Chumikan, 2017)

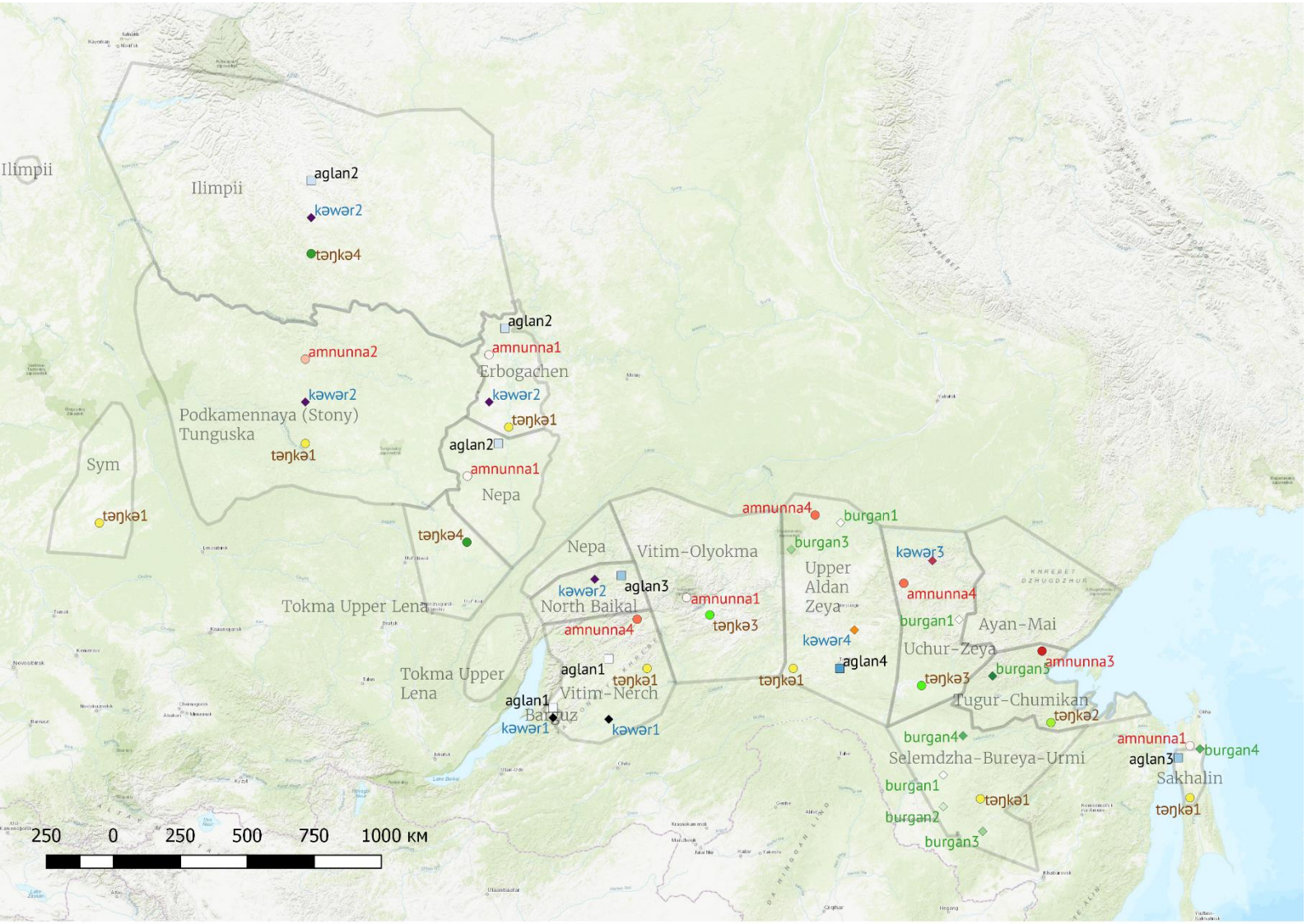
Hence, if landscape is a physical and cultural process, then its conceptualisation (cognizing its mental image and its lexicalisation) is a process, too. In this regard, it is significant to further examine how the idea of transitional boundaries suggested by (Mark & Turk 2003:30-31) in conjunction with the Ewenki people's nomadic practices may

contribute to the perception of certain geographic objects as moveable or fluid, and how the relationships between the Ewenki people, landscape objects, animals and other beings inhabiting the land contribute to the way people interpret the meaning of basic ecotopes. This issue is one for further consideration in future research.

6. Conclusion

Our analysis of the spread and divergence of Ewenki terms for key ecotopes in their territory shows that variations and flexibilities in landscape terminology and meaning are pragmatic. Yet, the fluidity of landscape terms can serve as a significant obstacle to simple categorical distinctions and standardization among dialect and speech communities in language and landscape studies (see Brabyn & Mark 2011:403). With its common language but breadth of dialect and geographic communities, Ewenki demonstrates how concepts of space, place, and geographic nomenclature evolve in an expanding Indigenous community over time and space. Moreover, the Ewenki case shows that the meaning of some geographic terms may vary so dramatically that in different communities they may be classified as completely different landscape categories. The phenomenon of dialectal variation, or fluidity of meaning among generic landscape terms, should be examined in more detail with due consideration to dynamic, changing and contrastive landscapes, and by shifting the analytical focus from abstract terms for “objective” geographic features to the ontological qualities of geographic phenomena as people experience and relate to them phenomenologically in navigating their expanding ethnophysiographic existence over time.

Map 4. Semantic dimensions of selected Ewenki landscape terms across their dialect continuum.



aglan
- 1. no trees
- 2. no trees, grass, open and small in size terrain
- 3. no trees, smooth and flat terrain
- 4. sparse forest

amnunna
- 1. ice on the river
- 2. no trees, sparse vegetation, grass, ice on the river
- 3. flat area near a river
- 4. ice on the river, stones

burgan
- 1. has grass, near a river
- 2. isolated piece of land, small in size, in a river
- 3. no trees, vegetation (bushes), no water, near a river
- 4. has trees and grass, dark, near a river
- 5. has trees, dark

kəwər
- 1. no trees, vegetation, a lot of grass, open and wide terrain
- 2. no trees, a lot of grass, open and expansive terrain
- 3. no trees, a lot of grass, has water
- 4. no trees, open terrain, elevation

təŋkə
- 1. trees, a lot of grass, near a river
- 2. no trees, near a river, small elevation, flat top, covered with water
- 3. trees, a lot of grass, near a river, flat area
- 4. forest by a river bank

Notes:

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Abbreviation

ABL — ablative case
ACCD — definite accusative case
ATTEN — attenuative
Ald. — Aldan dialect
Alg. — Algazeya village, Tugur-Chumikan District, Khabarovsk Territory
B.Y. — Belyi Yar village, Tomsk Region
Bnt. — Baunt sub-dialect of the Vitim-Nerch dialect
Brg. — Barguz dialect
Ch. — Chirinda village, Ewenki District, Krasnoyarsk Territory
Chum. — Chumikan dialect
CVB.SIM — simultaneous action converb
DATLOC — dative-locative case
DM — discourse marker
DSPRS — dispersive aspect
Ek. — Ekonda village, Ewenki District, Krasnoyarsk Territory
E. — Erbogachen dialect
FOC — focus particle
FUT — future tense
I. — Ilimpii dialect
Ie. — Iengra village, Neryungri District, Yakutia
IEA RAS — Institute of Ethnology and Anthropology, Russian Academy of Sciences

IMP — imperative mood

INCH — inchoative aspect

INDF — indefinite adverb

INDPS — indirect possession

INTJ — interjection

INTS — intensifier

IPFV — imperfective aspect

K. — Kislokan village, Ewenki District, Krasnoyarsk Territory

Kh.O. — Khantayskoye Ozero village, Taymyr Dolgan-Nenets District, Krasnoyarsk Territory

Khng. — Khingan sub-dialect of the Upper Aldan-Zeya dialect

N. — Nepa dialect

N.B. — North Baikal dialect

NEG — negation

Nerch. — Nerch sub-dialect of the Vitim-Nerch dialect

NFUT — nonfuture tense

NMLZ — nominalizer

Okh. — Okha village, Sakhalin Region

P.T. — Podkamennaya (Stony) Tinguska dialect

PHAB — habitual participle

PL — plural

POSS — possessive

PROL — prolative case

PST — past tense

PTCP.ANT — anterior action participle

PTCP.SIM — simultaneous action participle

S.R. — Sovetskaya Rechka village, Turukhansk District, Krasnoyarsk Territory

Sak. — Sakhalin dialect

SG — Singular

Sym — Sym dialect

T. — Tutonchany village, Ewenki District. Krasnoyarsk Territory

Tkm. — Tokma sub-dialect of the Tokma-Upper Lena dialect

Tng. — Tungir sub-dialect of the Vitim-Olyokma dialect

Tok. — Tokma village, Katangsk Ditrict, Irkutsk Region

Tor. — Torom village, Tugur-Chumikan District, Khabarovsk Territory

Uch. — Uchami village, Ewenki District, Krasnoyarsk Territory

Uchr. — Uchur-Zeya dialect

Urm. — Urmi sub-dialect of the Bureya-Urmi-Amgun dialect

Y. — Yukta village, Ewenki District, Krasnoyarsk Territory

Z. — Zeya sub-dialect of the Upper Aldan-Zeya dialect

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5.2. Paper 2. The Multiperspectival Nature of Place Names: Ewenki River Naming and Walking Relationships with Animals, Spirits, and Landscapes

Co-author: Thomas F. Thornton

Submitted to the Journal of the Royal Anthropological Institute

Abstract

This paper examines the process of production, use, and change of riverine and other place names based on data collected in 2017 among the Okhotsk Ewenki, the easternmost Indigenous fishing, hunting, and herding community in Khabarovsk Krai, Russia. We demonstrate how riverine names, and knowledge of hydrological systems in general, are embedded in Ewenki people's foundational understandings and perceptions of space and place and function in tandem with their mobility, navigation skills, and relationships with animals and non-human beings to render landscapes meaningful. The results reveal that Ewenki riverine names are not simply remembered and reproduced, but rather generated and transformed through empathic contact and engagement within a semiotic circle of shared knowledge and praxis among humans and other beings encountered in ambulatory travel. This practice is related to Ewenki understanding of ownership over territory, which is perceived as being equally shared with other beings, and is reflected in Ewenki place names.

Introduction

This paper discusses the processes of production and meaning of place names among traditionally pastoralist Ewenki communities in conjunction with their navigation skills, mobility patterns and semiotic relationships with animals and other beings. The Ewenki are one of the Indigenous Tungusic-speaking communities in Siberia inhabiting the vast territory of the mountainous taiga between the Yenisei River and the Okhotsk Sea. Although their population has always been relatively small, no more than 40,000 people, Ewenki are known as the most dispersed community in Eurasia (Janhunen 2012). It is likely that the Ewenki managed to inhabit such huge areas of Siberia due to their unique type of extensive reindeer herding in tandem with outstanding–perhaps co-evolved–spatial abilities to negotiate long distance navigation, including walking, reindeer riding and going by boat (see Mertens 2016). Most of Ewenki place names are riverine names. River systems have largely served for the people as central arteries for organising and referencing spatial knowledge and

have been for centuries used as the corridors upon which they have moved to new places (Adler 1910; Vasilevich 1963, 1971; Campbell 2003; Ermolova 2007; Sirina 2012; Oeterlaar et al. 2013).

Considering the important role of place names for Indigenous people around the globe (Basso 1996; Hunn 1996; Thornton 2008, 2012; Fowler 2010; Kari 2011; Paskvan 2011; Clark et al. 2014; Cogos et al. 2017), it is logical to enquire whether Ewenki place names, especially the preponderance of riverine names, function similarly. Despite an extensive language shift towards Russian, these Indigenous names continue to be produced and utilised. Along with narratives, place names, being a collective form of knowledge, help people make sense of their sense of belonging and ensure the continuity of their communities (Kirmayer et al. 2011: 84). They form what Keith Basso (1996: 34) calls a 'spatial concept of history' to Indigenous peoples and thus facilitate language maintenance as a geographic technology. To date, documentation, standardisation, and cultural transmission of Indigenous place names have dominated scholarly enquiry. However, our data reveal that Ewenki riverine names and other toponyms are not only reproduced but also coined and modified to fit in with evolving processes and perceptions and engagements with local surroundings and to reflect humans and animals' activities, relationships and experiences (cf. Harris & Holton 2019: 315-316). In this paper we show that a number of Ewenki riverine names are not merely remembered and reproduced, but rather generated anew and transformed through empathic contact within a semiotic circle of shared knowledge among humans and other beings, as well as through cognising different landscapes. This practice is based on the ability to think and produce signs from other beings' perspectives and is grounded in the understanding of other beings as possessing similar relations and ownership rights to territory as humans (Shirokogoroff 1933). We further argue that mobility, first of all walking, along with the ability to apprehend places from different perspectives play a crucial role in the process of naming and memorising of place names.

The concept of movement in the form of walking is one of the flagship themes in Ewenki studies that is inspired by a recent phenomenological understanding of movement in social anthropology in general and in Indigenous studies in particular (e.g., Cresswell 2006, 2015; Cresswell

and Merriman 2008; Vergunst and Ingold 2008). Movement tends to be represented both as a metaphor of life and as a daily practice in Ewenki society (see Safonova & Sántha 2010, Davydov 2011; Brandišauskas 2017). The notion of experience is also highly important for remembering existing names (see Thornton 2008: 22-29; Davidson-Hunt & Berkes 2010). Based on his fieldwork among the Western Ojibwa, Irving Hallowell (1967: 194) writes that a mental map is 'deeply imbedded in the "active" experience of the individual,' as his interlocutors tended to ignore the terrain outside of their experience. This statement is also true of the Ewenki people as we show in this paper.

At the same time, most of research on Ewenki mobility practices and relations with the environment do not engage with the people's linguistic conceptualisation of space, including place names. Ewenki spatial concepts and verbs of movement are also largely ignored (but see Lavrillier 2011). This ignorance is not only due to the fact that language is usually perceived as a separate issue from spatial orientation (Anderson et al. 2017), but also because within phenomenological optics, which is applied in current research on the Ewenki's mobility, researchers do not engage specifically with cognition and the production of meaning. The fascination with bodily experience and lineal understanding of movement are largely driven by Tim Ingold's (2000, 2007) approach, which denies semiotic and interpretative approaches in social anthropology (Wylie 2007: 153-162). Ingold is also known as one of the key figures in the recent critical discussion over human spatial orientation, namely 'mental maps' and abstract spatial cognition versus experiential wayfinding. For Ingold, the process of walking in the environment is akin to the process of thinking and, hence, gaining knowledge about the local surroundings through direct bodily experiences (see Ingold & Vergunst 2008; Ingold 2000, 2011). He questions the existence of mental maps and argues that movement consists of transitions or lines from one place to another in the direction which is not determined before departure (see discussion in Istomin & Dwyer 2009). To reinforce his argument, Ingold (2011: 149) turns to Ewenki herders who, according to him, do not live in space but rather in place, and that "this illusion that they do inhabit a polygonal space is based on our own cartographic conventions. On a map drawn according to these conventions, the few thousand (sic) Evenki appear to occupy an

area almost twice in size of Europe! The Evenki people, however, did not occupy the country, they inhabited it. And whereas occupation is areal, habitation is lineal."

While respecting the Evenki way of pathmaking, which may be lineal, our investigation and some ethnographic accounts (e.g., Podgorbunsky 1924; Oetelaar et al. 2013) suggest that the Ewenki have demonstrable ways of experiencing and knowing areas beyond their trail lines, including areal perspectives on their polygonal territories, taken from bird's-eye views afforded by strategic mountain lookouts. This is reflected in the riverine names and geospatial concepts too. Beyond this direct perception we must also take into account the relationships between local and transient animals, spirits, and different types of landscapes which further inform Ewenki perceptions of land and affordance. This, in turn, informs the way the Ewenki name places and may explain the changing of names as experiential encounters with the land change. In contrast to Ingold, we are convinced that the Ewenki do travel both along the paths that lead from place to place and across, above, and below the land surface, both physically and conceptually, e.g., into other-than-human worlds in mythological stories. This conceptualisation is not simply based on the difference between occupation and inhabitation, but also in between perspective and affordance. Perspective includes the ability to conceptualise—to think, to imagine—and name places from another's point of view (cf. Willerslev 2011). This multiperspectival capacity is important to clarify in the light of a growing body of research on the Ewenki and other Indigenous people's patterns of mobility, which are largely based on Ingold's influential lineal approach to movement, rather than a holistic ethnogeographic and spatial perception analysis informed by geospatial nomenclature, complex relationships with different beings and experience.

Data and Methods

The data for this research was collected by the author in the field among the Okhotsk Ewenki in the Tugur-Chumikan District, Khabarovsk Territory in summer 2017. Interviews were carried out at riverine and other named places using both official topographic maps and hand-made maps. Fieldwork also included participant observation, further informal and semi-structured interviewing,

and recording field notes. A total of 29 Indigenous villagers of Chumikan, Torom, Neran, and Algazeya were interviewed, and several more interviews were conducted with the local authorities and non-indigenous residents. Apart from Chumikan, which is the administrative center of the Tugur-Chunikan District, the rest of the villages are small, with populations ranging from 50 to 100 people. The Ewenki living there are mainly engaged in salmon fisheries and hunting for moose and wild reindeer. Only in Algazeya is small-scale reindeer herding maintained. Over a month-long period 10 maps documenting 186 place names were made by eight men and two women collaborators (see Appendix 5.1). All of them were fluent Ewenki speakers older than 40 years of age. The process of map drawing was followed by informal discussions about the meaning and configurations of the names and geospatial concepts. Interviewees were then asked to show the same rivers on both the official digital and paper maps. The aim was to compare the names and locations of the rivers on different types of maps to precisely identify which were selected and named. In addition, the hand-made maps were later talked through with other residents in each settlement in order to learn more about the meaning of the names and to document stories and other cultural associations related to them.

Fluid but Grounded Signs: The Semiotics of Place Names

When talking about their lands, the Ewenki tend to stress the fact that the landscape is fluid. This assumption stems from the diverse ways that people perceive and interpret different landscapes as open cognitive terrains in terms of the semiotics of place names. Beyond this, in anyone's mental map of a territory, landscape features are never the same because they are constantly changing according to seasons, as well as under the influence of natural and man-made causes, such as floods and fires, human and animal activities. The Ewenki language responds flexibly to these phenomenal changes by embracing semantic variations in the meaning of generic landscape terms and some place names (2020).

Linguistically, most of the Ewenki place names are riverine names which belong to the class of nouns designating particular location, resemblance, or specific feature. A special group of riverine

toponyms contains the names derived from ecotopes, the smallest ecologically-distinct landscape features (see Hunn & Meilleur 2010: 15). Although the full structure and classification of place names is more complex, and beyond the scope of this research, this simple distinction appears to be crucial for translating and interpreting Ewenki riverine names, as the names derived from ecotopes appear to exhibit the same pattern of variation in meaning as proper ecotopes.

For example, the meaning of the Ewenki term *burgan* varies from 'a river bank inundated with water' / 'meadow' to 'a black poplar tree growing on the river bank.' In some Ewenki communities, this word can also mean 'a river bank covered with shrubs' and 'a coastal grove' (Vasilevich 1958: 69). Among the Tugur-Chumikan Ewenki, the term *burgan*, however, carries the meaning of 'a dark spruce forest.' There is a place called *Lucha burgan* 'Russian spruce forest' in the taiga. It was named after a Russian who had allegedly gotten lost in this place long time ago. The place was described as being both dark and impenetrable. This example shows that whereas the term (sign) *burgan* stays the same, its meaning varies in such a way that the key feature changes twice: in the first group we could collate the terms which contain a reference to water / river bank; in the second group, there are terms with the meaning of a dark or black object ('black poplar tree', 'dark spruce forest'). Some connotations, for example, a black poplar tree, are still linked to the river bank, whereas others seem to have lost any direct link to river bank ecotopes or to riverine systems in general. It is also possible that the term *burgan* signifies a combination of the following elements: darkness, vegetation, and relation to the river bank. Yet, which element prevails depends on the speakers' relation to the site and the specific context of landscape features. The implications of this are significant, for when we come across a river named *Burgale* in Ewenki, its meaning is not transparent, but rather must be clarified according to the local use of the term *burgan* and the perception of the corresponding term in the community.

This kind of multiple meaning of landscape terms as signs significantly restricts the possibility of interpreting place names with the members of a community other than among those who belong to that territory or from which the names were collected. On the other hand, it opens up the possibility

of difference and highlights the role of context and the fluidity of interpretants in terms of Charles Peirce's (1994) semiotics. The interpretant is a new sign which is cognised in a speaker's mind in response to a proper sign, the combination of signifier and signified. The interpretation of signs usually results from cultural conventions and personal experience. The uniqueness of the Ewenki landscape terminology, at least part of it, lies in the fact that the same sign can be linked to completely different objects and, hence, stimulates the appearance of alternative interpretants, remaining, at the same time, semantically related to all those objects referenced. The meaning can to some extent be unpacked through the analysis of the whole system, as all its elements share the same quality. This phenomenon is based on the indexical nature of ecotopes and place names. As Peirce (CP 2.248) asserts, 'the Index is affected by the Object, it necessarily has some Quality in common with the Object, and it is in respect to these that it refers to the Object' (in Jappy 2017: 29). Indexicality is defined as the property of the context-dependency of signs. Ron and Suzie Scollon (2003), who developed the field of geosemiotics, further argue that knowledge cannot have any independent existence but must be represented by a system of signs. They posit that all three basic forms of signs–symbols, icons and indexes–are the property of indexicality because they have to be located in order to exist in the material world. Hence, place names as signs are also anchored in the material realm. It further implies that if the location or context has changed, then the signs change too.

Context, in which signs are used and interpreted, serves to ground their fluidity within a schema of interpretation, or frame (Goffman 1967), thus restricting the number of meanings. Yet to be accepted and correctly interpreted, these frames should be socially recognisable and shared, which is crucial for place names too (Harris & Holton 2019). The sociolinguist Penelope Eckert (2016: 76-77) further highlights that all signs are unstable at their nature. But people with similar experience and sharing the same ontology tend to have more similar interpretations of semiotic landscapes. As anthropologist Clifford Geertz (1973: 14) points out, 'our formulations of other peoples' symbol systems must be actor-oriented.' To put it another way, in order to understand a symbolic system, anchored in landscape, we need to examine interpretants in their relation to both signs and objects

(landscape features) among a particular group of people who share the same language code and experience. Keith Basso (1996: 39) similarly highlights that when it comes to Indigenous systems of place names, those of the Western Apache in his example, the problem we face is semiotic in nature. We are unable to apprehend the sense and significance of signs that are constructed through people's experience in the 'world of objects and events' with which we are unfamiliar.

The problem of diversity of language and experience becomes even more complex when it comes to the semiotic systems of animals and non-human beings and their influence on the way humans produce signs, including place names. As Eduardo Kohn (2013: 61) notes, 'all signs involve mediation and all of our experiences are semantically mediated.' Yet, we can only learn of others' semiotic systems though participation and shared experience. This conclusion, in turn, leads us to the necessity of integrating semiotic and interpretation approaches into the study of geographical nomenclature and place names in order to shift from an entirely anthropocentric phenomenological dimension to a broader understanding of meaning embedded in geographic concepts and place names. In the following sections, we consider some examples.

Process of Naming and Experiential Walking

Among the Ewenki, experience and place naming are bound to the practice of walking, a basic technology and iterative mode for learning and apprehending landscape features which change over time. Ewenki spend a lot of time in the taiga, hunting, herding, gathering, or just walking. People normally move along the more 'natural' lines, which are rivers and to a lesser extent game and reindeer trails in the taiga, as well anthropological lines, for example, paths left by geologists. This way is the safest and most predictable, but not always interesting in terms of affordances and human curiosity. Hence, hunters do visit some remote and rugged areas of the taiga out of interest and diverse affordances, crossing the land surface in different ways.

The Ewenki language embraces a number of verbs describing movement (see Vasilevich 1940: 172; 1958), including going up and down elevations, across mountains (*ala-mi: / dava-mi:*) and rivers (*da:g-mi:*), around swamps and marshes (*agi:l-mi:*), stepping aside from the path for

hunting (*dariwul-mi:*), following an animal's footprints (*ud'a-mi: / mui:kte-mi:*), searching for new paths (*tysu:-mi:*) or for animal footprints (*agi:kta-mi:*), going without path (*ho:nta-mi:*), and making breaks between movements (*urin-mi:*). In this sense, the Ewenki do travel within a much greater space, than simple lines or known trails reveal, and not merely from one place to another, for people who are setting up for the journey never know where they might ultimately find themselves (see Vasilevich and Smolyak 1964). On the way, they sensibly take note of new landscapes, identify changing habitats of animals, and types of soil and vegetation patterns (cf. Brandišauskas 2013). And sometimes they come across unusual or anomalous things, which afford and enable new orientations and pathways to come into focus. During these prospecting or pioneering excursions, people happen to name new places if they find them important or peculiar, either practically or aesthetically. Being on the move, they not only make lines, but also observe, cognise, and compare landscapes, and view them from different perspectives, including bird's-eye perspectives from elevations. The link between movement, observation and seeing from above is further reflected in the following Ewenki terms which link together the notions of travelling, wandering, and flying: *ne:kee:-mi:* 'to travel', 'to wander in the taiga', 'to fly by plane', *arikta-mi:* 'to climb up high', 'to hover' (about birds), 'to wander around looking for something'. Among other things, these perspectives allow people to predict, calculate, triangulate, and empathically understand animals' behaviours and movements not only through direct perception but also through more 'remote sensing' and engagement.

The Ewenki observe informal rules of walking, based on what Irving Hallowell (1967: 192) calls 'direct experiential knowledge,' viz.: where and how long one can go depends on personal strength, age, and experience. Ewenki would say that a young hunter needs two or three years to become 'experienced.' 'Experienced' in this context is closely related to one's walking-on-the-land skills, including practical knowledge, agility, and speed in navigating local surroundings. The more you walk in the taiga, the more places, animals and spirits' behaviors you come to know. In this regard, some Ewenki hunters are concerned with the spread of snowmobiles equipped with GPS (cf. Stammler 2002). Despite the fact that this technology allows people to significantly extend their

hunting territory, snowmachines are leading to the loss of 'walking skills.' As a result, people spend less time searching for animals and learning the taiga through ambulation, and they start to forget and fossilise places and their names, ceasing to coin new names. The knowledge of the local surroundings is also diminishing as hunters tend to use the same snowmachine trails from one year to another. Therefore, people do not need to know the whole territory any longer as they can move along a subset of familiar paths.

Correspondingly, when an Ewenki hunting territory starts to diminish in size, the extraterritorial land becomes vacant and subject to use by other hunters. Thus, hunters from Torom village said that since they had not been able to walk around the whole hunting territory, it had been gradually appropriated by Tugur hunters, whose community is much bigger in terms of the population and reindeer. Tugur hunters have established their own system of place names which is shared by the members of the Tugur community but is only partially known to Torom hunters. The latter consider this process of land alienation as negative but not unjust. They believe that it has been very important to look after the territory, controlling the populations of animals and protecting the land from outsiders. However, some of them try to secure land use rights through obtaining licences so that the hunting territories could be used at least by their grandchildren in the future.

The reduction of hunting territory further leads to some place names going out of use as people stop employing them along when no longer visiting the places the names signify. Thus, during our discussions of place names with Ewenki, people often declined to talk about the names which they considered to be 'alien,' i.e. from other communities. They tend to explain this reluctance in terms of aesthetics, as, according to them, place names in other dialects do not sound 'good' or are not 'correct.' However, there may be another reason for their unwillingness to talk about 'alien' names that can be explained through Ewenki notions of hunting territory and their relations with places.

Once, while working on a map with two Ewenki hunters from Torom village, they started to discuss the names 'on the Tugur side' of the map, as they referred to them (Pic. 8). By Tugur they meant the hunting territory known to belong to the hunters from Tugur village. It was evident that

they knew well not only the Tugur names but also some stories associated with them. However, when asked to depict the names on the map, they pronouncedly refused to do so, explaining that the Tugur Ewenki had their own dialect and, hence, their pronunciation and interpretation of the local names were completely different. In other words, the names are perceived as being linked to a certain speech community occupying a specific territory. This territory is defined on the basis of existing administrative boundaries, established in Soviet times, i.e., a village or a region, and the experience of people who are considered themselves as being members of that community (cf. 2016). Whereas the former remain the same and are normally hard to change, the latter are fluid and based on the practice of walking, experiential learning, and interaction with other hunters, animals, and spirits. Once the territory starts to be identified as belonging to a particular community of hunters, those people acquire a set of responsibilities that they have to carry out in relation to the local surroundings and beings that dwell there. These relationships and obligations are always reciprocal. The following section explores how these relationships shape Ewenki practices of naming.

Picture 8. Working on the map. Torom village, 2017. Photographed by N. Mamontova



On Spirits and Masters of the Rivers

Belonging to a particular territory is not a constant. Rather it is a process achieved through informal agreements with other hunters, as well as animals and spirits, which have similar ownership rights over the land. In this regard, Tim Ingold proposes to look at landscape from 'the dwelling perspective,' according to which any landscape is considered to be an enduring record of the past generations which have left there something of themselves (Ingold 1993: 152; see also Basso 1996: 106-107; Ingold 2000). Burial places are also dwelling places, for example, for ancestral spirits. Most of the Ewenki interlocutors, who were asked to draw maps, carefully added the location of old graves. Although supernatural beings are normally not designated in Ewenki names, some riverine names identify the presence of burials. People normally try not to hunt in their proximity. Thus, the name of the Giramkichan River 'small grave,' signals that there is a child's grave. Some graves are located in proximity to the rivers where the buried people used to hunt in the past. These people are believed to become the masters of hunting territories after their deaths. In Ewenki communities, these masters are known by different names (*bugadi, singe:n / hingke:n, etc.*) (see Ssorin-Chaikov 2001). Some Ewenki communities make a distinction between communal guardian spirits, who are believed to be their ancestors, and more depersonalised masters protecting a hunting territory, 'which does not belong to anyone' (Vasilevich 1958: 355). In fact, it is more accurate to identify this territory as not possessed by humans (cf. with Inuit in Bordin 2017). The name for such masters is the same as for hunting luck (*kutu*). The more nuanced relations between humans, different categories of animals, and masters are seen in the use of a separate term for a guardian master (*seveki:*) for humans and domestic reindeer.

The neglect of the masters' burials may result in an unfavourable interaction with a spirit, bring misfortune, or even lead to death. The following story narrated by an elder from Torom village tells about an encounter with *Ehekend'a* 'grandfather', a real ancestor of one of the local Ewenki families, who died a long time ago. The river where his grave is located was named after him (see Appendix 5.1, Map 17):

You must definitely stand by [the grave], smoke, talk a bit, like, "I have come, excuse me, I'm hunting here", and then you share something. Whatever you have, you need to put it [on the grave]. It happens that [the spirit] may disturb you. One year I went to their [the Safronovs'] hunting territory. Once at night I woke up in the tent. The night was moon-lit, and there was a big man sitting by the stove. It was Ehekend'a, there was his grave there. I was frightened. The black silhouette was sitting near the stove like this (he crossed his arms on his belly and bent forward - N.M.). I wanted to go out to the toilet, but I got scared. I had to wait until the morning [Yakov Porotov, Torom]

Ehekendya is recognised to be a good spirit, protecting the Safronovs' hunting territory. He is treated as the guardian of the area.

However, some beings are believed to be harmful. If hunters fail to make an agreement with spirits in this category through the rite of sharing, then they may feel compelled to leave the territory. It happens that people sometimes completely stop visiting some places and even cease hunting on particular rivers because of such spirits' antagonistic behaviours. If a place starts to be associated with an evil spirit, the meaning of its name may change. For example, the hunters from Torom village believe that the Gatkan River is a dwelling place for a spirit which shows itself in the form of a rotating head. The hunters, who have seen the head, say that the head would suddenly appear, then go through the tent, and 'run' down the hill towards the river to drink some water. The etymology of the word *gatkan* is unknown. One of the elders interpreted the name as 'lancet fish.' According to him, it stems from the word *gadyk*, which he believes to be the correct name for this river. The word *gadyk*, however, is translated in the dictionary as 'place where keta (*O. keta*, a.k.a. dog or chum salmon) is sprawling' (Vasilevich 1958: 81). In contrast, the younger hunters suggest that *gatkan* is a name of the person whose head the people have seen on the river. Their suggestion is backed up by the location of old graves at the source of this river. This example shows how different approaches to the interpretation of the same name can give an effect of intertextuality, which is a part of the ongoing

production of new signs and their meanings. As Keith Basso (1996: 107) notes, places provoke a network of associations about past and present, they animate the ideas and feelings in people who attend these places. He calls this process 'interanimation.' Yet, associations are not always positive. The meaning of a place may change from positive to negative, but the meaning is ultimately assigned according to its appropriateness to the current context and recipients.

In many cases, old burial places are not dangerous, once you know how to behave properly in their vicinity. The most dangerous places in the taiga are marshes. The Ewenki language contains numerous terms designating boggy places, which are also associated with harmful spirits and other non-human beings (2020). Along with graves, abandoned campsites and old storage places (see Anderson 2011), such places are known for transgression or 'crossing a line' (Cresswell 1996). Transgression leads to the transformation and reconfiguration of the boundaries and relations between time and space, body and mind, humans and non-humans.

Ewenki believe that the only type of landscape where an Ewenki person would not find a way out after being disoriented is tundra. Marshes and tundra-like landscapes are especially dangerous in October-November, in the period of freeze-up and severe winds and snowstorms, as the Ewenki have less knowledge of navigation in open spaces. Being 'captured' by a snowstorm, it is wiser to make camp and wait until the weather changes. Since such places are hazardous, some place names encode the information about the terrain and features which should be avoided by people. Thus, going up along the Gatkan River, one may reach the Nyakatyn River and Nyakatyn marshes, which are known as 'the place where people get lost.' The only elevations there are hillocks named Mukamukchal 'buttocks,' which are two absolutely identical mountains, standing apart from each other. The hunters say that if you lose your way in Nyakatyn marshes, you will probably wander from one hillock to another for a long time and get out only by chance.

To sum up, some place names encode the information about the difficulties—spiritual or geomorphic—one can face while traversing the places they signify. These places are not forbidden to visit. However, one needs to have a set of cultural 'keys'—linguistic, perceptual, interspecific—to

navigate there properly and contextually. Hence, such names not only indicate that a place is potentially dangerous but also provide a set of recognisable hints which a knowledgeable, attentive Ewenki can interpret and act upon accordingly while inhabiting the place. Through walking in the taiga, people systematically learn to identify and interpret these hints and adjust their pathways, relations, and practices accordingly.

Naming Places from One's Perspective

Perhaps, the biggest number of riverine names are those melding words for animals, fish, landforms and vegetation. Semantically, referencing is complex as some plant names may signify the presence of certain animals in the territory and vice versa. For example, *sivah* is the name for *equisetum*, a plant which is attractive to reindeer and moose. Hence, in proximity to the Sivah River, these animals can be found in abundance. Another category of widely spread names are those with the meaning of a burnt-out place. Burnt-out places, both natural and cultivated by people, are used among the Ewenki for hunting purposes, as fresh bushes, grass and berries attract moose and reindeer (Vasilevich 1969: 50-51; Brandišauskas 2017: 198). Among Okhotsk Ewenki, the word for burnt-out places is *d'agdah*. The eponymous river is the D'agdah River. Gradually such places get covered with fresh moss and bushes, and then with trees. With succession the name of a place may change. An interesting example illustrating such a change is the Gorelaya Hillock. This is an official toponym on maps that means 'burnt-out' in Russian. A hunter, in whose territory the hillock is located, explained that the Ewenki name of this hillock used to be Ongkoih 'moss', 'lichen.' In the past, moose would come to this place to feed on moss which had grown up on the burnt-out surface of the hillock. However, he added, nowadays the hillock is covered with mature willow trees and moose do not come there anymore. Hence, people have stopped referring to the hillock by the name *ongkoih* 'moss,' 'lichen,' as it no longer makes sense, and the hillock has become nameless in the Ewenki community, if not the Russian cartographic one. Another example of the links between an animal and a place name is the Gulandya Hillock. The name means a big northern or shady slope. Among the local Ewenki, the space around the hillock is known as the bears' dwelling place. The same hunter observed there were many

dens because bears 'like to settle in dark spruce forests, where snow does not melt for a long time, on the dark, northern slopes.'

These and other examples show that place names are open to modification and change. Toponymic change occurs not only under the influence of humans but also animals and plants which, through their own inhabitation, cognition, and practices, facilitate numerous transformations of the landscape. James Gibson (1979) calls these phenomenal possibilities 'affordances.' Hence, the taiga represents a set of affordances. However, changes in landscape and the environment also create new affordances. This process is continual and fluid in the same way as the fluidity and change of some place names. This model is different to, for example, Tlingit (Thornton 2008), where new place names are placed on top of old names, without erasing them, to signify environmental change and landscape transformation over time through a layered assemblage of linguistic artifacts.

The taiga, land, and all ecosystems are related to humans as well as to animals and other living beings. However, Ewenki we surveyed made a clear distinction between transient animals (e.g., *alin* 'transient animal' (concerning migratory squirrel and sable), *girkugir* 'transient / wandering squirrel' (Vasilevich 1958: 25, 89)) and local (resident) ones. This crucial distinction regulates hunting rules, as only the local animals are considered to be the direct partners of communication. The following statement from an interview with an Ewenki hunter explains the difference between these two categories of animals:

> *Even moose can be offended if you do not do the right thing, if you kill too many of them. If I kill more animals than needed, hunting luck will turn away from me. It is important to leave female animals for the offspring. It is bad to kill them. But you can kill transient animals. For example, I have my hunting territory, I have there transient moose and reindeer. I can shoot those. But I have no right to kill the local animals, and I will not allow anyone to kill them [Yakov Porotov, Torom].*

The Ewenki concept of luck (*kutu*), which is often mentioned by hunters, is complicated (see Shirokogoroff 1935; Anderson 2011). In his recent book on luck among the Ewenki-Orochen, Donatas Brandišauskas (2017) shows that human movement in the form of walking is bound up to constant interaction with spirits and the people's knowledge of the environment. People who are known as good hunters are called in Ewenki *kutuchi* 'having luck.' To become a lucky hunter is not coincidence; one must know how to behave in the taiga in various situations. The hunter must follow nature's rules and regulations *(od'o)*, make agreements with spirits and animals through sharing and negotiation, keep reciprocal relations with other hunters *(nimat)*, and even apply magic or ritual as needed. For example, when a hunter catches a sable for its skin, he must cut its joints, curl the sable's carcass up into the foetal position, and then put it into a tree hollow. This way the hunter prevents the carcass from putrefying on the ground and, hence, spreading infection; at the same time, nesting the carcass in such a way enables reincarnation, the rebirth of the body by another reincorporating a spirit, thus contributing to the regeneration and conservation of the sable population (see Vasilevich 1969: 215). The latter is also a part of the agreement between the hunter and the master of the hunting territory. This way hunters show respect to the animals they hunt so that the animals will not be offended, and their hunting luck, as a relational and reciprocal force, will not "turn away" (*otvernetsya* in Rus.) from them. If the hunter breaks this rule, he is destined to get in trouble, if not lose his luck. It is believed that such a hunter may get sick or even lost. The latter is a metaphor for death.

In contrast to the local animals, which are believed to leave constant *oktoror* 'trails' (not the same as occasional *u:d'al* 'footprints' in the taiga) and have their own established dwelling places, transient moose, reindeer, and sable do not need to mark the territory while passing by in search of food. The transients' behaviour is more chaotic and less predictable, and their movement usually represents just a jumble of lines. The trails of some of them, e.g., wild reindeer, form circles. Hence, in order to catch wild reindeer, hunters have to make circles while searching for them (*mui:desin-mi:*), replicating the animals' motion (see Shirokogoroff 1935: 69, 84). Sergey Shirokogoroff (Ibid.: 69) notes that the Tungus, including Ewenki, know perfectly the systems of paths in the taiga. Some

of them are used only for going on foot, others for riding on reindeer or horses. People know where each path leads, when it was last used, why it changes direction, which animals have recently passed by, and so forth. Only the local animals are considered to have ownership rights over the territory which they protect from outsiders by creating their own habitat, with a set of trampled places and marks. There is no specific name in the language for the local animals. Among Okhotsk Ewenki, they are usually referred to by the name of a family in whose hunting territory the animals dwell. Thus, people may say 'these are the Koryakins' moose' or 'Semen has lots of bears in his territory.' These references always denote the quality of relations to the locale, not the ownership of hunters over the animals.

The difference between transient and local animals can be further clarified by using the term 'nonselves,' as described by Eduardo Kohn. He writes that the Runa, an Amazonian Indigenous community, 'enter the forest's ecology of selves in order to hunt, which means that they recognise others as selves like themselves in order to turn them into nonselves' (Kohn 2013: 17). In this sense, for the Ewenki, transient animals are more nonselves compared to local ones. This does not mean, though, that transient animals lack personality. Quite the contrary, as an Ewenki hunter observed, 'When you find (transient) sable's footprints, you compare them, and then you calculate how much time you would need to catch the animal. There are such sables that you will be able to catch neither within a day, nor within two days, or maybe you will never catch them' [Stepan Safronov, Torom]. This observation shows that transient sables are not just a mass or a chimera; each of is an individual being. Most importantly, it is not expected that hunters will be developing long-term relationships with transient animals.

The more animals interact with humans, the more they are perceived as selves. Bears, which are considered to be connected to the Ewenki by blood relation, are even closer to humans on the imagined continuum of selves. They are followed by such 'companion species' in Donna Haraway's terms (2003) as dogs and domestic reindeer. Among other things, the concept of selves explains the mode of hunting with a special domesticated reindeer (*ondogdo*) that recently existed among the

Ewenki. The hunter would send his reindeer as a 'mediator' towards a herd of wild reindeer, while walking behind in his winter clothes turned inside out, this way being partly a reindeer himself. When the contact between the two reindeer was achieved, the hunter killed the wild one, or, using Kohn's terminology, turned it into a nonself. After death animals lose personality but not vitality which can be transformed into new selves through the rites of burial described above.

The habitat of a certain animal forms a network of trails and dwelling places. On a map, this network resembles a cluster of related place names, domains, or areas of interest, signifying the presence of the animal, its behaviour, and distribution. For example, the Sokhaty River 'moose' (Rus.) leads to the Tala River 'salt lick' (Ewenki). These two names indicate the abundance of moose which come to this area to lick natural salt. Some place names show possible scenarios of interaction between humans and animals that may take place in these particular places. In this case the names may form very complex clusters, which include different types of landscapes and subsistence activities. One Ewenki hunter describes intimately the area known as the Siladyak Mountains with the meaning of shish-kebab, looking at the panoramic photographs of this terrain:

> *Here are the Siladyak Mountains. There are sheep there. We would go up there to get them, and it was necessary to make shish-kebab afterwards at the top of the mountain. This is Antykan, it sticks out like a cape. Antykan is a spring, and the hillock is also Antykan. It means "right." This is Ogn'o in the direction toward Diktangde ('blueberry'). I used to hunt on the other side [of the mountain]. On that side is Upper Diktangde, on this side is Lower Diktangde. From here it [Lower Diktangde] is not visible. And there is Chukinkan, also a spring. It means "raw meat." You prepare undercooked lamb meat there. Ogn'o are ornamental rocks. The stones are of different colours [Vladimir Kolesov, Chumikan].*

In this regard, the ecotope-based names and those with the reference to flora and fauna may form complex semiotic networks. Normally, the change of a riverine name signifies that one or few key

elements of these relationships has changed. This may affect not only the name itself but the network of the names within a certain area.

To conclude, riverine and other place names derived from the names of animals and plants, as well as ecotope-based names, designate not only—and not always—the abundance of these animals and plants in the territory, but also the complex relations and possible scenarios of interaction between different humans and other-than-humans selves and their environments. Moreover, some of these names are hard-to-interpret indexical signs pointing not to what they allegedly signify, as it is shown in the example of the mountain Ongkoih 'moss,' 'lichen,' which indicates the presence of moss for moose, and not for humans. During hunting, herding, or just long excursions in the taiga people recognise and learn the system of affordances and network of dwelling places. They select and name the most significant of these affordances for their qualities in situating people's and animals' experience and engagement with landscape as they navigate pathways and projects in relation to the land and its constituent beings.

Discussion: Context, Interpretation and Ownership in Ewenki Place Naming

Ewenki riverine and other place names are not merely landmarks but fluid signs (the term of Daniel 1984). Their meanings are bound up with and interpreted through the complex and reciprocal relationships that adhere between people, animals, spirits, and landscapes. These relationships are thus an integral part of the context in which the names are produced and utilised by Ewenki in practice. If we take a name out of its context, then its meaning can be misinterpreted or even lost. This was one of the main reasons why Ewenki interlocutors normally declined to talk about place names which were used by speakers belonging to other territorial communities, or even those that had fallen into disuse. They did not want to bring their own interpretation into a geographic order of things established by others. They were also very concerned with and sensitive to the way that names sounded, pointing out crucial dialect differences in pronunciation, as dialects can literally make places sound more meaningful for people. Most importantly, the interpretation of names goes in tandem with people's experience, which for the Ewenki is associated with the mode of walking and its

requisite navigational skills. The more a hunter or reindeer herder walks in the taiga, the more names he or she knows. Hence, the names 'make sense' through regular interactions with the places, especially through the ambulatory praxis of 'making sense' of the nomadic herders' world.

However, these explanations are still incomplete, as all of them touch upon only one of the possible levels of interpretation, which is restricted only to humans, and tell us little about other actors which comprise the landscape. To fully understand why talking about place names in certain situations or contexts can be viewed by Ewenki as a violation of indexical order, we need to examine the process of interpretation as being multilayered, multidimensional, and experientially context-dependent. By doing this, we can better understand the role of names in a broader semiotic system that includes a broader set of relationships and interactions between humans and other parties.

In phenomenology, which deals with human experience, interpretation 'comprises the basic structure of "Being-in-the-world"' (Gadamer 2007: 168). The act of interpretation is linked with perception. Tim Ingold (2000: 189) posits that 'to perceive the landscape is therefore to carry out an act of remembrance, and remembering is not so much a matter of calling up an internal image, stored in the mind, as of engaging perceptually with an environment that is itself pregnant with the past.' He further develops this idea in his essay on naming as storytelling (Ingold 2011: 165-176). The past partly unfolds itself in narratives and stories which are embedded into the landscape and can to some extent be read in the same way as Ewenki hunters read trails and footprints left by wild animals (cf. Aporta 2004); or they can be heard from others. These narratives shape the way people perceive and respond to the environment and help them to mark spatial features in their own terms and categories, both cultural and linguistic. In other words, narratives provide local people (and researchers) with a meaningful context, helping them to memorise, coordinate, and interpret place names (on narratives see Basso 1996; Cruikshank 2005; Thornton 2008). However, the relationships between perception, linguistic means of expressing place names, and their interpretation remain complex and full of contradictions.

Even though stories may help to unfold the meaning of some place names, they often remain encapsulations of the past, revealing what used to be significant, leaving open the question of their current suitability and applicability. In many Indigenous societies, especially those who lead a more settled or territorial way of life than the Ewenki, symbolic connections to places can be reproduced through the concepts of heritage and collective ancestry (see Thornton 2008: 39). In this case, people need narratives which: 1) establish 'the right order of things,' 2) achieve resonance through their encapsulation in present names on the land, and 3) link generations together in perpetual dynamic of 'heritage and destiny' relations to territory and place, as in the Tlingit concept of *shagóon* (Ibid.). However, these links appear to be less salient among more nomadic peoples whose attachments to the land and concepts of territory are more fluid.

Analysis of how Ewenki place names or their meaning may change over time and space shows that these changes can happen due to the transformations of a landscape or the habitat of a certain animal. In this case, the name becomes 'out of place.' It does not descriptively fit the perceived environment anymore, and a discrepancy arises between the name and the perception of the landscape by people or other beings. This observation further challenges the idea of static landscapes, with names pinned on them. Ingold tries to overcome this problem by asking what if the earth's surface is 'continually unfolding in the course of life itself through the movements of people and animals, wind and currents, celestial bodies and so on?' The movement in this portrayal is viewed as knowing, and, hence, 'the knowledge that names convey is storied knowledge' (Ingold 2011: 168). This proposition is a good alternative to the portrayal of landscapes and Indigenous peoples who inhabit them as static, and it fits well with Ewenki notions of constantly changing landscapes as discussed above (see also 2020). Some outcomes of this movement reveal themselves in place names derived from ecotopes: they gradually 'attach' new features to the basic meaning, as the process of transformation unfolds, as in the example of the term *burgan* discussed above. On the other hand, Ingold does not really explain how the knowledge is generated beyond bodily experience.

In contrast, the semiotic perception of landscape implies that there might be several and equally accepted layers of naming and meaning depending on *who* refers to a particular place and *what* this reference means for each party in a particular relational moment. This is reflected in Kohn's (2013: 61) idea of semiotically mediated experience and seems consonant with Gadamer's understanding of experience 'as a potentiality for being the other.' It also suggests that the situation of empathic contact between different beings within a semiotic circle of shared knowledge and experience is the premise for generating names and making sense of existing ones. In this way lines of travel, á la Ingold, are encompassed in semiotic spheres that reflect the richness of relationships between beings and forces that constitute Ewenki environments.

Returning to the example of successive names of the same mountain, discussed above, the earliest documented name of the mountain is *gorelaya* 'burnt-out,' which is an official toponym. This name does not contain storied knowledge yet; rather it is just one potential scenario of the relationships between the mountain, people, animals, and plants. Over time, when the mountain's surface transformed, the mountain got another name, which was *ongkoih* 'moss,' signifying for moose the presence of moss, and the presence of moose, in turn, made it significant for humans. Finally, the mountain, which is now covered with trees, lost its name because the moose stopped visiting the place in the absence of moss; hence, people stopped referring to the mountain at all. Ironically, only from its official name on the map we may find out the initial meaning. However, cessation of name use does not mean that the name is forgotten, but merely that it is abandoned as a perceptual tool. It may still be remembered as an artifact, rather than an active referent.

It appears significant that the mountain was not initially named 'moose' even though the Ewenki knew from their experience that burnt-out places attracted this animal. This example shows that the sequence of actions and relations between moss, moose, and humans is important on its own, and the name reveals these co-evolving relations in every particular stage. This phenomenon can be characterised by using the term 'layered simultaneity,' proposed by Blommaert (2018), when several chronotopes, configurations of space-time in discourse, are synchronised in a way to form a new one,

which is more adequate to here-and-now. Therefore, in terms of language pragmatics, the majority of Ewenki place names carry out an appropriateness-to-context function which is based on human experience, knowledge, and perspective. The latter is linked with ontologies that manifest themselves in the complex relationships and interactions between places, humans and non-human beings. The task is to deconstruct different layers of meaning in order to establish the role of sign, which can be a place name, in semiotisation of space and place.

The notion of perspective also implies that the land beyond the human trails and places is inhabited by non-humans, and the people are in close contact with the latter. Therefore, when Ewenki are asked about the size of their hunting territories, which can exceed hundreds of hectares, they highlight the fact that, while for hunting they need just a relatively small piece of land, the rest of the territory is largely assigned to local animals as a domain in which to dwell, feed, reproduce, move, and interact with transient animals. The animals are believed to have similar ownership rights over particular hunting territories as the Ewenki themselves (see Shirokogoroff 1933: 44-45; Shirokogoroff 1935: 78). In order to hunt sustainably within smaller areas of the taiga, along 'their lines of travel' as it were, it is thus necessary for people to 'have' huge hunting and grazing territories. For this purpose, they try to secure broad land use rights, as the officials tend not to understand this perspective of dwelling and interaction, arguing that the land is 'empty' because people are not physically present there continuously or regularly. Yet while contact between people and animals may occur in a small subset of Ewenki territory, they need the rest of the territory to make it possible. This is the answer to Ingold's enquiry about why Ewenki hunters appear to 'occupy' an area almost twice in size of Europe. In a full sensory and semiotic way, they do.

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5.3. Paper 3. Rivers and Mobility in Siberia: Semantics and Fluidity of Ewenki Riverine Names

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Keywords: Ewenki, place names, hydrological maps, river systems, Indigenous mapping

Abstract

This paper examines place names and hydrological maps among hunting, reindeer herding, and fishing Ewenki people living in the vast area of Siberian mountainous taiga, with a particular focus on the meaning, distribution and semantics of geographic place names in comparative perspective. Methodologically, this research is based on Indigenous participatory mapping and archival research examining a sample of Ewenki hydrological maps collected over the past century by the Soviet researcher Glafira Vasilevich in tandem with our own field data obtained in the Ewenki communities of the Khabarovsk Krai and Yakutia in 2017 and 2018 respectively. This research demonstrates that Ewenki employ a riverine orientation system and most of Ewenki place names are primarily hydrological. In contrast to other Indigenous groups, these names are fluid in nature: although the same patterns of naming are applied in every surrounding, the names are highly variable, both semantically and structurally. Additionally, they are not only passed across the generations but produced and modified to make sense of the locales. The results challenge the common understanding of Indigenous place names as primarily static and heritable.

0. Introduction

This paper discusses Ewenki place names (toponyms) in terms of their structure, typology, semantics and distribution, as well as general name-giving principles among Ewenki, the most highly dispersed Indigenous hunting and reindeer herding community in Siberia. It is based on both current ethnographic and linguistic data and archival cartographic material representing hydrological systems with numerous riverine names collected by the prominent Soviet scholar Glafira Vasilevich. All the maps were collected through participatory mapping and represent river systems with more than a thousand toponyms. The importance of river systems for Ewenki's migration, orientation, subsistence, cosmology and identity has long been highlighted in research (see Shirokogoroff 1926, 1935; Vasilevich 1963, 1969: 182, 1971; Vasilevich & Smolyak 1964; Campbell 2003; Ermolova 2007; Lavrillier 2010; Sirina 2012; Oeterlaar et al. 2013; Brandišauskas 2017; Mamontova & Thornton 2020). Rivers have also served as the corridors through which Ewenki moved to new places. Along with cartographic abilities, spatial skills and diverse mobility patterns, the knowledge of river systems has made the Ewenki an exceptional case in human nomadism and migration (Okladnikova 1998). At least since the end of the nineteenth century Ewenki map making skills and geographic knowledge, based on the precise knowledge of diverse river systems, have attracted attention of such scholars and explorers (see Adler 1910). As a reliable and convenient travel routes, rivers played a

crucial role in the exploration and colonisation of Siberia (Sablin & Savelyeva 2011). In this regard, the detailed knowledge of local river systems was in high demand.

The most significant material on Ewenki hydrological knowledge is Glafira Vasilevich's unpublished research entitled 'Geographical Terminology of the Tungus Origin and Tungus Toponymic Suffixes' in which she proposes an innovative classification of riverine names and suffixes designating locality and movement in place names (Vasilevich 1965; see also Vasilevich 1958a, 1971) and 30 preserved hand-written maps collected in different Siberian regions in the period from the 1920s to the 1960s (uncatalogued document 'Ewenki maps', fond 22, housed at the archive of the Museum of Anthropology and Ethnology, Russian Academy of Sciences). The archive has never been published or analysed, except for four maps (Vasilevich 1963). This document, in tandem with the maps created by Ewenki informants, serves as a significant source of geographic information and combined with contemporary field data collected in the same regions may reveal a lot about how the Ewenki and nomadic people in general interact with landscapes and use hydrological networks for navigation, orientation, and memorisation of the local surroundings.

What is the significance of Indigenous place names for research? Research among Indigenous people shows that place names play a key role in substance, navigation, cosmology and Indigenous epistemologies (see Basso 1996; Thornton 1997, 2008, 2012; Jett 2001, 2011; Kari & Fall 2003; Kari and Seri 2005; Kari 2011; Aporta et al. 2014; Bordin 2017). The choice of places to be named and associated with them events are strikingly diverse among Indigenous communities (Burenhult and Levinson 2008; Bohnemeyer et al. 2004). At the same time, there is a tendency to highlight the conservative, enduring and durable nature of Indigenous place names (Kari 1989; Jett 2011: 336), their tight relations with land and narratives (Cruikshank 1990; Fall 1990; Basso 1998; Kari 2010), overlooking how people produce new names and modify previous ones (but see Harris and Holton 2018). A long tradition of research on place names in Soviet and then Russian toponymical school similarly focuses on the history of place names rather than how Indigenous people engage with their names (see Davydova 2013). Additionally, in research on Indigenous cartography toponyms are usually considered separately from mapping. Yet participatory mapping together with Indigenous members may reveal a lot about how Indigenous people select and represent spatial relations and what kind of place names they select to map (see Chapin and Threlkeld 2001).

We argue that Ewenki hydrological systems represent a collection of unique riverine names rather than diverse landscape terms to identify different types of rivers in terms of their size or qualities. This makes Ewenki riverine names distinct and semantically rich. Since all collected maps represent river systems, we propose to primarily focus on the idea of the river-as-corridor for mobility and look at hydrological networks in terms of the distribution of particular categories of names and their links with peoples' seasonal activities and relationships with non-human beings (cf. Kari 2011).

We suggest that the network of rivers helped the people to travel long distances and cognise the local surroundings in their own terms by using similar name-giving patterns. Yet in contrast to many other Indigenous peoples, Ewenki do not only pass and reproduce the same set of names but flexibly adjust the names in order to phenomenologically and semantically fit them to new realm (see also Mamontova and Thornton 2020). This helped Ewenki to spread their place names across a huge territory of Siberia.

We show that these flexible name giving patterns correspond to Ewenki's understanding of place and landscape as fluid and can be defined in terms of Tim Cresswell's (2006) nomad metaphysics. He points out that in contrast to a sedentarist metaphysic, the nomad metaphysics "puts mobility first, has little time for notions of attachment to place, and reveals in notions of flow, flux, and dynamism" (Ibid.: 26). In this paper we intend to examine this phenomenon in more detail to further demonstrate the dynamic nature of Ewenki riverine names. In particular, we analyse different types of variation and change of place names over space by using Vasilevich's multi-sited corpus of 1416 Ewenki place names and over time by comparing maps of the same river system collected in the 1940s and in 2018 in one of the Ewenki communities in the Republic of Yakutia (Sakha). We also utilise contemporary field data (by Nadezhda Mamontova) collected in the Neryungri District, Yakutia, and Tugur-Chumikan District, Khabarovsk Territory in 2017 and 2018 respectively to discuss general Ewenki name-giving principles. In addition to interviews on the significance and meaning of place names, 12 hand-written maps with 283 toponyms were gathered in these communities (see Appendix 5). Research on Ewenki place naming patterns and strategies contributes to our understanding of how nomadic societies, with more obscure land use patterns and attachments, perceive space and place and cognitively respond to numerous changes in the environment.

1. Methodology and Data

Data collection and analysis for this study included the following steps. First, we created a single list of all riverine names (1416 names) from Vasilevich's maps and translated them into Russian using Ewenki dictionary (Vasilevich 1958b) and published ethnographic material.[11] Names and translations were then discussed and corrected in the field with bilingual Ewenki-Russian speakers in Ienga village of the Neryungri District, Yakutia, in 2018.

Second, we reduced the initial list of the names to a set of unique names (995 names), including their grammatical forms (a name with a suffix designating location / size / quality / etc.), but leaving out dialect variations of the same names. By unique we mean that the name represents a

[11] There is also a small number of other toponyms refereeing to forests and lakes on Vasilevich's maps which are beyond the scope of this research.

new concept in terms of either meaning or structure. Therefore, the complete list demonstrates that 70% of the total number of the names, including their grammatical forms, are unique or non-repetitive. This suggests that most of the Ewenki names, at least in Vasilevich's archive, are highly creative as they repeat neither within a particular area nor across regions. However, this does not mean that they never re-occur, but rather that it is hard to find the same set of riverine names in two randomly chosen Ewenki communities. Yet this conclusion cannot be applied to a certain number of riverine names, mainly those derived from landscape terms and fish names, which are found commonly across Ewenki habitats. We discuss these cases later in more detail.

The complete list of unique names was further reduced by excluding the names, which we were not able to translate due to obscure etymologies and, hence, analyse (List 1). The total number of 610 or 61% of the names were then divided into several conceptual categories: flora, fauna, persons' names, landscape terms, locale, objects, physical characteristics, terms of orientation and movement, anatomical references, etc. In each conceptual category, we analysed the meaning of the names and the prevalent affixes by using the typology of toponymical affixes suggested by Vasilevich (1965). For example, the river *Hoikta* has a stem *hoi* 'tundra', which is a landscape term, and an affix -ktA designating the agglomeration of certain objects, which are small in size and can be found in a big amount within a particular area. Therefore, the meaning of this name is the river with lots of small tundras located along its banks. This is a descriptive name identifying a type of the local landscape which diverges from the prototypical taiga-riverine environs. Hence, we classified this name as 'Landscape' category, 'Ecotope' sub-category.

After the basic morphological analysis was completed, we created an Ewenki toponymical database (designed by Elena Klyachko) allowing us to examine the distribution of the names cross-regionally and to examine the correlation between each category and affixes (see the list of the names with their morphemes in Appendix 6). This task required the uniting of similar and overlapping river systems in order to exclude the possibility of counting and analysing the same names multiple times. By using the Russian State Hydrological Register (http://textual.ru/gvr/) we identified the location of the riverine systems by the name of one of the key rivers on a map, which is usually an official toponym (see Map 5). As a rule, each river system contains a few official names, for example, the Gonam River, which make it possible to approximately geolocate the rivers from the archival maps. Then we generated a list of duplicated names and possible connections between the rivers in terms of both the number of identical names and the possible location of the river systems established earlier. This analysis was particularly helpful in regard to the maps representing a few river systems with a large number (more than 300) of riverine names.

Finally, the maps were grouped according to the overlapping river systems (see Table 12). For analysis of each group we first excluded the generated duplicated names, except for the cases when

the same name is used several times in the same river system, and then carried out similar morphological and conceptual analysis as applied to List 1. The complete list was named 'the united river systems' and contains 1223 names (List 2) from 13 river systems. Of this number, we translated 709 names or 58%. In the end, we examined the distribution of the selected categories of riverine names in each river system, the number and percentage of each category of affixes on List 2, and the correlation between the most commonly used affixes and the categories of names.

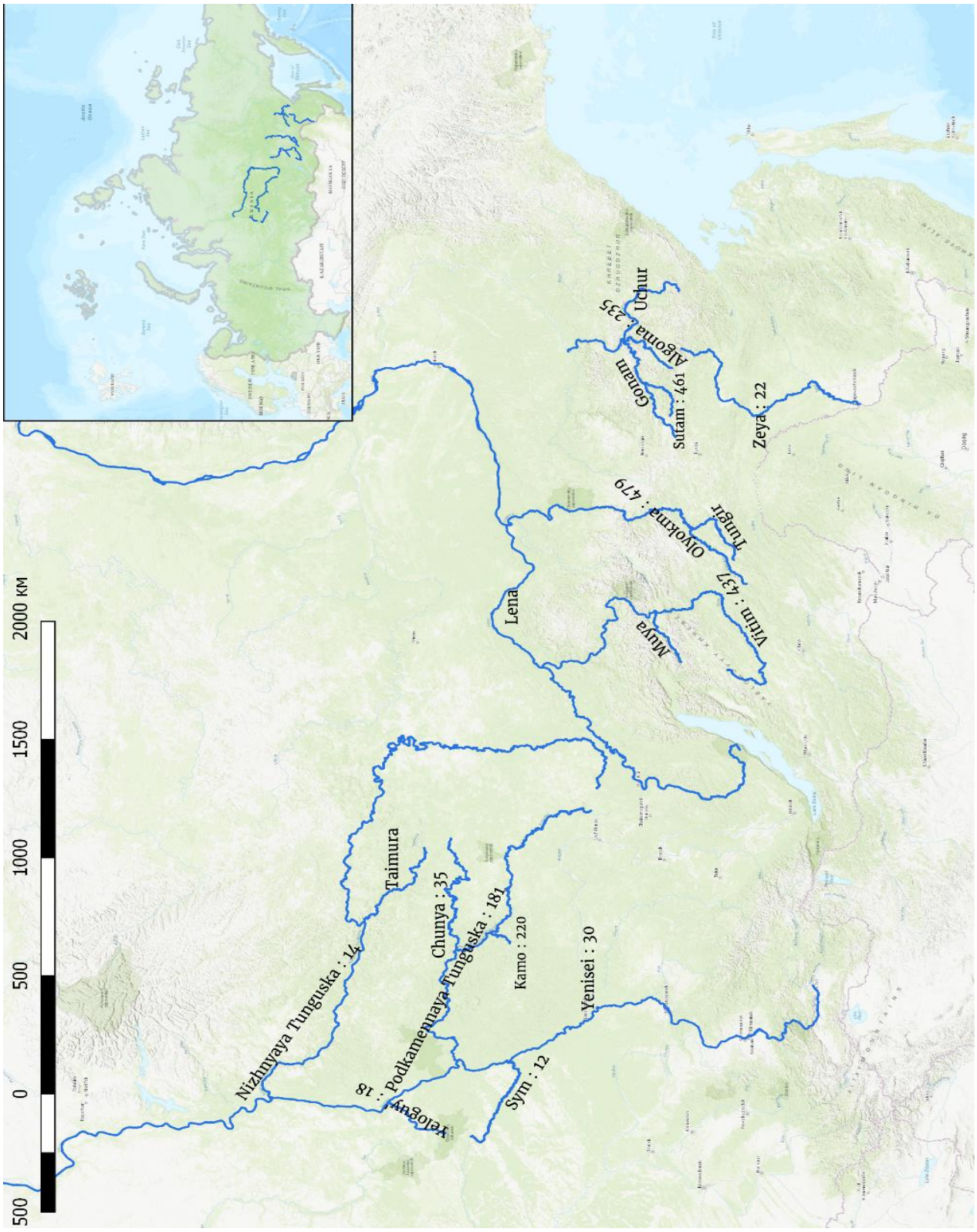
Table 12. The united river systems from Vasilevich's archival maps

№	River system	Map №	Region	Total number of riverine names	Number of deduplicated names
1	Podkamennaya (Stony) Tunguska river, incl. the system of Tychano river, tributary of the Chunya river	9, 11, 15	Ewenki District, Krasnoyarsk Territory	181	154
2	Kamo and Tayga rivers, Podkamennaya Tunguska river system	1, 9, 10, 12, 21	Ewenki District, Krasnoyarsk Territory	220	197
3	Chunya river, Podkamennaya Tunguska river system	13, 20	Ewenki District, Krasnoyarsk Territory	35	34
4	Nidym and Taymura rivers, Nizhnyaya (Lower) Tunguska river system	8	Ewenki District, Krasnoyarsk Territory	14	14
5	Algoma River, Gonam river system	2, 4, 26, 30	Yakutia	235	213
6	Sutam and Gonam Rivers, Gonam and Uchur river systems	3, 22, 23, 25, 30	Yakutia	461	433
7	Olekma and Tungir Rivers, Lena and Olekma river systems	6, 7, 22, 24, 27	Yakutia, Amur Region and Zabaikalye Territory	479	455
8	Muya River, Vitim river system, and Khani river, Olekma river system	3, 22, 24, 29	Amur Region and Zabaikalye Territory	437	414
9	Zeya River, Amur river system	28	Amur Region	22	22
10	Eloguy, Yenisei river system	17	Yenisei District, Krasnoyarsk Territory	18	18
11	Tym and Sym rivers, Yenisei river system	18	Yenisei District, Krasnoyarsk Territory, Tomsk Region	12	12
12	Sym river, Yenisei river system	19	Tomsk Region	30	30
13	Tributary of Tunguska River?	14	Possibly Ewenki District, Krasnoyarsk District	15	15

This protocol provided a dataset from which to further analyse the essential characteristics of Ewenki place names and their morphological structure, distribution and semantic relations, allowing us to examine the distribution of the names as the network of communicative signs. The following

map shows the location of the river systems from Vasilevich's archive and the number of names in each system.

Map 5. The location of river systems from Vasilevich's archival maps and the number of riverine names in each system.[12]



[12] Map data copyrighted OpenStreetMap contributors and available from https://www.openstreetmap.org.

2. Typology and Semantics of Ewenki Place Names

When Ewenki speakers are talking about the landscape, they tend to use place names more often than generic terms. This explains the fact that even those who know the native language fluently may experience difficulty remembering such simple words as 'mountain', 'river' or 'forest' in Ewenki. In an Ewenki individual's mental map of the environment, it seems, there are no 'general' or abstract mountains and rivers but rather concrete mountains and rivers which are known only by particular local names. Among all place names, riverine names dominate Ewenki topography.

Structurally, the majority of the documented Ewenki riverine names belong to the class of nouns and are formed as one-word constructions. The names tend to be short and direct in terms of meaning. Other grammatical categories are present only occasionally in toponyms. Unlike many other languages, Ewenki place names add neither generic terms nor specific affixes to specify what kind of landscape object is meant. Yet some names may occasionally contain the generic word *bira* for river, for example, *Kurum bira* 'wedding river' or *Ehel birangityn* 'the bear's river'. Complex phrases are very sporadically used as place names. For example, there are the rivers of *Bunil bira* 'the place which the dead have visited' and *Apanas hutelin giramnatyn* 'the grave of Afanasiy's daughter' on a few archival maps. It is significant that both name phrases signify the presence of burials which means that it might have been important for the people to provide some additional information about these places.

Although Ewenki place names are very diverse, there appear to be the same categories and grammatical structures across Ewenki geographical communities. This fact makes it possible to examine the differences and similarities of the names in different geographic settings, as well as to develop their typology. Place names can be classified according to a number of ways depending on what principle is chosen. Since most of the Ewenki names are formed of nouns, it is rational to classify them in terms of their primarily meaning and the purpose of naming. This mode of classification is used in two similar typologies proposed by Glafira Vasilevich (1958a) and Anna Sirina (2012).

However, these kinds of typologies are useful to the analyst if there is some metadata to establish the purpose of naming, or to answer the question of *why* this place is distinguished. Yet in many cases we cannot ascertain the deeper meaning of an Ewenki name unless we get to know the *relational* circumstances under which the name was coined and the context in which it is used (Tylor 2016). For example, there is a broad category of 'toponyms which are named by similarity with an object' in both abovementioned typologies. This category is hard to distinguish from other categories of objects. It is quite common when Ewenki name a river after an object which someone has recently lost or seen nearby this river as in *Kokkollo*, which refers to a mitten which hunter left on the river bank. There is even the name of *Monapkich* on one of the archival maps which literally means 'a

place where [someone] has left something.' Along with *ilker* 'marks' or notches on the trees, which served as a means of communication between hunters, these lost or left objects are regarded as mnemonics, salient signs that help people to memorise the place in a traveling context, and refer to the place in conversation.

The lost object itself does not necessarily possess any value for the speakers and can be occasionally selected by chance based on actual experience. Hence, the category of 'objects' can be further divided into a number of subcategories according to the motivation and purpose of naming: lost objects (trace reference and mnemonic signs), objects which shape reminds the shape of the corresponding river (iconic reference), sacred objects (symbolic reference), objects related to subsistence activities (indexical reference) and so forth. Therefore, a semiotic approach to the study of place names can be helpful if we need to examine the complex relationships between signs (names) and objects (landscape features) among a group of people who share the same experience.

Since Vasilevich's maps lack translations and information which could help us to restore the meaning and purpose of naming, we had to classify the names according to either their meanings stemmed from the root of the word or relational concepts. The latter categories contain the names which meanings were neither possible to figure out from the root of the word nor to determine the purpose of naming. Diagram 1 shows the percentage of names in each category. It identifies that most of the names cross-regionally fall into five categories: Landscape, Fauna, Objects, Foreign Names and Flora. This distribution is proportionally similar to other Indigenous typologies (e.g., Thornton 2012 on Tlingit). We briefly describe other smaller categories.

Thus, 'Event' category (2.2% of the total number of the names) contains such names as, for example, *Kurum* 'wedding', *Dyawugdakit* 'the place of fighting' or *Suwinngetydek* 'the place where [people] have eaten the meat from the ribs'. The names from this category are semantically overlapped with those from proper 'Place' category (2.5%). The latter includes the names with the references to repetitive activities, mainly subsistence ones, performed in a particular place in the past or present (e.g., *Tuledek* 'the place for setting a trap' or *Solakmakit* 'the place for hunting for foxes'). In 'Nomadic circle' (2.4%) category, there are the names which helped people to structure their nomadic activities according to the traditional calendar and reindeer annual nomadic circle (*Nengneskit* 'the place for spring camping' or *Kanyakit* 'the period of mosquitos'). These three categories of names altogether (7.1%) show what kind of activities and where people perform during the year.

Some categories are further divided into a number of subcategories. For example, the category 'Physical features' (3.8%) includes such parameters as river's shape (*Bugali* 'split'), size (*Ngonam* 'long'), colour (*Bagdarin* 'white') and water quality (*Lamaka* 'stinky'). Semantically related categories are 'Position' (1.4%) and 'Motion' (1.4%). The former identifies the position and

location of rivers in relation to each other (*Dulismar* ‘middle’, *Dyulok* ‘frontal’, *Tora* ‘side / on the side’), the latter, the possibility of using the river for navigation (*Solokichindya* ‘the way upstream’). ‘Material’ category (4.1%) relates to geological nomenclature (*Tukalak* ‘sandy place’ or *Dewenek* ‘the place with minium’). In contrast to objective parameters, the names in ‘Assessment’ category (2.1%) reflect subjective attitudes and opinions on certain rivers in terms of their ‘behavior’ (e.g., *Mongnorin* ‘vigorous’ or *Ayaya* ‘good’). The names in these five categories help Ewenki to choose the best route and evaluate the river in terms of different characteristics.

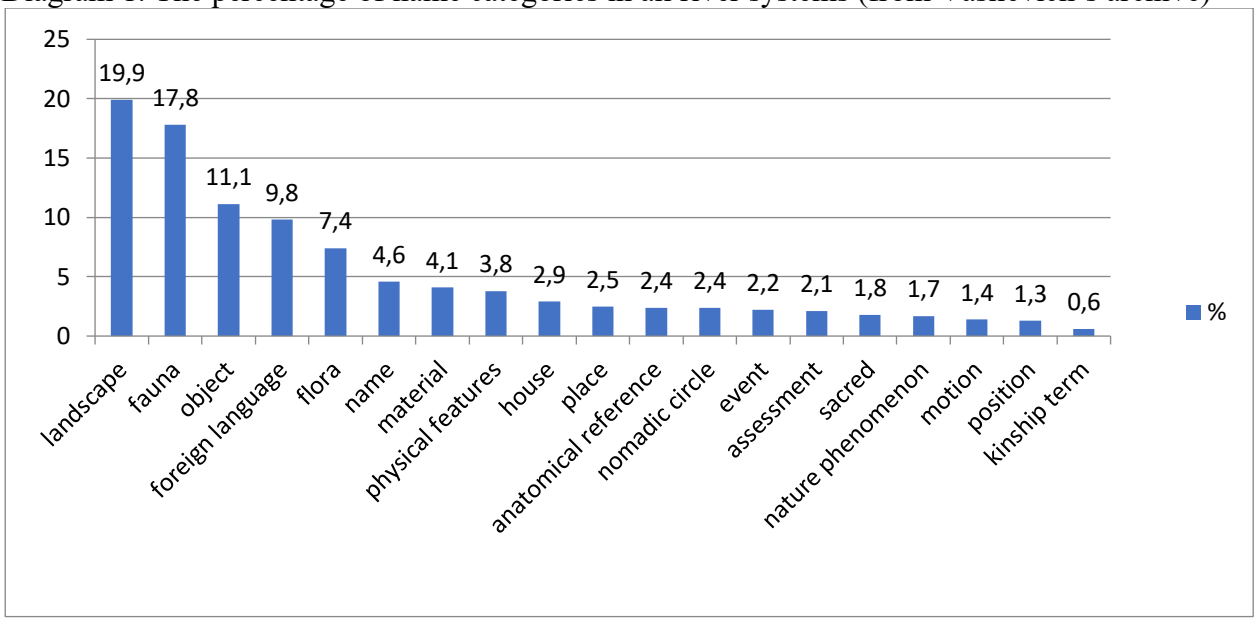
‘Object’ category (11.0%) embraces items of clothing (*Tarbakil* ‘gloves’), utensils (*Kalakan* ‘small pot’) and tools (*Atara* ‘harpoon’). These names are largely mnemonic. We grouped all objects with the reference to spiritual culture such as for example, *Untugun* ‘shamanic drum’ into a separate category of sacred names (1.8%) along with the names identifying burial places and sacred animals as they represent special cultural significance for the Ewenki.

The group of anatomical references (2.4%) represents the names with the meaning of body parts and organs, either human or animal (e.g., *Lopchakan* ‘small flipper’, *Miro* ‘shoulder’, *Udik* ‘bladder’). Some of them have a metaphorical meaning. For example, the river of *Mewan* ‘heart’ may refer to the key water arteria with smaller tributaries resembling veins or capillaries.

Finally, ‘Personal and clan names’ along with ‘Kinship terms’ constitute 4.6% and 0.6% respectively. Quite often the names from these categories signify the location of burials along the river which is named after a person who used to hunt there in the past. These names can be either proper personal names like, for example, *Miske* and *Mikcheney* on Vasilevich’s maps or the rivers of *Vera* and *Tamara*, which are Russian female names, on the maps collected in the Tugur-Chumikan District, or kinship terms. A few riverine names stem from so-called clan names. One of them is the river *Ullegirindya* ‘respected or big Ullegir clan’ in Yakutia, which is known now as simply *Ullegir*. The rivers named after certain people are usually small in size. These names are used as long as the memory about these people is preserved. A river may be given a person's name also as a token of respect for this person and his or her hunting or other extraordinary abilities.

In contrast to personal names, the names derived from kinship terms are usually passed from one generation to the next. Thus, such names as *Etyrken* ‘grandfather’ and *Atyrkan* or *Ewe* ‘grandmother’ are rather common in Ewenki toponomy. These names also indicate the presence of old graves along the river bank and are associated with guardian spirits. Some names may be linked to particular persons through stories and narratives. However, most of them represent a timeless category or signifiers without materiality (Ohnuki-Tierney 1994). suggesting that the links between the names and real persons may change across generations. After the memory of the buried person has erased, the place becomes ‘vacant’ and can be named after a hunter who used to hunt there recently.

Diagram 1. The percentage of name categories in all river systems (from Vasilevich's archive)



After this typology was established, we examined the possible links between each category and affixes. Affixes in place names help to clarify the meaning of the name and orient the traveller in the environment by revealing what the name signifies phenomenologically (see Berez 2015). The total number of affixes which may be combined with Ewenki place names can reach up to fifty (Boldyrev 1978). Vasilevich (1971) defines nine major categories of affixes. We have extended the list of affixes proposed by Vasilevich by including null affix, plural and proper possessive affixes. We have also calculated total numbers and percentages of affixes in each category, as well as the number of combinations of different affixes and foreign names with different affixes. Since there is no space to discuss each category in detail, we present the results in the following Table.

Table 13. Common affixes in Ewenki place names on List 2

Category	Affixes	Number (% of all names on List2)	Example (river name)
Geographical denomination	-ngdA, -ngrA, -ngnA, -ngA	66 (5.40)	Delinngne 'taimen', Nirungda 'grayling', Kamanga 'float rod'
Unknown etymology, possibly ancient	-m / r / rA	2 (0.16)	Votam / Votanga, Taymura, Madra, Urum, Tym
Relative clause / place of habitual action	-k	21 (1.72)	Atarak 'the place with a harpoon'; Onok 'the place where [people] search for reindeer'
	-kit	48 (3.92)	Solog Nennedekit 'upper spring camping place'; Dyawugdakit 'place for fighting / where fighting happened'
	-mAkit	16 (1.30)	Ollomokit 'fishing place'
	-dAk, -dzhAk,	9 (0.74)	Ampardak 'place for a storehouse'
	-li, -gli	16 (1.30)	Yuktoli 'with springs'

	-klA	0 (0)	
	-mbA, -bA	3 (0.25)	Yorabo ‘the place with migratory fish’
	Total	177 (14.47)	
Diminutive	-kAn, -chikAn, -chAn	91 (7.44)	Tongurchikan ‘small lake’, Chawidakan ‘clay’
Augmentative	-kun, -miya, -ndA, -ndzhA	14 (1.14)	Birandya ‘huge river’
Possessive (Total)	-chi, POSS (inc. in combinations)	59 (4.82)	
Possessive	Comitative -chi ONLY	48 (3.92)	Dyagdachi ‘with pine trees’
	POSS ONLY	11 (0.90)	Gimobudekin (‘Gimo’s grave’)
	Both -chi and POSS	2 (0.16)	Ollonchin (‘With fish’)
Dispersive	-ktA	31 (2,.53)	Bugarikta ‘a lot of burnt-out places’
Adjective signifying the quality of an object expressed by the base root	-mA	16 (1.31)	Moma ‘wooden’
Clan names’ affixes, group of people, residents	-gan – -gat (Pl), -nkan – -nkar (Pl), -chen – -cher (Pl), -gir	5 (0.41)	Dawagan ‘the resident of the mountain pass’, Kongagin (clan name)
NULL	0	795 (65.00)	Dyuani ‘summer’, Kungkuy ‘bear’
Plural	-l; -r	16 (1.31)	Burushil (‘whetstones’)
Other Categories			
Combination of affixes (total)	-chi + -ndya, -ngna + -kit; -r + -chan; etc.	82	Solokichindya ‘the river with the way upstream’
Other categories (total)	-riktA, -t, etc.	58	Aririkta ‘only storks’
Foreign Names (total)	different affixes	68	Cherepches (Ket), Zolotoy (Rus.), Artyk (Yakut)

The results have shown that more than a half of the Ewenki riverine names from Vasilevich’s collection have no affixes at all (65.0%). Most of the affixes tend to be found in just a few categories of names: ‘Landscape’, ‘Fauna’, ‘Flora’ and ‘Object.’ Our research shows that there are no strong relations between the affixes and the names, except for the dispersive affix -ktA which tends to combine with the names derived from ecotopes and plant names, and the toponymical affix -ngnA

and its dialect variations which can be found mostly in the names referring to fauna. At the same time, as our field data suggests, even in the same community people may refer to the local rivers by adding different affixes to the same riverine names depending on which qualities of the named rivers they want to emphasise. Again, we see that this variation particularly occurs in the names derived from ecotopes. Next section discusses this type of names in more detail.

3. Names Derived from Ecotopes: Relationality and Semantics

As Diagram 1 shows, most of the analysed riverine names refer to landscape terminology (19.9%). Among them, the biggest sub-category is represented by ecotopes (142). The names derived from ecotopes constitute about 15% of the total number of the unique names (L1) from the maps collected by Vasilevich and are widely used in the surveyed communities as well. Ecotopes are defined as "the smallest ecologically-distinct landscape features in a landscape mapping and classification system" (Hunn & Meilleur 2010: 15). Most of the Ewenki place names in this category stemmed from geographic terminology referring to the shape and qualities of river banks and adjunct elevations, marshy areas and open terrains along the banks. Among the most widely spread ecotope-based names, there are burnt-out places (*Bugarik, Degdocho, Kurung*), flat and boggy places (*Detikte, Kowikta, Marekta, Hoikta*), different types of rocky river banks (*Kadara, Kipchikan, Kuru*), and salt marshes (*Tala and Kudu*).

The uniqueness of Ewenki ecotopes lies in the fact that they represent significant variation in meaning across the dialect continuum in a way that the same term can be linked to completely different objects, while remaining, at the same time, semantically related to all those objects (see Mamontova et al. 2020). Hence, the classification of the related names should be based on the object features of the referenced site, as well as on the meaning and use of geographical terms in the community, rather than a simple semantic rendering. For example, the term *amnunna / amnunda* has the following meanings: 'wide and flat area in the river basin', 'frost on the river', 'agglomeration of stones at the mouth of a mountain river where ice does not melt during warm seasons', and 'grassy place in the taiga' (Vasilevich 1958b: 29). In some dialects, this term means 'ice which does not melt at the mouth of river mountains' and, hence, falls into the category of 'snow and ice ecotopes'. This is one of the most common riverine names, which is translated by Vasilevich (1965) as a 'frozen river'. However, among the Tugur-Chumikan Ewenki, the rivers of *Amnunnak* and *Amnundakan* have a meaning of 'clear place' as the related ecotope designates 'a wide and flat area, which is located in the mouth of the river and covered with grass'. The name *Amnunnak* has a suffix -k with signifies a collective noun with the meaning of a big number of clear places or valleys on this river, whereas *Amnundakan* simply means 'a small valley'. However, among the Iengra Ewenki, who speak several sub-dialects, the name *Amnunna* has two different meanings: a clear place in the river delta and a

frozen river. Thus, the name *Amnunna* may signify either the type of vegetation, or the absence of trees / clear place, or the presence of ice, or the combination of these features.

Therefore, the interpretation of all riverine names stemmed from landscape terms should start by the clarification of their meaning in a particular community in terms of which quality and feature of an object in question is highlighted in the name. After the common meaning of the term is established, it is important to examine the affix which specifies the characteristics of the named river. This protocol is generally applicable to the interpretation of all Ewenki place names. But it is particularly important when it comes to ecotopes as they are the most fluid in terms of meaning across the Ewenki dialect continuum. Names in this category also tend to form semiotic relations with other names, especially those that reference to flora and fauna, and thus signify a complex set of relationships between humans, animals and landscapes.

For example, there is a broad category of names referring to vegetation (7.4%). This category includes the names for plants, bushes, trees, and the types of landscapes with certain soil and vegetation (see Yurgin 1970). The latter can also be classified as ecotopes. Such names signify the abundance of certain plants in a given place and can be grouped under the heading 'Flora'. However, this category tells us little about the usage of named places and its relations with other sites. For example, the *Taled'ak* River in Ewenki means a salt march where hunters stay during hunting. The word *taled'ak* stems from *tale / tala* 'salt march'. This kind of landscape attracts moose and wild reindeer which come there to lick natural salt. It also serves as a good place for Ewenki hunters who come seeking game. Hence, the hunters and wild animals have different intentions for visiting this place, whereas the name of the river just indicates the presence, the affordance, of salt there. In other words, pragmatically this riverine name falls into several categories of names, referring both to vegetation and wildlife species, as well as their behavior, distribution and habitat. Yet conceptually it should be classified as an ecotope. The variability of the referent gives the impression of intertextuality when it comes to the interpretation of the names, as we have discussed in previous research (Mamontova & Thornton 2020).

Among the most significant and widely spread Ewenki names are also those referring to animals, birds and other species (17.8%). Information about the presence of certain animals in the area helps Ewenki hunters and herders not only to establish hunting areas but also regulate their relationships with animals or other beings mutually. Discussing river name *Kulinda* 'snake', the specialist on the Tungusic cultures Sergey Shirokogoroff (1933: 43) notes that "these regulations are also observed by the animals too, as otherwise life for them would also be impossible […]. These relations in taiga compel the Tungus, first of all, to know every valley thoroughly, and also to know which animals inhabit it." Some place names may indirectly refer to the presence of animals. For example, the name Gulandya Hillock 'shady slope' in the Tugur-Chumikan Ewenki community

describes a kind of place where bears usually dwell: it is located on the dark side of the mountain, covered with spruce forest, and not attractive for humans. Bears choose such places to build their winter dens. In this regard, the ecotope-based names and those with the reference to flora and fauna may form complex semiotic networks, as the following dialogue with an Ewenki reindeer herder (A.E.) from Iengra exemplifies:

N.M.: Could you tell just from the riverine names which places might be good for hunting?
A.E.: Yes, we could. For example, Kudu, Nire, Amnunna. These are good hunting places where you can get some meat for your family in the summer.
N.M.: What do these names mean?
A.E.: Well, Kudu means a salt march, it is natural. Wild animals come there to feed on. And at that place you are ambushing them to feed your family, your reindeer camp. This place is called solonets in Russian. You already know [from the name]. Nire is a damp place, Amnunna means a river delta. This is a clear place also, but dry and stony. These [rivers] are all small, the glens, and full of food [for animals]. There are wood grouses constantly there, partridges, hazel grouses.

To the end, from an isolated name itself, it may be hard to conclude how it is used in the community, or its origin, or novel meaning, or complex relations between the site and the name. Moreover, considering that there might be discrepancy between the name, its meaning and the purpose for naming, we can develop several means of classifying and interpreting the same name. This fact makes any typology of Ewenki and other Indigenous place names problematic. In addition, Ewenki place names may change under some internal or external circumstances. Normally, the change of a riverine name signifies that one or more key elements of the relations between the name and the site have changed. This may affect not only the name itself but the network of the names within a certain area. It is especially evident if we compare the names of the same river system accomplished in different time periods. This comparison makes it clear that some names change not only over space but also time.

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4. Variation and Change in Place Names over Time

In autumn 2018, we collected two maps in Iengra village representing the Gonam River with 30 names, and its tributary Itymzha River (*Itymdya* in Vasilevich's collection) with 13 names respectively (41 altogether). The number of these names on Vasilevich's map from the same village corresponds to that on the contemporary sketch map of the Gonam River (*Ngonam* 'long' in Ewenki) produced in the 1940s. Of this number, 13 rivers are named similarly (see Fig. 11; see also Appendix 5.2, Map 17). As for the rest 17 riverine names, due to the absence of scale it is hard to say whether the same rivers have changed their names or some previously nameless rivers have acquired names. To clarify this matter, we showed one of the draftsmen, Yakov, the archival map asking him to comment on it. He noticed that some rivers had obviously changed their names as there are no other

rivers in the area which could have been named. For example, the archival map contains two rivers of *Nekengre* ‘sable’ and one without name. The same rivers on Yakov’s map have the following names: *Upper Solokit, Middle Solokit,* and *Lower Solokit* ‘upstream’. A few tributaries of the *Togloy* River, which are nameless on the archival map, are identified by Yakov as *Left Argaskit* and *Right Argaskit*. The name *argaskit* means ‘to pass over the mountain’ to get to another river system. These two rivers serve as an important water passage to the Sutam River system and typologically fall into the category of ‘Motion’. Another example is the *Kenerkit* River (*Kengerkit* ‘fishing cage trap’ on Vasilevich’s map) with two tributaries named, according to Yakov, as *Kenerkit* 2 and *Kenerkit* 3. It is common in Ewenki toponymy to give smaller rivers numbers, or to frame them with the diminutive affix -kAn. Since these rivers are not usually important for subsistence or navigation, except in referencing them vis-a-vis larger navigable rivers, they either remain nameless or are marked with numbers to count the order and position of the rivers in relation to other rivers in the area.

There are also a few names on Yakov’s map which are not attested on the archival map at all: *Luhinna*, *Kitaj* ‘China’ (Rus.), *Dvojnik* ‘double’, ‘twin’ (Rus.), which is presumably *Solokichind’a* ‘the way upstream’ on Vasilevich’s map, and *Uhungnu,* which might have been previously known as *Guhingre* ‘eagle’. Finally, there are a few riverine names on Vasilevich’s map which are not present on Yakov’s map. One of them is *Uregechi* ‘having mountains’. Although Yakov did not know this riverine name, he described the surrounding landscape in detail while explaining the possible meaning of this name for the community. Other names are similar in terms of meaning on both maps, yet most of them have another ending. For example, *Ullegirind’a* ‘respected or big Ullegir clan’ has reduced to *Ul(l)egir* and the river *Horohochi* ‘the place with capercaillie’s call’ is known now as *Horohond’o* ‘big capercaillie's call’.

These examples clearly show that some rivers do change both their names and affixes over time. Moreover, the whole cluster of names may change as the following example illustrates. The Itymzha River flows into the Gonam River on the left side as the archival map illustrates. Vasilevich identifies this river’s name as *ityk* ‘sacred reindeer’. Yet our informants were rather skeptical about this translation. On the map created for me by two Ewenki reindeer herders from Iengra village, this river has 13 named tributaries, of which number only 4 correspond to those on the archival map. Several riverine names on the contemporary map are of particular interest: *Kurun, Kurunuchi,* and *Sukhoj* (Rus.). *Kurun* and *Kurunuchi* have the meaning of a burnt-out place which is good for hunting and are of great importance in shamanic topography. These two rivers are located close to each other but on the opposite sides of the same river. We see that on the archival map the river *Kurun* is written as *Kurum* ‘wedding’. The name signifies that this event occurred in the past in proximity to this river. Over time, the memory of this event must have been erased and, hence, the river got another name, which is similar in sound but having a completely different meaning. The new name not only

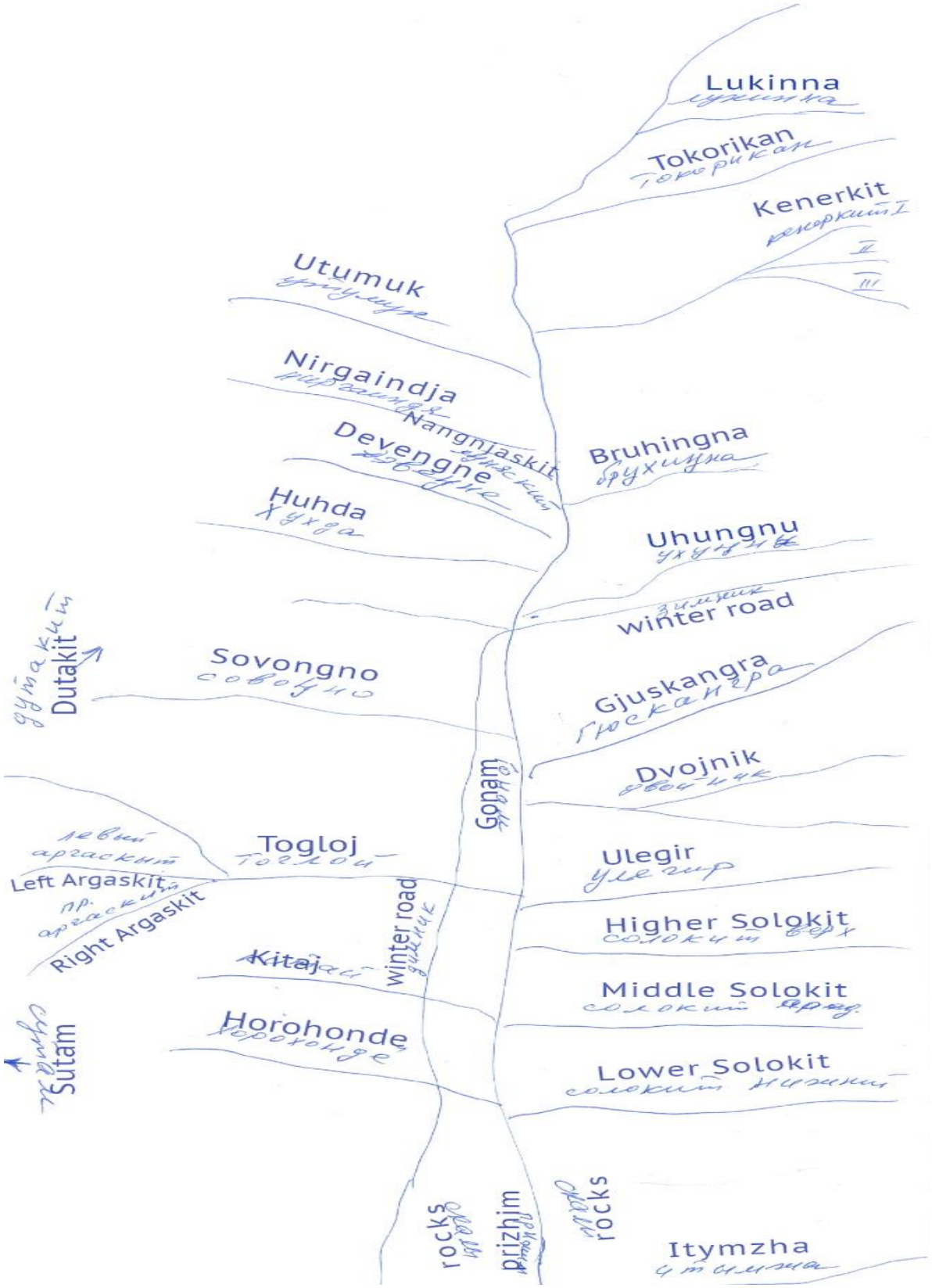
represents the surrounding landscape well but is also related to other riverine names in this area with a similar meaning. Thus, along with *Kurun* and *Kurunuchi* the neighbouring river *Sukhoy* 'dry' (Rus.) also describes a burnt-out place with dry woods. The previous name of this river was *Kirgisyak*, which is likely to be derived from the Yakut word *kirgihekh* 'wood carving tool.'

Figure 11. Two maps representing the Gonam river system: a) from Vasilevich's archive; (b) from Iengra village

a)



b)


Lukinna
Tokorikan
Kenerkit
I
II
III
Utumuk
Nirgaindja
Nangnjaskit
Devengne
Huhda
Bruhingna
Uhungnu
winter road
Dutakit
Sovongno
Gjuskangra
Gonam
Dvojnik
Togloj
Left Argaskit
Right Argaskit
Ulegir
Higher Solokit
Middle Solokit
Lower Solokit
Kitaj
winter road
Horohonde
Sutam
rocks
prizhim
rocks
Itymzha

The comparison of the same river system on the maps collected in different time periods demonstrates that place names and their affixes can change if their meanings do not fit to the local environment and people's experience anymore. Some names may also change their location by having been applied to previously nameless rivers in the same area. The analysis also suggests that some names form semiotic networks or clusters. Any transformation in the environment, persons' experiences or animals' behaviors may provoke the change of the whole network. This finding demonstrates the fluidity in Ewenki spatial cognition as related to river systems which so far has been elided in the literature on place names in favour a static model of place names' transference across the generations.

5. Results: Fluid Nature of Ewenki Riverine Names

Our research has shown that in comparison with other landscape terms, most of the Ewenki rivers have distinct names rather than modified generics. This explains a huge number of diverse riverine names the Ewenki people use to refer to the rivers. The elicitation of the names from Vasilevich's archive (1416 names) has demonstrated that 70% of toponyms represent separate concepts or new combinations of the name with an affix. The high percentage of individual names explains why it is hard to find the same set of names in two riverine systems. In contrast, the names referring to landscape terms and ecotopes tend to be reproduced. However, whereas the names may sound the same, their meanings should be clarified in every speech community as the ecotopes in Ewenki may refer to completely different landscape objects. Linguistically, this phenomenon is called the variation of semantic cognates and appears to be rare in place names (see Mamontova et al. 2020).

Despite a great diversity of names within each category and across communities, Ewenki naming patterns seem to be transferable or 'nomadic' in their nature. The same patterns of naming are applied in different surroundings inhabited by the Ewenki people in naming various rivers they encountered once they came to inhabit a new hydrological environment. Our research shows that the distribution of the names categories is similar in most of the regions in which the maps were collected. Most of the names, regardless their location, are easily grouped into the following categories: landscape, fauna, objects, foreign names and flora. Collectively, these categories encompass almost 66% of the total place names. These five categories are dominant in all surveyed river systems. This pattern can be compared with Athabaskan name giving principles. James Kari (2011) demonstrates that their geography represents a web of interconnected place name networks. He also argues that the content, structure, and distribution of the place names have similar features within the whole language area (see also Kari 1989, 1996). Yet, in contrast to the Athabaskan model, the content and structure of Ewenki names may significantly vary cross-regionally and change over time. In addition, as our

research demonstrates, names are not only transmitted between the generations but also meaningfully produced.

Structurally, Ewenki names rarely attach any generic terms or endings to specify what kind of geographical objects are meant. This further differentiates Ewenki toponyms from other Indigenous place names in Siberia and elsewhere. There are no strong relations between the categories of names and affixes either. Yet the dispersive affix –ktA_is likely to be found in the names stemmed from landscape terms (14.83 %), whereas the toponymical affix -ngnA is used mostly in the names referring to fauna. Affixes are not only highly variable over the categories of names, suggesting that in different river system there can be different affixes combined with the same names, but also over time as our comparative analysis of the archival and contemporary maps has clearly demonstrated. This variation needs separate research as there might be some correlation between environmental changes and affixes.

At the same time, foreign riverine names, in which generic terminology is used, are widely utilised, as Ewenki speakers tend to apply bilingual names in linguistically diverse surroundings. These bilingual names may signify different qualities and features of the same rivers. The percentage of foreign names in some river systems, for example in the Yeloguy river, one of the tributaries of the Yenisei River, may even be dominant over other categories of names (39%). Ewenki have maintained local Indigenous names once having inhabited new places. Our field data suggests that these names usually represent different qualities of the river and among bilingual speakers may be used in different contexts.

To conclude, in Ewenki riverine names one can observe three key types of variation: variation in meaning (mainly ecotope-based names), variation in affixes and variation in the location of the names when the same names are applied to previous nameless rivers or their parts within one river system. Variation in the location of place names and their changes are most common in place names referring to small rivers or glens and utilised by family members within hunting territories. They may change several times over a short period of time, even within a generation. People easily produce new names to replace old ones if they do not find them suitable anymore. Unlike some other Indigenous groups, among Ewenki many place names are not only passed from one generation to the next but also coined anew or modified to fit to the current realm. This fact also suggests that names are variable and contextual and that they depend on how local interlocutors perceive and experience certain places in dialogue and interaction with landscapes and their other-than-human constituents. We examine this phenomenon in more detail in a separate paper (Mamontova and Thornton 2020).

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6. Conclusions

This thesis contributes to the growing research on the relationships between language and landscape. The aim of my research is to examine the relationships between Ewenki spatial knowledge, adaptation, and mobility through the analysis of landscape nomenclature and place names within a broader cultural and geographic portrayal of the interactions between humans, animals, spirits, particular places, and landscape types. Specifically, this thesis investigates the phenomenon of fluidity of geographic terminology and place names in several reindeer herding, hunting and gathering Ewenki communities in Siberia and the Russian Far East. Research has demonstrated that this phenomenon is closely related to the notion of mobility in the Ewenki language and culture and linked with the precise knowledge of Siberian hydrological networks. Research posits that Ewenki geographic terms and place names, which are largely riverine names, and the knowledge of hydrological systems in general, are embedded in Ewenki people's understanding and conceptualisation of space and place. This knowledge helped Ewenki to inhabit a huge territory and adapt to diverse Siberian ecosystems.

Methodologically, I have drawn on such interdisciplinary research fields as ethnophysiography and place and space studies (the works of Niclas Burenhult, Leslie Johnson, Stephen Levinson, David Mark, James Kari, David Smith, Thomas Thornton, Andrew Turk and others), as well as phenomenology-oriented humanistic geography with its focus on experience and practice (Tim Ingold), interpretative approaches of cultural anthropology and geography (Clifford Geertz, James and Nancy Duncan), and geosemiotics (Ron Scollon and Suzanne Scollon). I have also utilised Eduardo Kohn's theoretical ideas of ecosemiotics in relation to Charles Peirce's original theory of signs to explain how Ewenki generate new names in a dialogue with other beings, including animals and spirits. This complex theoretical approach allowed me to demonstrate the multispectivial nature of Ewenki place names and explain the fluid nature of geographic terms as relational signs.

This research primarily aims to contribute to the field of ethnophysiography. Over the past decade, ethnophysiography has significantly shaped the ways researchers examine and discuss landscape perception and conceptualisation. Research highlights the necessity to shift from descriptive documentation and analysis of the most salient landscape features (Smith and Mark 1998b) towards a holistic understanding of the relationships between the environment and speech communities (Levinson 2008a). In a set of comparative research, it has been proven that different communities categorise and classify landforms and geographic features in very diverse ways (Johnson and Hunn 2010; Mark et al. 2011b; Bromhead 2013, 2018) albeit with some cross-cultural patterns. Research shows that a variety of ontological principles are deployed cross-culturally to label landforms and select geographic categories to name (Smith and Mark 2001, 2003). Similarly, whereas some communities have a concept of 'landscape' as a discrete category, others perceive surroundings more as a set of interconnected places rather than scenery. Yet Siberia and the Russian North have remained a blind spot in ethnophysiography, with only limited research published. Hence, this research seeks to contribute to the developing cross-cultural and comparative field of ethnophysiography using the example of the Ewenki community. The findings were presented in three papers.

Through linguistic (contextual and semantical analysis using two Ewenki digital text corpora, voiced dictionaries and sociolinguistic survey), visual (photographs of landscape objects, dialect and sketch maps) and anthropological (interviewing and participant observation) methods, I analysed landscape terminology in fourteen Ewenki communities living across diverse geographic terrain. The terrain included such ecosystems as the Siberian mountainous taiga, subarctic and marine environments. In particular, I used examples of three key conceptual categories: 'mountain' / 'elevation', 'flat terrain', and river terms.

The analysis has shown that the most unique characteristics of Ewenki landscape terminology concern the multiple meanings of the terms. The same term can be linked to completely different landscape features or objects, remaining semantically linked to all of them. Linguistically, this

phenomenon is called the semantic variation of cognates. This variation in meaning is especially evident in terms for 'plains', as this type of landscape is particularly prone to transformations in Siberia and less typical in the mountainous taiga. These variations and possibly changes in the meanings of the basic geographic terms across the dialect continuum reflect the Ewenki people's unique nomadic engagement with the land, their flexible adaptation to new ecosystems and their perception of landscapes as being constantly changing. The language appears to reflect this flexible perception in the form of semantically related but diverse in meaning landscape terms. The phenomenon of conceptual overdifferentiation of 'plain' landscapes in Ewenki in contrast to the lack of generic terms for, for example, the boreal forest deserves separate research. It appears that Ewenki tend to perceive the mountainous taiga as homeland, with named rivers and a set of different places and patches, which can also be named, rather than a massive territory covered with larch trees known as 'taiga' in Russian and English (cf. Levinson 2008b).

Why is this finding important? The Ewenki case raises the important question of the relations between certain physical features of landscape and language in a single Indigenous community yet living in diverse ecosystems. The relationships between language and the environment have long been discussed in the literature, starting with pioneering works of Edward Sapir and Benjamin Lee Whorf. Using the Umeda language of New Guinea, Alfred Gell (1995), who defines his research as the environmental determinist theory of ethno-poetics, highlights the close relations between forest habitat and language iconism in Umeda. He argues that language iconism is determined by the local environment. In contrast, Gary Holton (2011a) shows how differently two nomadic hunting Athabaskan (Na Dene) and Eskimo language communities living side by side categorise the same landscape and utilise place naming strategies. The Ewenki language, however, demonstrates the variation in meaning of the basic landscape categories cross-dialectally. In some geographical areas, the most marginal ones for the Ewenki people, as for example the semi-steppe, there is an evident link between the landscape and the terminology. For example, basic terms for forest, plain, and tundra / swamp in the Barguz dialect, spoken in the semi-steppe area, have the meaning of the steppe. Yet

in other cases, these links are obscure and hard to explain. The Ewenki case shows the need to pay close attention to the variation in meaning of the same landscape categories between the dialects of a single language and even in particular speech communities, especially in nomadic societies with a broad and varied area of habitat.

Although Mark and Turk (2003b) suggested that basic categories in a language must be tuned to the variations in the environment, to date, there has not been any systematic research on the phenomenon of variation within a single language. Yet there has been much concern with preferences relating to landscape features and elements in communities whose members engage in different subsistence activities (see, e.g., Surova and Pinto-Correia 2008; Krohmer 2010; Thornton 2011). But the holistic nature of languages is usually taken for granted. Although the latter assumption has recently been challenged in linguistics, most of research in ethnophysiography remains within this essentialist paradigm. The other reason is that there are not so many as spatially extensive communities as Ewenki who have the biggest area of distribution in Eurasia among other Indigenous communities. This fact makes this community a unique and suitable example for the exploration of this language-environment problem.

This research has also revealed that context is crucial for understanding the meanings of the terms. The field data and context analysis by the means of Ewenki digital text corpora search have shown that some geographic terms exhibit a change of meaning being considered in a different context. For example, the term *det* can mean either ‘tundra’ or ‘swamp’. The choice of the meaning depends on whether the speaker talks about internal and safer space of the taiga or about the space outside of the Ewenki oucumene, i.e. the Arctic tundra. This suggests that the terms are not essential but rather relative (cf. with Tlingit in Thornton 2017). This finding further challenges the idea that spatial boundaries are the most salient features for categorisation. I posit that ethnophysiography should pay more attention to the context-dependency of geographic entities and landscape terms by utilising methods of interpretative anthropology and geosemiotics.

On the whole, the terminology for swamps and tundra in Ewenki requires further research as this part of vocabulary may shed light on the way the people define domestic space vs. marginal (perhaps even liminal) space and how they perceive themselves within this imagined geography. The choice of either meaning would be dependent not only on the local landscape features but also on the "collection of beliefs about some domain" that constitutes ontology (Mark et al. 2010: 30). This phenomenon represents a significant challenge to data analysis and also deserves separate research on the change of meaning depending on a spatial reference and the position of the speaker.

The variation and change of meaning were further examined in Ewenki place names collected in the Tugur-Chumikan-District, Khabarovsk Territory, in 2017. The results have revealed that Ewenki riverine names are not simply remembered and reproduced, but rather generated and transformed through numerous contacts and engagements among humans and other beings encountered in travel. This finding highlights the necessity to shift from human-oriented research on place names towards the understanding of place naming as a communicative practice that involves not only humans but other beings. The data has demonstrated that Ewenki use a perspectival strategy to name places. This strategy is linked with ontologies that manifest themselves in the complex relationships and interactions between places, humans and non-human beings. Some place names represent complex ideas and contain a lot of useful information concerning the place, its inhabitants and relations with other places. This strategy is also related to Ewenki understanding of ownership over territory, which is considered as being equally shared with other beings, in particular with spirits and animals. Therefore, it is common that some places are named from different points of views or incorporate different perspectives on places. For example, by naming animals' dwelling places Ewenki acknowledge the animals' ownership rights rather than just signify the presence of these animals in a certain territory.

I argue that the notion of the Interpretant in terms of Charles Peirce's semiotics is crucial for understanding how Ewenki hunters and herders understand the meanings of place names as complex signs rather than descriptive names. In his seminal book 'How forests think' Eduardo Kohn (2013)

points out that not only humans produce and exchange signs, but also other beings, and that humans constantly learn about other beings' semiotic systems. I argue that in Ewenki, the meanings of place names may be multispectival, referring to different participants in the shared space of the taiga, and 'multi-layered' in terms of Jan Blommaert's idea of layered simultaneity. The meanings of place names also depend on the referent which people have in mind when talking about places. The referent may be based on the speaker or another viewer, or both. Stephen Levinson (1996: 365) applies the term 'relative reading' to spatial coordinates which are based on the speaker. This term appears to be suitable in relation to the way Ewenki deal with place names as some of them may not have absolute positions in the constantly changing relations and the environment in the taiga. The names as well as geographic terms are relative and more bound to the speaker or speech community rather than abstract. This fact explains why the names are not only passed from one generation to the next but also modified and even produced: they must be in tune with the context in which they are used.

The change of a place name may happen as a result of the transformation of the environment, personal experiences or relations between participants, including humans, animals and other beings. Some place names form clusters of interconnected places. In this case, the change may lead to the transformation of the whole cluster. Therefore, the majority of Ewenki place names carry out an appropriateness-to-context function which is based on human experience, knowledge, and perspective.

Based on field research among the Tugur-Chumikan Ewenki, I suggest that all Ewenki place names can be roughly divided into two big categories: official and local. By 'official' I mean the names given by Russian authorities. Some of them are of Ewenki origin. The group of local names contains riverine names in Ewenki and other languages spoken in the region, such as Yakut and Russian. Some rivers have several names in different languages, which are used simultaneously with Ewenki ones (cf. with Tlingit in Deur et al. 2015: 51). They are not alternative but rather coexisting with Ewenki names and may mark some additional features of the places or be utilised in other contexts. I note that Vasilevich's archival maps contain a huge number of names in other than Ewenki

languages, such as Ket, Yakut and Selkup. There is a need to examine them together with the specialists in the corresponding languages.

According to my field data, as a rule, Ewenki names for key water arteries are passed across generations without change. These names can also be official, i.e. recorded on official topographical maps. Other names in this category refer to the tributaries of the key rivers. These names are mainly known to the members of the local hunting and herding community whose members live or hunt in proximity to the corresponding rivers. The names in this sub-category can be defined as ‘communal’ or ‘territorial’ (see Table 14). They are quite stable but may be changed if the links between the name and the river get broken, meaning that the name does not correspond to the local surroundings anymore or people stopped engaging with the names places. Finally, the most fluid sub-category of names is ‘personal names’, which are known only to the members of a particular family. These names are easy to change. They usually reflect individual experience in the place and are used as mnemonic signs in communication and way-finding.

Table 14. Categories of names according to the possibility of change

Category	**Official**		**Local (Ewenki)**		
Sub-category	"Russian"	Indigenous	Communal-1	Communal-2	Private
Members	All	All	All	Members of a particular territorial community	A group of people (family) hunting in a particular territory
Authorship / Source	Officials	Officials	Community members; authorship is usually unknown	Community members; authorship is usually unknown but new terms can be produced and accepted	Community members / concrete persons
Rivers which are named	All	All	Main rivers (bira)	Main rivers (bira) and some smaller rivers (birakan, yukta)	Only smaller rivers (birakan, yukta)

The possibility of change	Hard to change	Hard to change	Hard to change	Possible when the circumstances change	Easy to change
The possibility of production	Almost impossible	Almost impossible	Possible but rare	Possible	Possible
Transmission to the next generation	Yes	Yes	Yes	Yes	Very limited

In order to examine the variation and change of Ewenki place names over time, I drew on the unique multi-sited and multi-temporal corpus of place names for Ewenki (1416 in total) collected by the Soviet researcher Glafira Vasilevich. The names were put by the researcher on sketch maps made by her Ewenki informants in different Siberian regions in the period from the 1920s to the 1960s. They belong to 13 river systems. I translated most of the names from Ewenki into Russian, in consultation with Ewenki in the field. Each river system was identified and geolocated. One of the outcomes of my research was the creation of an open-access Ewenki digital toponymical database (co-designed with Elena Klyachko).

Research on Vasilevich's archival place names was focused on the typology, semantics and linguistic structure of the names, as well as their variation and change. The comparative analysis of riverine names in different locales helped me to examine the patterns of naming and proposed the first comprehensive typology of Ewenki riverine names. I primarily examined the idea of the river-as-corridor for mobility and looked at hydrological networks in terms of the distribution of particular categories of names and their links with peoples' seasonal activities and relationships with non-human beings, including animals and spirits. I showed that the network of rivers helped the people to travel long distances and cognise the local surroundings in their own terms by using similar name-giving patterns. This strategy can be compared with hydrological networks in the Athabaskan communities surveyed by J. Kari (2011). However, in contrast to the Athabaskan static model, Ewenki place names do change. In order to prove this statement, I compared the names of the Gonam river system, Yakutia, collected by Vasilevich and myself in the 1940s and 2018 respectively by using participatory mapping. The analysis has proved that of 30 riverine names on both archival and contemporary sketch

maps, only 13 are the same. It shows that 43% of the names have changed over the past 80 years. It is also possible that some rivers have become nameless. Hence, it is crucial to continue analysing the variation and change of the names over time in the other twelve river systems.

To sum up, my research has established that there are three types of variation in Ewenki riverine names: variation in meaning, variation in affixes and variation in the location of the names when the same names are applied to previous nameless rivers or their parts within one river system. The most variable or fluid names are 'private names', the names assigned to small rivers and utilised by family member hunting or herding in proximity. A specific variation occurs in the names derived from landscape terms or ecotopes. As said above, research has shown that Ewenki ecotopes are quite fluid in their meanings across Ewenki dialect continuum. Hence, the names related to ecotopes, which constitute most of the Ewenki names, exhibit the same pattern of variation as the ecotopes.

An important implication of this finding pertains to how we evaluate archival or silent data: in most of the cases we cannot figure out the meaning of the name from a dictionary. In light of this peculiarity, I propose the following protocol for the collection and analysis of the names derived from ecotopes:

1. Identification of all possible meanings of the corresponding ecotope from dictionaries and other material;
2. Clarification of their meanings in a community in terms of which quality and feature of a geographical object in question is highlighted in the name;
3. Identification of the proper meaning(s) of the name in the community;
4. Examination of the affix which specifies the characteristics of the named river;
5. Clarification of the context in which the name is used and the properties of the named river;
6. Documentation of the previous names of the named river, if applicable.

To conclude, temporal and geographic comparisons of geospatial terms and place names has clearly demonstrated that, along with a conventional understanding of Indigenous place names as stable, conservative and even ancient, there is a dynamic model of place naming to be found in

nomadic societies. Both the meaning of the names and the names themselves may change over time and space and in different contexts. At the same time, these names seem to be transferable or 'nomadic' in their nature; that is the people applied the same rules in naming the rivers, especially the most important ones, upon inhabiting a new environment. Hence, the names represent a bricolage or a set of assemblages, the coming together of different elements, rather than fixed categories on a map. Ewenki creatively combine these assemblages to form new names or transform the previous ones.

I hope this research will help to move beyond a sedentarist metaphysics towards a nomad metaphysics (Cresswell 2006) in relation to the analysis of place names and geospatial concepts as primarily fluid. I argue that this ability to get flexibly transformed and modified to fit a new realm, both semantically and phenomenologically, makes Ewenki place names unique and adaptive. This fact, in turn, suggests that flexibility in place naming strategies should be regarded as another crucial technique in human cognitive adaptation to novel landscapes and environments. In this thesis, I addressed a number of methodological approaches regarding how geographers and social anthropologists might collect and analyse geospatial concepts and place names in nomadic societies which have been underrepresented in ethnophysiography.

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Appendix 1. Ewenki narrative ‘How a man went down to the Underworld’

Narrated by Valentina Yoldogir (Chirinda sub-dialect of the Ilimpii dialect), transcribed by N. Mamontova, translated into English by B. Donahoe, Chirinda, Ewenki District, Krasnoyarsk Territory, 2011.

Source: Mamontova, N. (Ed.). Folklore of the Ilimpii Ewenki. Collected Texts with Translation and Comments (in Ewenki, Russian and English). Moscow: Yazyki Slavyanskoy Kultury (in preparation).

Sound material: http://corpora.iea.ras.ru/corpora/describe_text.php?id=48

Picture 9. Valentina Yoldogir (on the right) with her husband. Photographed by N. Mamontova



‘Ōн бэе хэргӯлэ̄ дӯндэлэ̄ йстан / Как человек дошел до нижней земли / How a Man Went Down to the Underworld’

Умукэ̄н бэе, охотник, булта̄де, сипка̄мйдяна, булта̄денэ пурга̄дӯ, кэ̄йчэ̄ эрдэлэ̄н дю̄й.
Один человек, охотник, в пургу охотясь на соболя, совсем потерял свой чум.
One day a man — a hunter — got completely lost while hunting for sable in a snowstorm and couldn't find his way back to his tipi.

Гиркудяса̄, гиркудяса̄ иртыкй-дэ, дю̄гин, дю̄н бихивэн, эрэгэрит кэ̄йчэ̄.
Шел, шел в ту сторону, где чум находится, и совсем заблудился.
He walked and walked in the direction of his tipi, but he got completely lost.

Албасā гиркудямӣ.

Тщетно бродил.

He was walking around in vain.

Туг гиркудяна, гиркудяна хактырāдӯ, ӭкун-мāл сӧпкокодӯн бурурэн.

Так бродя, бродя в темноте, в какую-то яму провалился.

While he was wandering around like this in the dark, he fell into some kind of pit.

Эрдэлӭн бурурэн хэргискӣкӭкун. «Ӭр ӧн ӧдам?» — гӯннэ.

Далеко провалился, на самое дно. «Как оказался тут?» — сказал.

He fell deep down, all the way down to the very bottom. "How did this happen?" he wondered.

Тар бэе ӗнан, ӈӭлэлчӭ эрэгэрит.

Человек удивился, испугался совсем.

The man was surprised; he was completely frightened.

Тар ӭлахā-вэл тар сӧпкокодӯн бурукӭнэм, āхисā-гу, эсӭ-гу бисӭ.

В какой-то момент в яму упав, уснул вроде или нет.

At some point in the pit he fell, maybe he fell asleep, or maybe not.

Ӭлахā-вал аӈдан-да, эйдэнэн-дэ хурурэн, хурурэн — тар ӭкун-мал дӯндэ хэргӣлӭ бирэн.

Когда-то очнулся и пошел, пошел — там какая-то земля внизу была.

At some point he came to his senses and walked and walked; there was some kind of world down below.

Дӯндэлӣ тар хурурэн.

По той земле пошел.

And he went toward that world.

Ӈэнэденэ, ӈэнэденэ, исэрэн дӧкчāлбэ, дӧкчāкāкур илӣтчара. Тāрилдулā дагамаран.

Идя, идя, увидел чумы, чумища стоят. К ним приблизился.

He walked and walked, and then he saw tipis; there are big tipis standing there. He approached them.

Бэел гиркудявкӣл, ӈинакир тэгэтчэвкӣл тулӣлэ̄, аивувкӑкур тэгэтчэвкӣл, эвкӣл гогородо̄ нуӈанмӑн, исэрэ-дэ̄ эвкӣл. [13]

Люди ходят, собаки сидят на улице, сытые сидят и на него не лают — его не видят.

People are walking around; dogs are sitting in the street, completely sated. They're just sitting there, not barking — they don't see him.

Тар бэел опэт нуӈанмӑн эвкӣл исэрэ. Тар дю̄лӑтын ӣрэн, дю̄кчӑлӑ умукэ̄ндулэ̄.

Те люди тоже его не видят. В чум к ним зашел, в чум один.

And those people also don't see him. He went into their tipi, into one of the tipis.

Девдерэ бэел тарӗ, улдэвэ девдекэ̄куттэ.

Едят люди, мясом насыщаются.

People are sitting there eating, stuffing themselves with meat.

Тӑрилдӯ-тэ деммулкэ̄нэм, тэгэлдӹсэ̄ остӧлдӯ.

Среди тех-то людей проголодавшись, сел за их стол.

While he was among them, he got hungry and sat at the table.

Тар тэгэтчэрӣвэн эвкӣл, эвкӣл тар бэел исэрэ. Ӈӣ-дэ̄ эвкӣ исэрэ нуӈанмӑн.

Сидящего не видят те люди. Никто не видит его.

Those people don't see who is sitting there. Nobody sees him.

Тар, хэлэ, гӯлчэ̄л, девденэл тар бэел: «Э̄да тогот хиӈкэрӣлдэн?

Вот они стали говорить, едящие те люди: «Почему огонь начал трещать?

Well then they started talking, those people who were eating, "Why has the fire started to crackle?

Хэлэ, имӯксэлэ нӧдӯгӑт тогодӯ. Тогот хиӈкэрӣдерэн — э̄дӑ-вал эрӯпчут».[14]

Ordinary people entere into the lower world by accident. For example, they may fall down into a hole in the ground. It is believed that there live the same people as in the middle world. N. M. Udygir from Ekonda notes that the inhabitants of the lower and upper worlds differ from the ones in the middle world only in the way they put a girdle around: in the lower world they put a belt below the navel, in the middle one ─ at the waist, and in the the upper world ─ under the arms. However, in the lower world ordinary people become unseen and unheard for the locals; the latter could even get sick by touching them.

14

The Ewenki, like other Siberian peoples, believe that it is possible to communicate with fire. By the sounds emanating from the fire, as well as from the "behavior" of its flame, one is able to predict the future or learn about a misfortune

Давай сало бросим в огонь. Огонь трещит — что-то плохое».
Let's throw some lard into the fire. The fire crackles something fierce."

Имӯксэлбэ нӧдӯвкӣл тогодӯ. Тар бэе девулды̄дерэн, тэгэтчэрэн нуӈарнӯнтын.
Сало бросают в огонь. Тот человек ест и сидит вместе с ними.
They throw lard into the fire. That man eats, sitting there with them.

Эвкӣл-дэ нуӈанмӑн яӈгӯра, исэрэ, эвкӣл исэрэ нуӈанмӑн, тар девулды̄дерӣвэн остӧлдуктын.
Про него не говорят, не видят его, едящего вместе с ними за столом.
But they don't say anything about him; they don't see the man, eating with them at their table.

Тулӣлӭ гаксӑкӑкур локӯсадявкӣл, улдэлбэ олгӣдявкӣл.
На улице юкола висит, мясо сушится.
Outside dried fish is hanging; meat is drying.

Тар тулӣлӭ бэелнӯн гиркувкӣ, эвкӣл нуӈанмӑн исэрэ эрэгэрит. Тӑдӯ тар умукӭн дӧкчӑлӑ йсӭ.
На улице среди людей он ходит, и его не видят совсем. Там в один чум зашел.
Outside he walks among the people, and they do not see him at all. There he went into another tipi.

Тӑдӯ аӈкӑкур локӯсадяра, ирӭксэкӭкур йвсӭл локӯсадяра, сӑтырал йвсӭл, немӯлэ-немӯлэ йвсӭл ирӭксэл, сӑтырал опэт локӯсадяра, кэтэмэмэ.
Там эти висят, шкуры выделанные висят, песцы выделанные, мягко-мягко выделанные шкуры, песцы тоже висят, много.
There hang these… tanned [reindeer] hides are hanging, and processed polar fox pelts, incredibly soft tanned hides, polar foxes are hanging there, so many of them.

«Хэлэ, бӣ эрилдук ирӭксэ̄ дёромокто, — гӯсӭ, — и сӑтыраӣ.
«Вот я у этих шкуру украду-ка, — сказал, — и песца.
"Hey, I’m going to steal a hide from them," he said. "And one of these fox skins.

which has already happened. If the fire gives out evil signs, it should "be fed"; that is what the people of the lower world do in this text.

Эвкӣл исэрэ минэ. Ӧн-мал некэнэ, дӯндэӈдулэ̄и хурувуктэ.

Не видят меня. Как-нибудь их на свою землю унесу.

Nobody sees me. And somehow I'll take them back to my world.

Дӯндэӈмӣ исмӣ, хэхэнилдеӈэ̄в дя̄лдӯӣ: “Бӣ бисэ̄в тар хэргӯдӯ̆ дӯндэдӯ̆, — гӯннэ, гӯннэ, — эр эмэвум аӈняӣ!”

Когда на свою землю приду, расскажу друзьям: “Я был на нижней земле, — говорит, — это принес!”

I'll get back to my own world, and I'll tell my friends, 'I was in the underworld', he says, 'I brought this with me'".

Этэ̄рэ тэдёрэ, — гӯннэ.

Не поверят, — сказал.

"They'll never believe it," he said.

“Эр нуӈардуктын эмэвум, туг нуӈартын ӣвкӣл ирэ̄ксэлбэ, са̄тыралба ӣвкӣл тугӗ”, — гӯннэ, — исэвкэ̄ндеӈэ̄в дя̄лдӯӣ.

Это от них принес, вот они так выделывают шкуры, песцов выделывают так, — сказал, — покажу друзьям.

"From them I brought this — look at how they work the hides; they work the fox pelts like this," he said. "I will show my friends.

Бӣ дёромокто эрилдук, хэлэ». Умукэ̄н са̄тырава гаса̄, умукэ̄н ирэ̄ксэвэ гаса̄.

Я украду-ка у этих вот». Одного песца взял, одну шкуру взял.

Yep, I am going to steal from them." So he took one of the fox skins, he took one hide.

Сакилча̄ тариӈилби, хурувдэ̄и.

Связал их, чтобы унести.

He bundled them up to carry them.

Тар ӧн-мал некэденэ хурусэ̄: «Хэлэ, бӣ хуруктэ, ӈэ̄ливсилэ̄тын хӧл бэелкем эре.

Рано или поздно ушел: «Вот пойду-ка я, страшные очень эти люди.

Sooner or later he left, "It's time for me to go. Now I'll go — these people are frightful.

Эвкӣл минэ исэрэ. Эр хэргӯлэ̄ дӯндэлэ̄, хӣнчэ, иссӑ бихим.

Меня не видят. Кажется, до нижней земли дошел.

They don't see me. It seems that I've reached the underworld.

Ӧн-мал некэнэ, эмэдекпӣ бакадӑв нӑдэ». Тар бэе хурурэн эмэдектыкий.

Как-нибудь обратную дорогу найти надо». Тот человек обратно отправился по тому месту, откуда пришел.

Now I've got to find a way back somehow." The man turned around and went back toward the place from where he came.

Талӣ ӈэнэденэ, ӈэнэденэ хӯскӣ тар ирэ̄ксэӈилби угадяна.

Идя, идя обратно, те шкуры тащит.

He was walking there, walking back, carrying the skins.

Ӣдӯ-вэл исэмэ̄к ӧдан ӈэ̄рӣдерӣвэ, угӣгит ӈэ̄рӣдерэн.

Где-то заметил свечение, сверху светит.

Then somewhere he noticed a brightness; from above something was shining.

«Эбэ̄й, эртыкӣ, хӣнчэ, дӯндэӈӣв, — гӯсэ̄. — Тар, эм, угӣгӣт тар хёву бурудерэн.

«Ой, там, кажется, земля моя, — сказал. — Вот же сверху свет падает.

"Oi! There, it seems, is my world," he said. "There, light is falling from above.

Тырганӣ ӈэ̄рихин бурудерэн хэргискӣ эрэ̄».

Дневной свет падает вниз».

The light of day is falling down."

Тар, тарӑ ӣстан-дӑ тар хаӈӑрба, ӧн-мал некэденэ, ӧн-мал некэденэ, талӣ ӯрэн.

Дошел до дыры, каким-то образом, как-то оттуда выбрался.

He went to the opening and somehow, some way he got himself out of there.

Угӣскӣ дӯндэдӯ ӧдан. Эр урусэ̄ тар бэе.

На верхней земле оказался. Обрадовался тот человек.

And he found himself in the upper world. And the man was overjoyed.

Хэлэ аямамат эйдесэ̄: «Эргитын, хинчэ, эмэсэ̄в.

Вот хорошенько присмотрелся: «Оттуда, кажется, пришел.
Well, he took a good look around: "I came from there, it seems.

Дыласакāкун аямāма, тар дӯндэӈдӯн эргитын эртыкӣ бидэ̄н нāдэ дюлвӣ.
Солнышко хорошее, на земле в той стороне должен быть дом.
The sunlight is bright; my home must be in that direction.

Эртыкӣ хуруктэ». Тар хурурэн дюлāӣ. Хэлэ, горово, горово ӈэнэкэ̄нэм, дюи бакаран, хэлэ.
Туда пойду-ка». Пошел домой. Долго, долго шел, прежде чем свой чум нашел.
I do think I'll go that way." That's how he went home. He walked for a long, long time, and finally he found his tipi.

Бэел удялбатын бакаран — гэлэ̄ктэдекил-бэтын ороpди.
Человеческие следы нашел — искали его на оленях.
He found footprints — they were searching for him on reindeer-back.

Тар ӯдялдулӣтын хурурэн-дэ, дюи бакаран. «Кэлэ, ӣдӯ бисэ̄с?
По следам пошел и чум нашел. «Ну, где ты был?
He followed the footprints and found his tipi. "Well, where have you been?

Э̄кун дӯндэдӯн бисэ̄с?» — гӯнденэ, дя̄лин ханӈӯкталда.
На какой земле был?» — говоря так, друзья стали расспрашивать.
What kind of world have you been to?" his friends say, starting to question him.

«Эр, хэлэ, бӣ гороло̄к эмэм, мусӯм хӯскӣ», — гӯнэн.
«Вот я издалека пришел, обратно вернулся», — сказал.
"Well, I have come from far away, I have returned," he said.

— Эр хэргӯ дӯндэвэ иссā бихим. Хэргӯ дӯндэдӯ гиркум, бэелбэ исэ̄м, ӈинакирба исэ̄м.
— До нижней земли дошел. На нижней земле бродил, людей видел, собак видел.
"I went all the way to the underworld. I walked around in the underworld. I saw people there; I saw dogs.

Аямамат ӣндерэ тāдӯ, эр хэргӯ дӯндэдӯ. Тадук эмэм бӣ», — эр гӯсэ̄.

Хорошо живут там, на этой нижней земле. Потом я вернулся», — так сказал.
They live well there, in that underworld. And then I came back," he said.

Тар дя̄лин эвкӣл тэдёрэ: «О̄н эмэндэ?
Друзья не поверили: «Как вернулся?
His friends didn't believe him, "How did you come back?

О̄н хэргӯ дӯндэдук эвкэ̄ мусā̄нмура?» — «Эр-ты̄ бӣ мусā̄нэм, эсэ̄?!
Как с нижней земли можно вернуться?» — «Вот же я вернулся, разве нет?!
How could you possibly have returned from the underworld?" "Well, look, I've returned, haven’t I?!

Эр исэткэлду, хэлэ, эр ирэ̄ксэлбэ эмэвум тадук, ирэксэ ирэ̄ксэӈӣлдуктын гана, эмэвум, — гӯсэ̄.
На это посмотрите, вот эти шкуры принес оттуда, эту шкуру из их шкур взявши, принес, — сказал.
Take a look at this — here, I've brought these skins from there. I took a hide from their hides and I brought it with me," he said.

— Исэткэлду эрē!» Ирэ̄ксэвэ исэвкэ̄сэ̄, немӯлэмнӣн эрэгэрит, эрэгэрит немӯлэмнӣн ӣвсэ̄ ирэ̄ксэ.
— Смотрите вот!» Шкуру показал, мягкая совсем, совсем мягко выделанная шкура.
"Look, here it is!" And he showed them the hide, so wonderfully soft, so perfectly tanned and soft.

Сā̄тыра ирэ̄ксэвэн исэвкэ̄сэ̄ — эр опэт немӯлэмнӣн ӣвсэ̄.
Песца шкуру показал — эта тоже мягко выделанная.
He showed them the fox pelt — it was also so soft and wonderfully processed.



Picture 10. Televu:n, facility for drying reindeer skin. Photographed by S. Chapogir, Surinda, Ewenki District, 2014

«Эр нуӈартын туг ӣвкӣл. Туг ӣвкӣл тэтыгӭӈӭтылэвэр нуӈартын немӯлэ-немӯлэ.

«Это они так выделывают. Так выделывают они мягко-мягко на одежду себе.

"This is how they process them. They work them like this for clothing, oh so soft.

Аямамат ӣндерэ, эвит, тӑдӯ. Только минэ эвкӣл исэрэ. Тоготын хэлэ хиӈкэрӣвкӣ.

Хорошо живут, кажется, там. Только меня не видели. Огонь их все трещал.

It seems like they have a good life there. Only they couldn't see me. But their fire was crackling something fierce.

Бӣ девулдӭлдэӈкӣв остӭлдутын, тэгэлдӭӈнэм, девулдӭлиӈнэм нуӈарнӯнтын.

Я ел за их столом, сидел вместе с ними, ел среди них.

I ate from their table; I sat and ate among them.

Эвкӣл минэ исэрэ тэгэтчэрӣвэв. Тоготын только хиӈкэрӣливкӣ.

Не видели меня сидящего. Огонь их только трещал.

But they didn't see me sitting there. Their fire was just crackling away.

Тарит тар, хэлэ, гӯнивкӣл: “Э̄кун-мал эмэсэ̄”, гӯнивкӣл, — гӯнэн. — “Э̄кун-мал эмэсэ̄, тогодувар нӧдӯга̄т имӯксэлэ”.

Поэтому вот они говорили: “Кто-то пришел”, говорили, — сказал. — “Кто-то пришел, в огонь бросим жир”.

And because of that they said, 'Someone has come,' they said. They said, 'Someone has come, throw some fat into the fire.'

Тар имӯксэлбэ нӧдӯлӣвкӣл». Тар-тэ̄ тариӈӣлӣн тэдёрэ, хэлэ.

Жир бросали». Тогда-то те поверили, вот.

And they threw fat into the fire." Well, then they believed him.

«Туги кэ̄йкэ̄нэм, гиркудяна, гиркудяна хактыра̄дӯ, э̄кун-мал сӧпкокодӯн бурэсэ̄в, — гӯсэ̄.

«Так заблудившись, бродил, бродил в темноте, затем в какую-то яму упал, — сказал.

"Look, I got completely lost and walked and walked in the dark. Then I fell into some kind of pit," he said.

— Туг некэденэ, тар тар хэргӯвэ дӯндэвэ ихим тарилдук.

— Так случилось, до нижней земли дошел.

"That's what happened, I approached the underworld.

Хэлэ, тар ӈэ̄ливсилэ̄тын-дэ хӧ, эвкӣл минэ исэрэ, гиркудярӣвав-да эвкӣл исэрэ.

Вот страшные очень, не видят меня, бродящего меня не видят.

Well, they were awful! They don't see me; they don't see someone who is walking.

Ӈинакиртын аямамал, аивука̄кур тэгэтчэвкӣл», — гӯсэ̄.

Их собаки хорошие, сытые сидят», — сказал.

The dogs just sit there completely full," he said.

— Эвкӣл минэ гогоро. Тарилдук тар эмэм, хэлэ», — гӯсэ̄.

— Собаки их на меня не лают. От них я вернулся вот», — сказал.

"Their dogs don't bark at me. I have come back from them, and that's that," he said.

Тар, хэлэ, тэдёсэ̄л бэел: «Йдук-ка бакадян-да̄ тар ирэ̄ксэлэ ӣвсэлэ?»

Вот поверили люди: «Где же найдет такие шкуры выделанные?»
And so the people believed him, "Where can he find such wonderfully tanned hides?"

«Тар хэргӯдук дӯндэдук эрē тэдёдэхун эмэвум, — гӯсэ̄, — эр ирэ̄ксэлбэ, сāтыра ирэ̄ксэвэн, бэйӈэ̄ ирэ̄ксэвэн».
«Вот с нижней земли, чтобы поверили, это принес, — сказал, — эту шкуру, песца шкуру, дикого оленя шкуру».
"Here — that's why I brought this back with me from the underworld," he said. "This fur, this fox pelt, this wild reindeer skin."

Тариӈӣлӣн, хэлэ, тэдёсэ̄л: «Туг-гӯ бивкӣ, эвӣт, тар дӯндэдук мусāнмукā», — гӯсэ̄л.
Те вот поверили: «Так бывает, видно, чтобы с той земли возвращались», — сказали.
And they believed him, "So it really can happen that someone can return from that other world," they said.

Хэлэ, тэдёсэ̄л дя̄лин тарит.
Вот поэтому поверили друзья.
And those friends of his did believe him.

Appendix 2. Evidence of submission

December 11, 2019

Dear Nadezhda Mamontova, Elena Klyachko and Thomas F. Thornton,

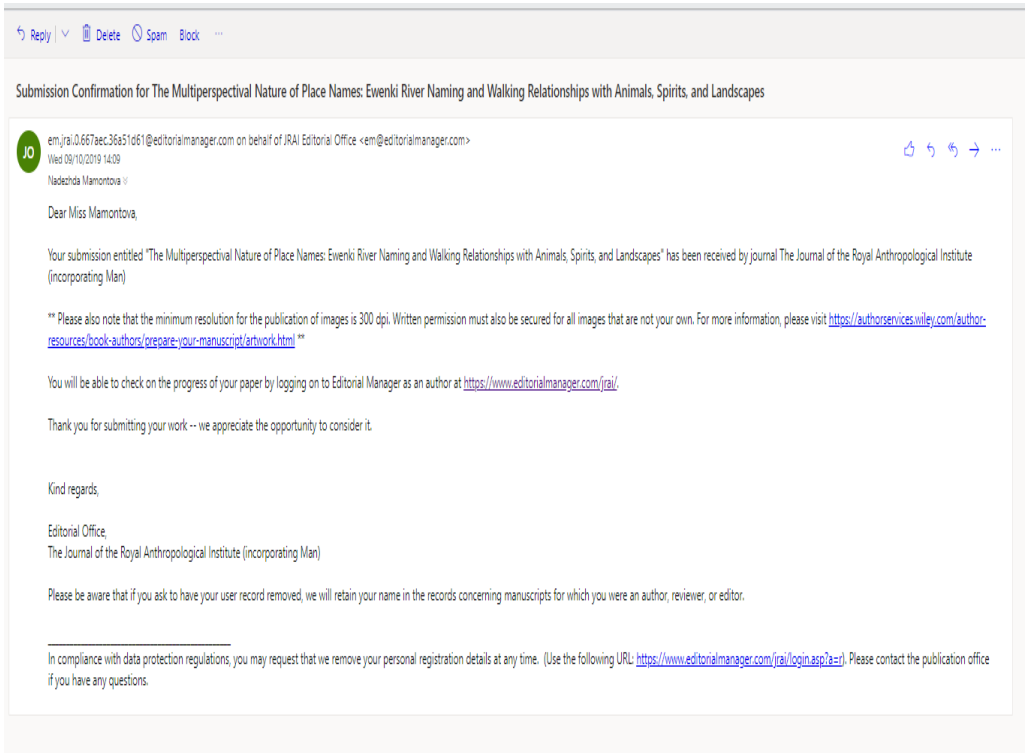
We confirm that your manuscript titled ""The track is never the same": The fluidity of geographic terminology and conceptualization of space among Ewenki" has been accepted by the guest editors of the special issue of the journal Hunter Gatherer Research titled "Hunter-gatherer representations of space and place".

We anticipate that this special issue will be published in 2020 but the timing is contingent upon the editors of the journal, the Liverpool University Press and the journal's editorial schedule.

Sincerely,



Dr. Carolyn O'Meara
(on behalf of the guest editors for this issue of HGR)


Reply | Delete Spam Block ···

Submission Confirmation for The Multiperspectival Nature of Place Names: Ewenki River Naming and Walking Relationships with Animals, Spirits, and Landscapes

JO em.jrai.0.667aec.36a51d61@editorialmanager.com on behalf of JRAI Editorial Office <em@editorialmanager.com>
Wed 09/10/2019 14:09
Nadezhda Mamontova

Dear Miss Mamontova,

Your submission entitled "The Multiperspectival Nature of Place Names: Ewenki River Naming and Walking Relationships with Animals, Spirits, and Landscapes" has been received by journal The Journal of the Royal Anthropological Institute (incorporating Man)

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You will be able to check on the progress of your paper by logging on to Editorial Manager as an author at https://www.editorialmanager.com/jrai/.

Thank you for submitting your work -- we appreciate the opportunity to consider it.

Kind regards,

Editorial Office,
The Journal of the Royal Anthropological Institute (incorporating Man)

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on behalf of
JRAI Editorial Office <em@editorialmanager.com>
Wed 09/10/2019 14:09

Nadezhda Mamontova

Dear Miss Mamontova,

Your submission entitled "The Multiperspectival Nature of Place Names: Ewenki River Naming and Walking Relationships with Animals, Spirits, and Landscapes" has been received by journal The Journal of the Royal Anthropological Institute (incorporating Man)

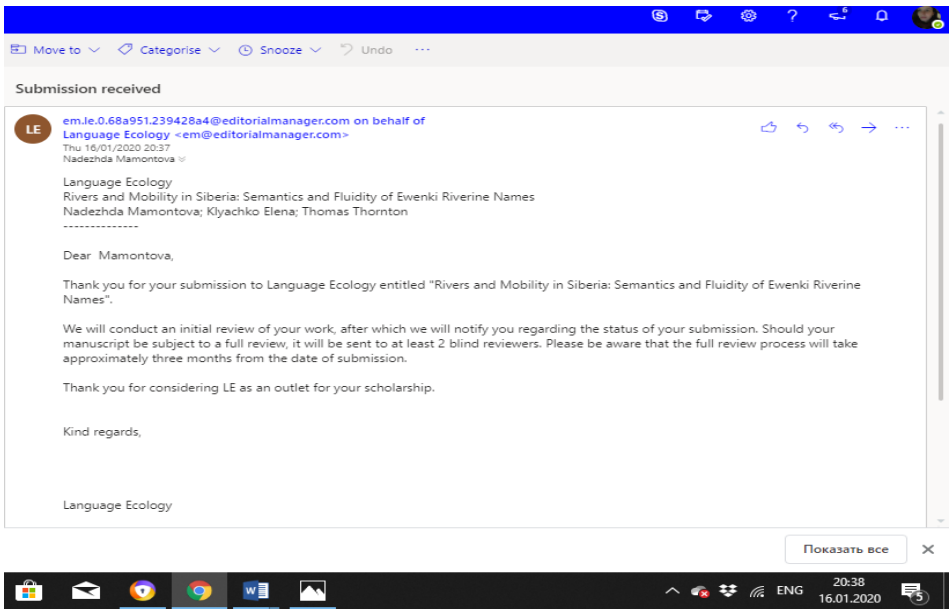
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You will be able to check on the progress of your paper by logging on to Editorial Manager as an author at https://www.editorialmanager.com/jrai/.

Thank you for submitting your work -- we appreciate the opportunity to consider it.

Kind regards,

Editorial Office,
The Journal of the Royal Anthropological Institute (incorporating Man)



em.le.0.68a951.239428a4@editorialmanager.com
on behalf of
Language Ecology <em@editorialmanager.com>
Thu 16/01/2020 20:37

Nadezhda Mamontova

Language Ecology
Rivers and Mobility in Siberia: Semantics and Fluidity of Ewenki Riverine Names
Nadezhda Mamontova; Klyachko Elena; Thomas Thornton

Dear Mamontova,

Thank you for your submission to Language Ecology entitled "Rivers and Mobility in Siberia: Semantics and Fluidity of Ewenki Riverine Names".

We will conduct an initial review of your work, after which we will notify you regarding the status of your submission. Should your manuscript be subject to a full review, it will be sent to at least 2 blind reviewers. Please be aware that the full review process will take approximately three months from the date of submission.

Thank you for considering LE as an outlet for your scholarship.

Kind regards,

Language Ecology

Appendix 3. List of Ewenki landscape terms

Gloss in English	Gloss in Russian	Ewenki terms	Ewenki terms (local)
Forest	Лес	Dygide, moha, dyle, agi	
Larch forest	Лиственничный лес	Irektel	
Cedar forest	Кедровый лес	Taktykah	
Spruce forest	Еловый лес	Asiktakar	
Pine forest	Кедровый лес	D’agdak	
Burnt-out forest	Горелый лес	gondakta	
Taiga	Тайга	Moha, dyle, agi	
Thicket	Чаща	Higikah dunne, hargil, supire, sigikag, taka	
Mountain	Гора	Ure	
Slope in a mountain created by a small river; gorge	Наклон на горе, созданный ручьем; ущелье	Iken	
Northern slope	Северный склон	Boso	
Southern slope	Южный склон	Antaga	
Eastern slope			
Western slope			
Front side of a mountain	Лицевая сторона	Gonyvun	
Back side of a mountain	Задняя сторона		
End of a mountain	Нос горы, окончание	Ongokto ureni	
Steep slope	Крутой спуск	Ellenge	
Rocks	Скалы	Kadar	
Mountain surrounded on both sides by high and abrupt picks	Гора, окруженная с обеих сторон острыми и высокими вершинами	Kapchan	

Small mountain with a flat and long pick	Маленькая гора с плоской и длинной вершиной	Kerain
Stony mountain	Каменистая гора	Angkayku
Wide, flat area	Широкая ровная местность	Hogil, devsen, hoj
Low area, depression	Низменность	Herelgen, aglan, tanmaka
Plain covered with moss	Равнина, покрытая мхом; болото	Aj
Hummocky area	Кочковатая местность	Sungnikecher
Tussock field	Кочкарник, марь с кочками	Kever
River	Река	Bira
Large river	Большая река	Hegdy bira
Dried-up river	Высохшая река	Olgoso biraja, osolgon
Bendy river	Изогнутая река	Kochgdo bira, usiki bira
Stream	Поток, ручей	Birajakan
Small river originating from a lake	Маленькая речка, берущая начало из озера	
River bank	Берег реки	D’apka
Stretch of the river	Плес реки	Guruka
Quiet stretch of the river	Тихий плес, заводь	Urigdan
Small tributary	Небольшой приток	Naldy
Spring	Ручей	Jukte
Rapid	Порог	Oran
Fast river current	Быстрина	Kangki, ojo
River bank closer to the river	Берег реки ближе к воде	

Opposite bank	Противоположенный берег	Bargida
Sliding river bank	Крутой берег реки	Tenke, ulukta, emker
High river bank	Высокий берег реки	Ulukta
River bank, inundated during rain seasons	Берег реки, затопляемый во время дождя	
Terraced river bank, covered with trees	Террасовый берег, покрытый деревьями	Tengke
Rocky river bank	Скалистый берег реки	Heksa, jaltyr
Sandy river bank	Песчаный берег реки	Inga
Stony river bank	Каменистый берег реки	
Flat river bank	Плоский берег реки	Naptama ugu
Wide and flat river basin	Широкий ровный бассейн реки	Amnunna
Area between two arms of the river	Пространство между двумя рукавами реки	Arbun
Source of the river	Исток реки	Deren,
Upper reach of the river	Верховье реки	Deren, soligida, ojeokte, solokit
Lower reach of the river	Низовье реки	Egile ojoki, edigu
Mouth of the river	Устье реки	Daptun
River passage	Перешеек	Uksi
Arm of the river	Рукав реки	Pehirgekte
Bend of the river	Изгиб реки	Koso
Ford	Брод	Olon, dakkit, alakit
Backwater	Заводь, запруда	Tunguke, ajan
Stagnant river	Стоячая река	
Sandbank	Отмель	Arba
Slough in the river	Топкое место на реке	Neveki

Isthmus near the river bank		
Cape	Мыс	Koso
Lake	Озеро	Amut
Old riverbed	Старое русло реки	
Tundra	Тундра	Detker, hoj
Swamp	Болото	Hoj, bulel, jaku, levere
Peat swamp	Торфяное болото	Levere
Grassy swamp	Травянистое болото, марь	Nire
Rocky mountain	Каменистая гора	Ure
Bare mountain	Безлесая гора	Yang
Foot of the mountain	Подножие горы	Ure hergiden
Top of the mountain	Верховье горы	Ure ojon
Hill	Холм	Bukachan
Slope	Склон горы	Kaltyr
Hillock	Кочка	
Pit, hole	Дыра, яма	Sopko
Ravine	Овраг	Jakta
Unfrozen patch of water	Полынья	Higlen
Salt march	Солонец	Kudu

Appendix 4. Ewenki geographical terminology (Vasilevich's archive 1965)

The first two columns of the table below are based on the data provided in Vasilevich's archival material. The third column includes the data on Ewenki dialects from the dictionary (Vasilevich 1958) and the fourth column shows the presence of the terms in my data and voiced dictionaries.

Name in Ewenki (Latin)	**Translation**	**Dialects**	**Presence in recorded material**
	Terminology for elevations		
D'ugdyr	Mountainous area with bare rocky and sharp peaks	Z, Ald, Uchur, Chum, Urmi	+
Hingan	Mountainous area with soft wavy ridges	E, Urmi	—
Urel (PL)	Ridges covered with forest	Most of the dialects	+
Kadaril (PL)	Rocky mountains	PT, NB, Brg, Nerch, Tng, Z, Ald, Khng, Uchur, Urmi, Chum, Sak	+
Nerbege / erbege	Small mountain covered with pine forest, located besides the river bank	—	—
Jangil	Bare rocky peaks	All (?)	+
Ngeke / ngeku	Small bare mountain standing beside the river bank	PT, N, E, Uchur, Urmi, Chum, Sak	+
Heksa / eksa / eha (also heha, heksha)	Cliff	PT, N, E, I, Z, Sym, Ald, Tkm, Khng	+
Hise (also ise, ishe)	Cliff or stone located on the shore	PT, N, E, I, Tkm, Z, Ald, Sym	+
Eldengi	Precipice	I	—
Kamniga	Rocks standing close to each other	PT., N, I, UL, NB, Nerch, Sak, Sym	+
Uksi / uksikta	One of the two high steep banks of the river with a gorge in between	PT, E, Uchur, Nerch	+
	Terminology for 'plains' (any open terrain without trees)		
Naptaga / naptaka (also naptaksa, napta, namuring, neptekse)	A plain that is wide and big in size	PT, N, E, Z, Tng,Urmi, Sak, Sym	+ / any flat object

Pollaka (also pollama)	Small in size plain	PT, N, E, Urmi, Sak	+
Tengki (also tengke)	A low plain that is big in size, covered with water during rain seasons	Ald, Urmi, Sak, PT, N, E, I, Sym, Tng, Chum	+
Avlan / aglan	Plain covered with grass	Tng, Z, Ald, Uchur, Urmi, Chum, Sak, NB, Brg, N, E, I, Bnt	+
Det	Plain surface in the taiga covered with sphagnum	PT, N, E, Sym, Z, Urmi, Chum, Sak	+
Killan / kiland'a	Plain surface at watersheds covered with moss; mountainous tundra	Z, Ald, Uchur	—

Terminology for river banks

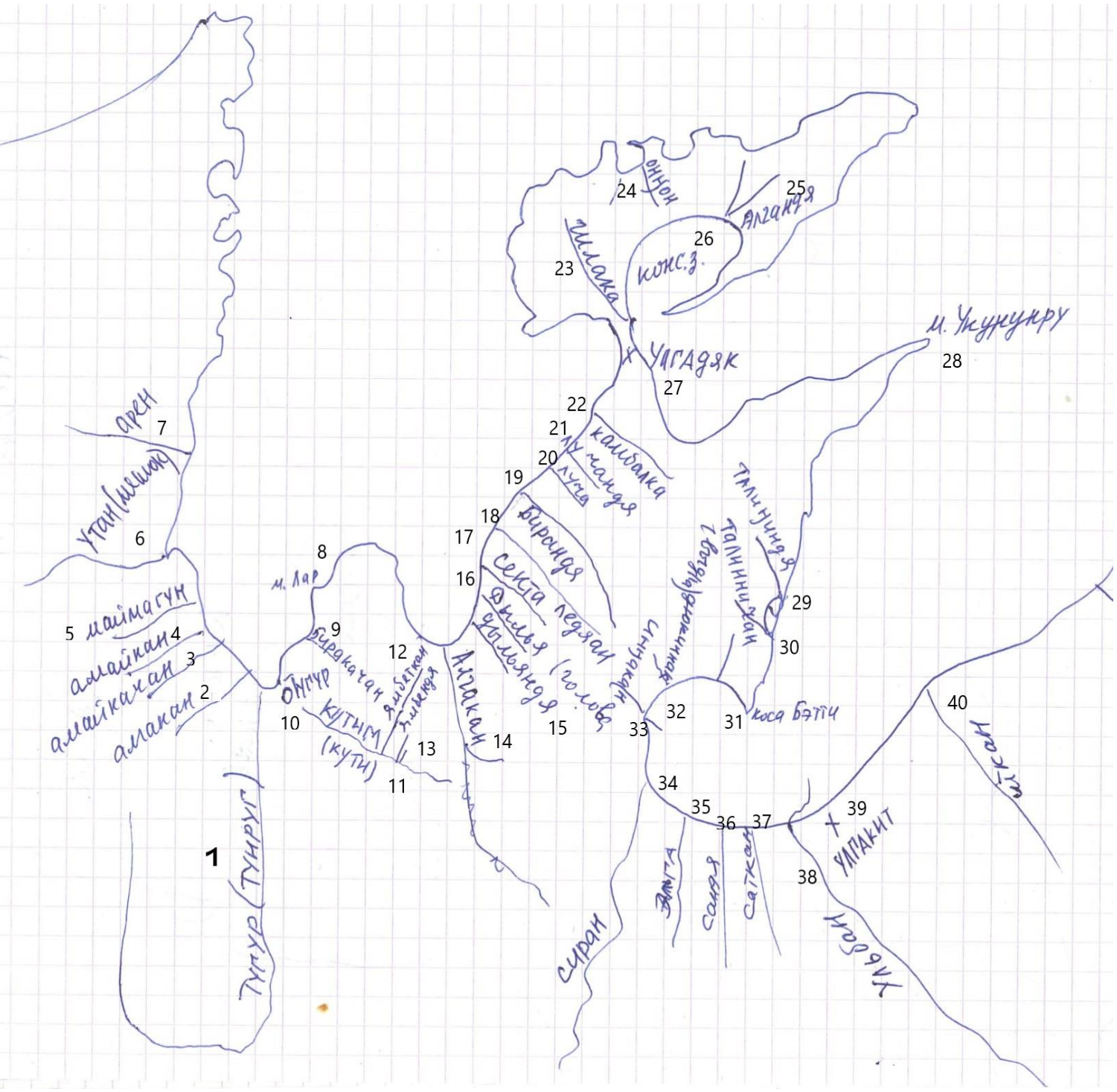
D'apka	High river bank	PT, N, E, I, UL, NB, Tng	+
Huli / uli	River bank	Z, A, Ald, Uchur, Urmi, Sak, Chum	—
Kityl	River bank further from the water[15]	Olkmm, Tng, Sak, Ald, Uchur	—
Dyndyv	Non-inundated river bank	—	—
Ngen	Lower terrace of the river bank	PT	—
Tengke / tengkuchen / Burgan	A river bank, inundated during rain seasons	See 'elevations'	+
		Ald, Uchur, Urmi, Sak	+
Nit	Flat river bank	Chum, Sak	+
Megdyn	High river bank	E, Z, Uchur, Urmi, Sak, A, Chum	— +
Giri	Sandy, pebbly river bank	Sak, Z, Urmi	—
Inga		PT, E, I, UL,	+
		Olkmm, Tng, Z, Ald, Chum, Uchur, Urmi, Brg	+
Kadama	Rocky river bank	PT, N, E, Uchur	—
Eksa / heksa		See 'elevations'	+
Uksi	River bank with a cliff	See 'elevations'	+
Ngeke / ngeku	River bank with a sloping hill	See 'elevations'	+
Bargida	Opposite bank	All	+
Evgide	River bank on which the person is located	PT, N, E, Tng, Z, Ald, Uchur, Urmi, Sak	—

[15] The river bank closer to the water in (Vasilevich 1958: 204).

Appendix 5. Ewenki hand-written maps collected in the field[16]

5.1. Ewenki hand-written maps from the Tugur-Chumikan District, Khavarovsk Territory, 2017

Map 6. The river systems nearby Tugur settlement. Created by Antonina Gutchenson, Chumikam, August 2017.



[16] Place names are translated by Ewenki native speakers, my comments are added after ';'.

Place names: 1. Тугур / эвенки: Тунруг (Tugur / Ewenki: Tunrug ‘semicircle’), 2. Амакан (Amakan ‘grandfather’), 3. Амайкачан (Amajkachan), 4. Амайкан (Amajkan), 5. Маймагун (Majmagun; *majma* ‘trout’), 6. Утан / Утакан (Utan / Utakan ‘sack’), 7. Арен (Aren), 8. мыс Лар (the cape of Lar), 9. Биракачан (Birakachan ‘small river’), 10. Онггур (Onggur; probably from *ongko* ‘reindeer feeding place’), 11. Кутин / Кути (Kutin / Kuti ‘intestine’), 12. Ямбеткан (Jambetkan), 13. Ямбендя (Jambend’a), 14. Алгакан (Algakan), 15. Дыльяндя (Dyljand’a ‘big head’), 16. Дылья (Dylja ‘head’), 17. Секта (Sekta ‘spruce’), 18. Ледяан (Led’aan), 19. Бирандя (Birand’a ‘large river’), 20. Луча (Lucha ‘Russian’), 21. Лучандя (Luchand’a ‘big Russian’), 22. Камбалка (Kambalka; *kambala* ‘flounder’ Rus.), 23. Гилака (Gilaka ‘Nivkh’), 24. Оннгон (Onngon; *onngan* ‘ring finger’ Vasilevich 1958b: 325), 25. Алгандя (Algand’a), 26. Залив Константина (the bay of Konstantin), 27. Угадяк (Ugad’ak), 28. мыс Укурун(г)ру (the cape of Ukurun(g)ru; from *ukuru:* ‘humpback salmon’), 29. Талингиндя (Talingind’a), 30. Талинничан (Talinnichan), 31. коса Бэтти (the sand bar of Betty), 32. Дюкиннак (D’ukinnak ‘the place of otters’), 33. Иннгакан (Inngakan ‘stony’), 34. Сиран (Siran; probably from *siran* ‘a trip wire which is connected to the bow of the hunting trap to trigger it’ Vasilevich 1958b: 357), 35. Элга (Elga; *elge* ‘harpoon’ Vasilevich 1958b: 553), 36. Сандя (Sand’a ‘the river flowing out from a lake’), 37. Саткан (Satkan), 38. Ульбан (Ul’ban), 39. улгакит (ulgakit ‘the place for offerings to a spirit’), 40. Иткан (Itkan): the right name is Ike:n ‘gorge’.

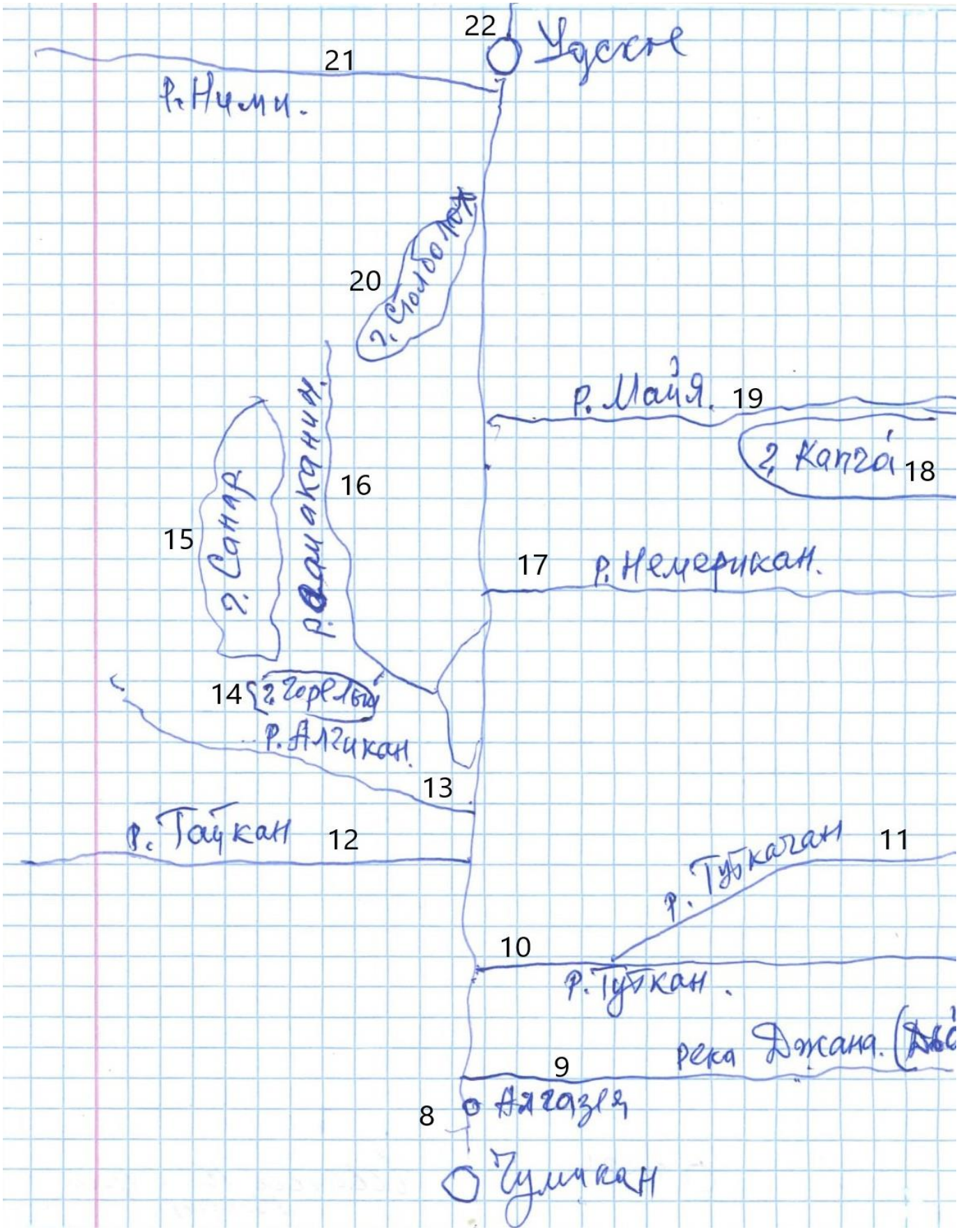
Map 7. The Okhotsk sea (lam in Ewenki) and several rivers nearby Tugur settlement. Created by Roza Kuretskaya, Torom, August 2017.

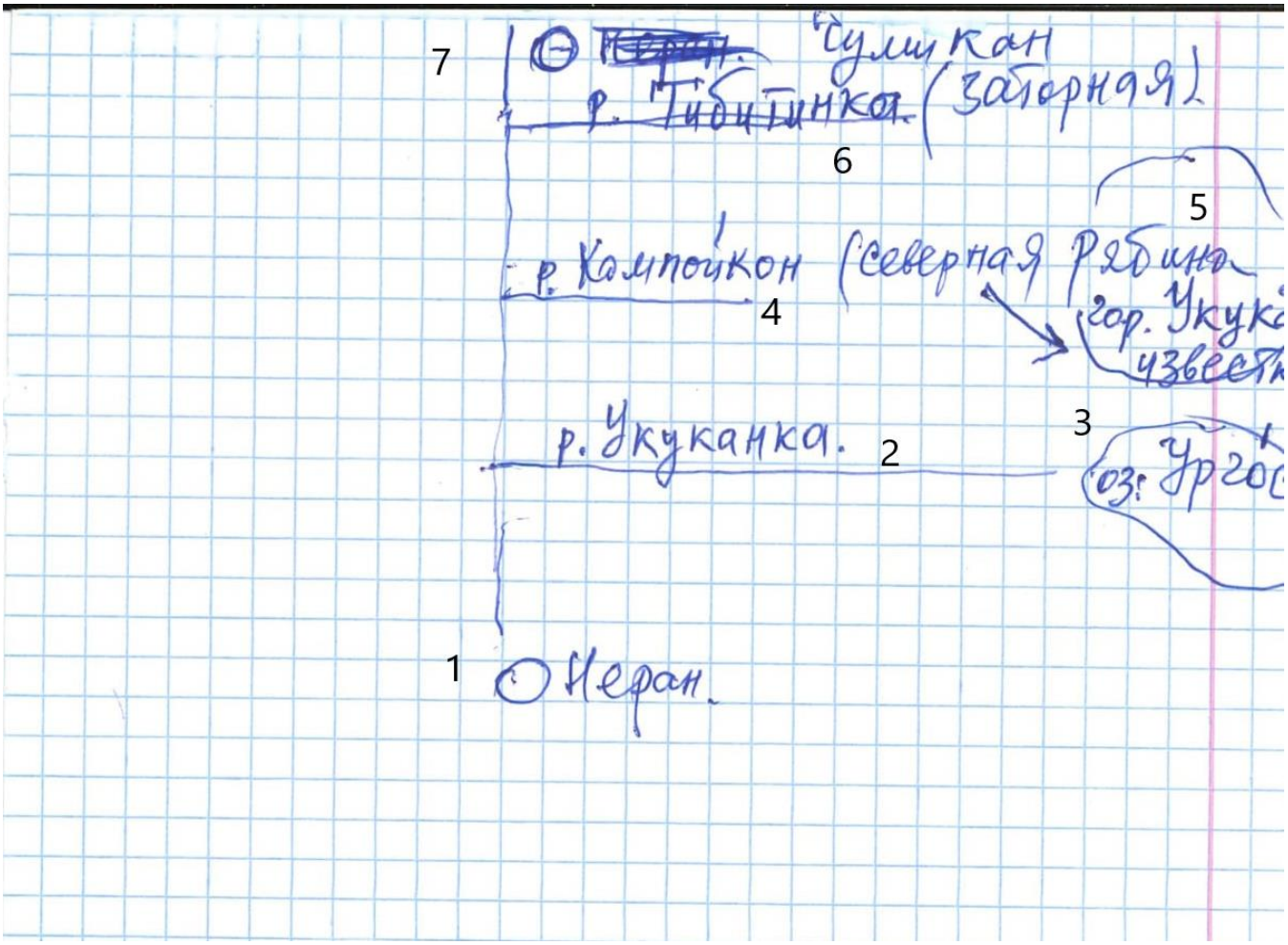


Place names and other signs: 1. лам (lam ‘sea’, the sea of Okhotsk); 2. залив Константина (the bay of Konstantin); 3. Алга (Alga); 4. Шантарские острова (Shantar islands).

Small glens which are absent on the map: 1. Muukton, 2. Iktak, 3. Lezhbishche ‘seals’ breeding ground’ (Rus.), 4. Chasha ‘bowl’ (Rus.), 5. Kalamachin, 6. Sonki, 7. Ulikan (from *ulika:* ‘river cape’ ?), 8. Tylekichan ‘small Tyl’, a tributary of the Tyl river.

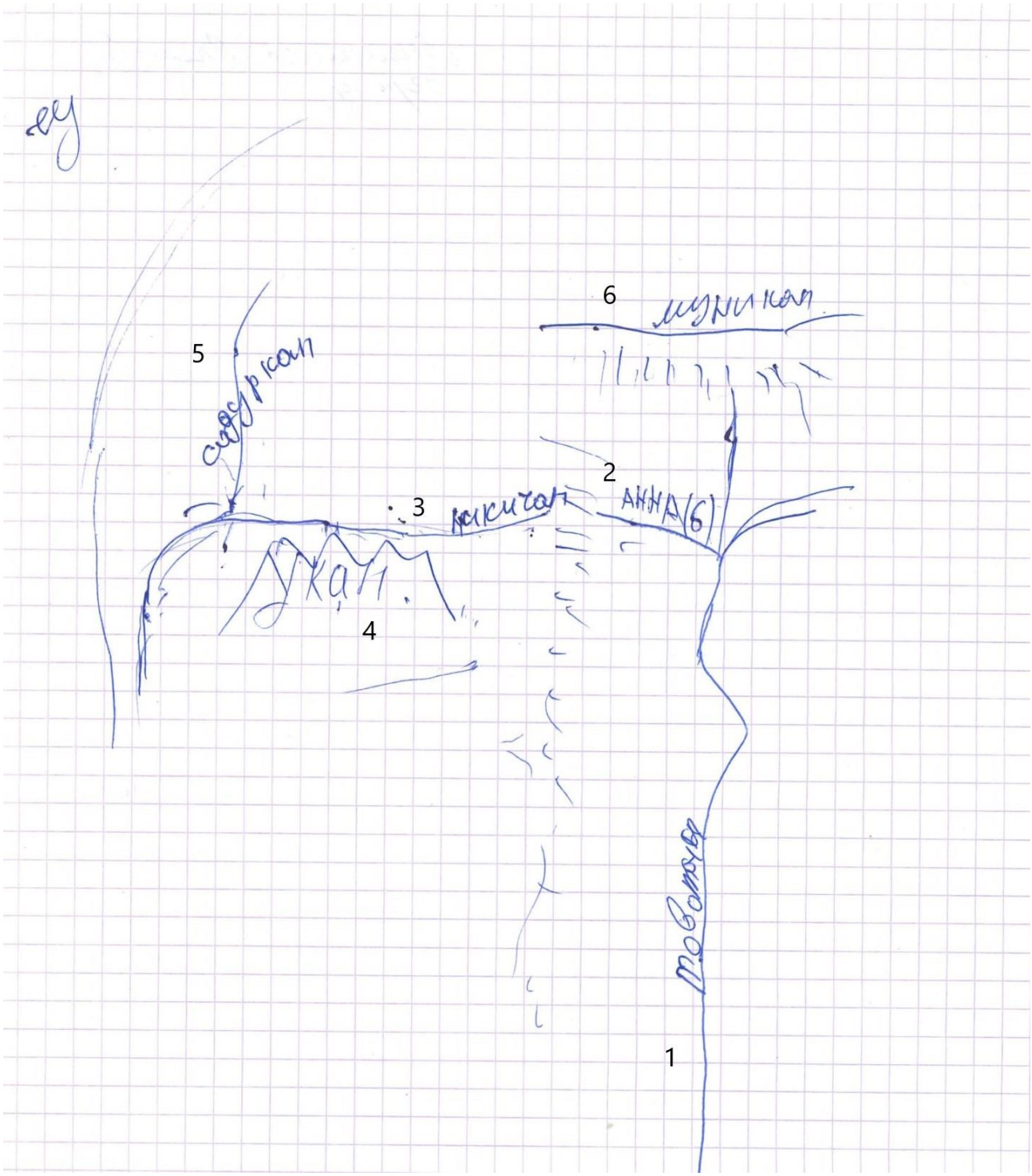
Map 8. A water way from Neran settlement to Udskoye settlement via Chumikan. Created by Nikolay Ivanov, Neran, August 2017.





Place names: 1. Неран (Neran settlement), 2. Укуканка (Ukukanka), 3. оз. Ургос (the lake of Urgos ‘frightening’, Yakut), 4. Компойкон (Kompojkon ‘ashberry’), 5. г. Укукан (Ukukan mountain), 6. Тибитинка / Tibitik (Tibitinka / Tibitik ‘blocked’, Yakut), 7. Чумикан (Chumikan settlement), 8. Алгазея (Algazeja), 9. Джана (Dzhana), 10. Туткан (Tutkan; probably from *tuteken* ‘sward’ Vasilevich 1958b: 406), 11. Туткачан (Tutkachan; see 10), 12. Гайкан (Gajkan), 13. Алгикан (Algikan), 14. г. Горелый (Gorelyi ‘burnt’ mountain, Rus.), 15. г. Сан(г)ар (San(g)ar ‘hole’ mountain), 16. Самаканин (Samakanin; *samak* ‘pubic bone’, ‘terret on a reindeer sledge’ (Vasilevich 1958b: 342)), 17. Немерикан (Nemerikan), 18. г. Капча (Kapcha ‘flat’ mountain), 19. Мая (Maja), 20. оз. Столболох (the lake of Stolboloh), 21. Ними (Nimi), 22. Удское (Udskoje settlement).

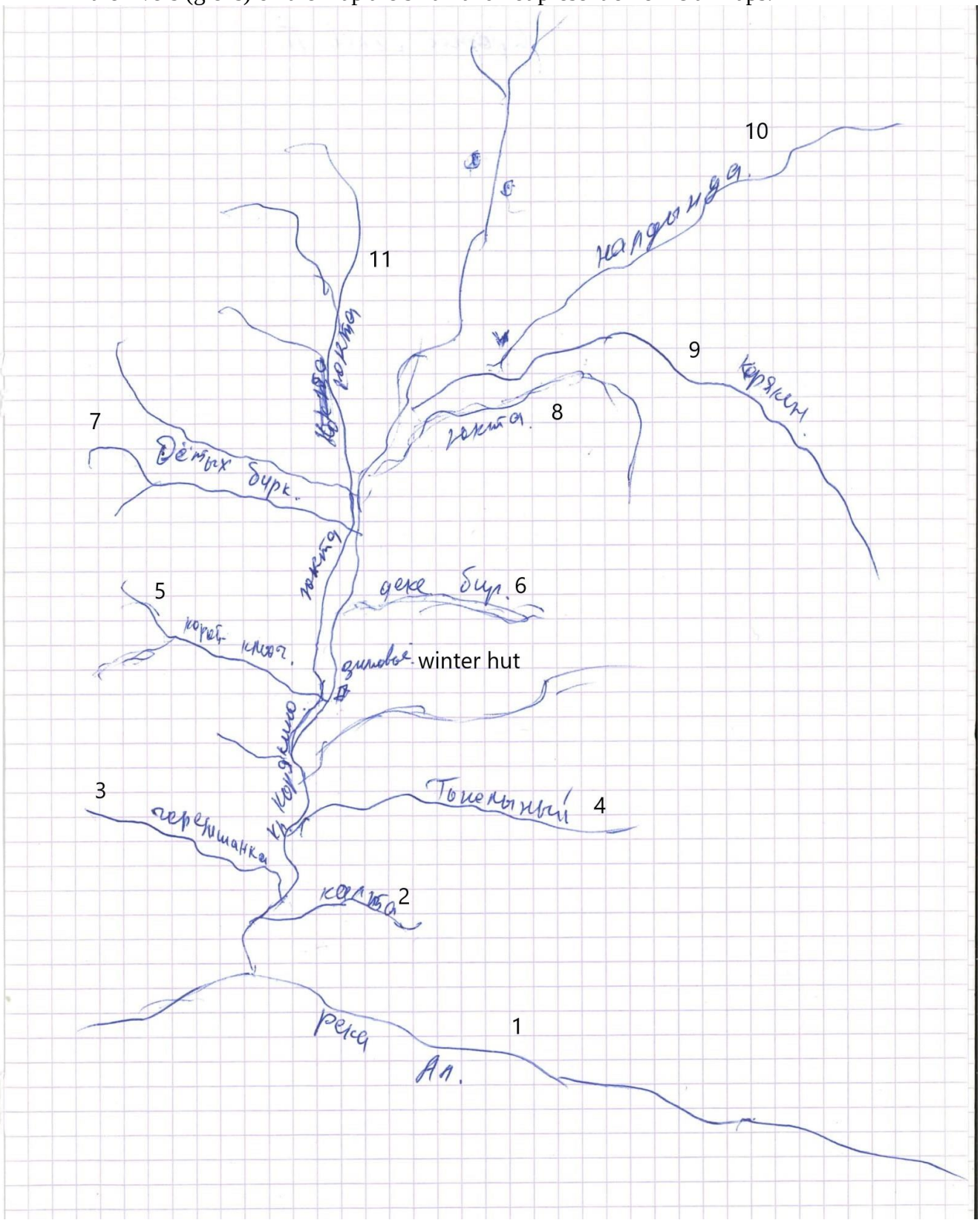
Map 9. The system of the Tevetyn (Tovotyn) River. Created by Aleksey Malyshev, Torom, August 2017.



Place names: 1. Товотын (Tovotyn ‘aufeis’ river), 2. Анна (Anna river), 3. Никичан (Nikichan ‘duck’), 4. г. У(u)кан (U(u)kan ‘saw’ mountain), 5. Судуркан (Sudurkan), 6. Муникан (Munikan ‘hare’).

Map 10. A private hunting territory belonging to the Porotovs. Created by Yakov Porotov, Torom, August 2017.

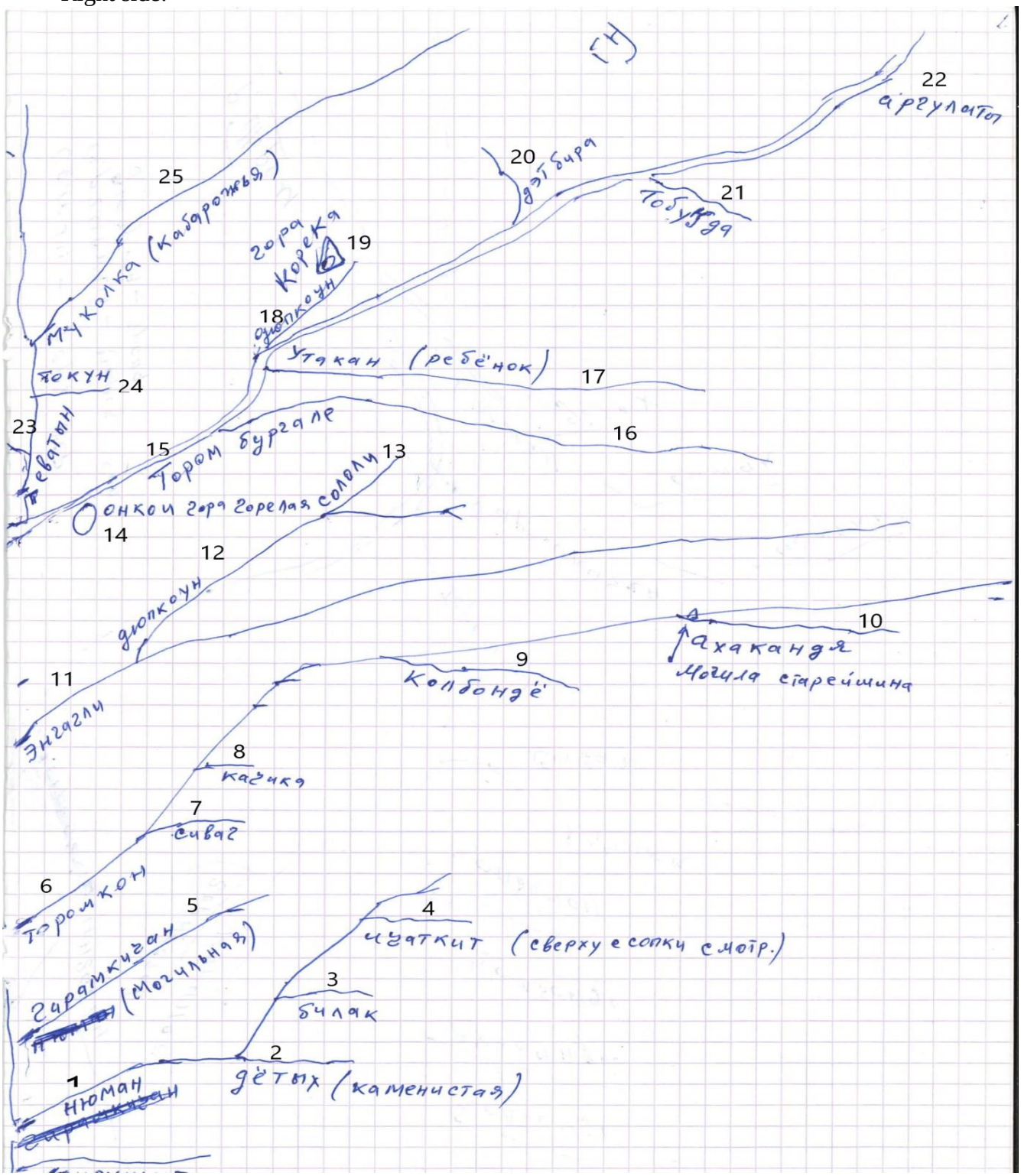
All the rivers (glens) on the map are small and not present on official maps.



Place names: 1. Ал (Al river), 2. распадок Калка (Kalka glen / Kalakatkan ‘small pot’), 3. распадок Черемшанка (Cheremshanka ‘wild garlic’ glen, Rus.), 4. распадок Тополиный (Topolinyj ‘poplar tree’ glen, Rus.), 5. распадок Короткий (Korotkij ‘short’ glen, Rus.), 6. распадок Деке бира (Deke bira ‘small river’ glen), 7. Юкта (2) (Jukta ‘spring’), 8. распадок Корякин (Korjakin glen), 9. распадок Налдындя (Naldynd’a ‘river arm’ glen), 10. Юкта (Yukta ‘spring’)

Map 11. The system of the Torom River. Created by Stepan Safronov, Torom, August 2017.

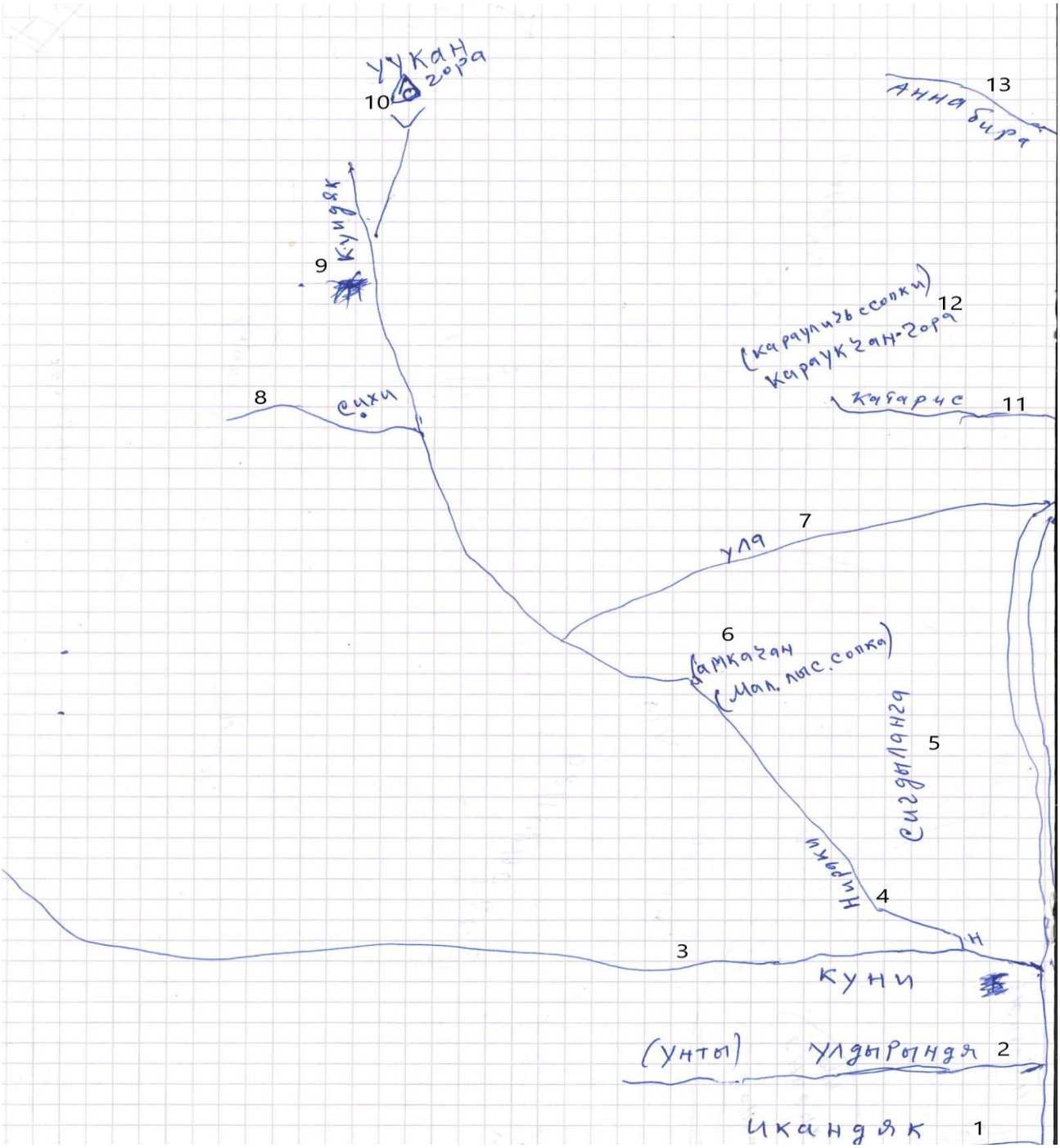
Right side:



Place names (right side): 1. р. Нюман (N’uman), 2. Дётых (D’otyh ‘stony’), 3. Билак (Bilak), 4. Ичаткит (Ichatkit ‘observation point’), 5. Гирамкичан (Giramkichan ‘small grave’), 6. Торомкон (Toromkon ‘small Torom’), 7. Сиваг (Sivag ‘equisetum’), 8. Качика (Kachika ‘willow’ (?)), 9. Колбондё (Kolbond’o ‘store house’), 10. Ахакандя (Ahakand’a ‘grandfather’), 11. Эн(н)гагли (Enngagli ‘bird cherry tree’), 12. Дюпкоун (D’upkoun, from *d’upku* ‘hollow’, a river with high

banks), 13. Сололи (Sololi ‘upper’), 14. сопка Онкои(х) / гора Горелая (Onkoi(h) ‘lichen’ hillock, Ewenki / Gorelaja ‘burnt’ mountain, Rus.), 15. Тором (Torom river), 16. Бургале (Burgale ‘ spruce forest’), 17. Утакан (Utakan ‘child’), 18. Дюпкоун (D’upkoun, see 12), 19. г. Корека (Koreka ‘sea-shell’ mountain), 20. Дэт бира (Det bira ‘tundra river’), 21. Тобунгда (Tobungda ‘trout’), 22. Аргулаты (Argulaty), 23. Теватын (Tevatyn), 24. Токун (Tokun ‘rogue’), 25. Муколка (Mukolka ‘musk deer’).

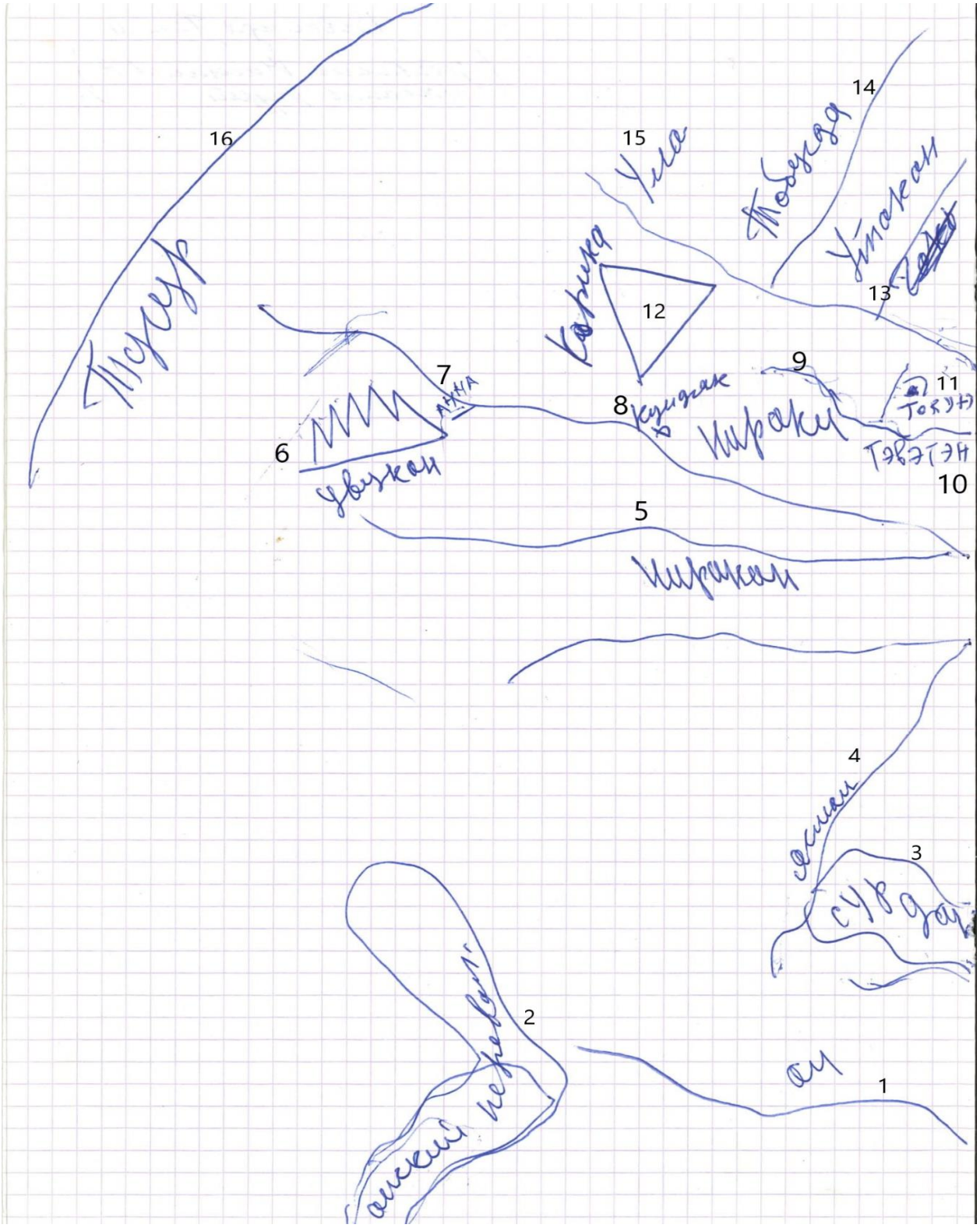
Left side:



Place names (left side): 1. Икандяк (Ikand'ak river 'the place for dancing' during *ikenipke*, annual spring festivities), 2. Улдырындя (Uldyrynd'a 'unty (traditional fur boots)'? probably from *uldyr* 'stitch'), 3. Куни (Kuni 'howl'), 4. Нираки (Niraki 'boggy', a river with durty water), 5. сигдыланга (sigdylanga 'place between two rivers'), 6. Амкачан (Amkachan 'glade' hillock, Ewenki / Malaja lysaja sopka 'small bald hillock', Rus.), 7. Ула (Ula), 8. Сихи (Sihi 'spruce'), 9. Куидяк (Kuid'ak 'the place of fight'), 10. г. Уукан (Uukan 'saw' mountain), 11. Катарис (Kataris; personal name from Rus. Katerina), 12. Караулчан / Карауличья сопка (Karaulchan 'small observation point' hillock, from Rus. *karaulit*' 'to watch over').

Map 12. The system of the Torom River. Created by Vladimir Koryakin (Vovkandya), Torom, August 2017.

Left side:



Place names (left side): 1. Ал (Al), 2. Альский перевал (Al mountain passage), 3. Сурдак (Surdak ‘frightful’ mountain), 4. Ясмал (Yasmal), 5. Нираки (Niraki ‘boggy’), 6. г. Увакан (Uvakan ‘saw’

mountain), 7. Анна, (Anna) 8. Куидяк (Kuid’ak ‘the place of fight’), 9. Нираки (Niraki ‘boggy’), 10. Тэвэтын (Tevetyn), 11. пещера Токун (the cave of Tokun ‘rogue’), 12. г. Корика (Korika ‘sea-shell’ mountain), 13. Утакан (Utakan ‘child’), 14. Тобугда (Tobugda ‘trout’), 15. Ула (Ula), 16. Тугур (Tugur).

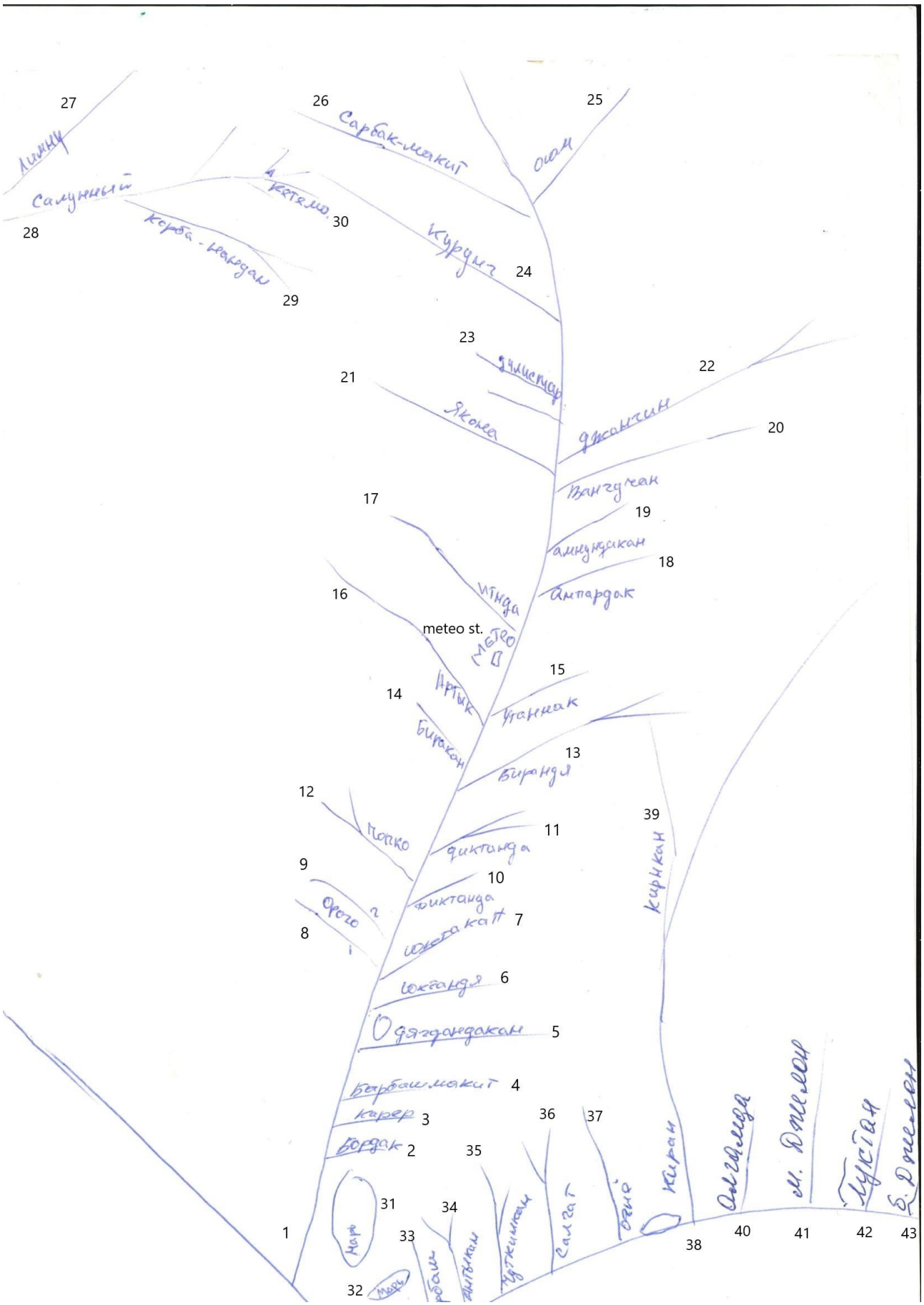
Right side:



Place names (right side): 1. Лам (lam ‘sea’), 2. Сонёл (Son’ol), 3. Сулакичанин (Sulakichanin ‘little fox’), 4. burial place, 5. Алгаканка (Algakanka ← Algakan ‘boggy’; the etymology is unclear), 6.

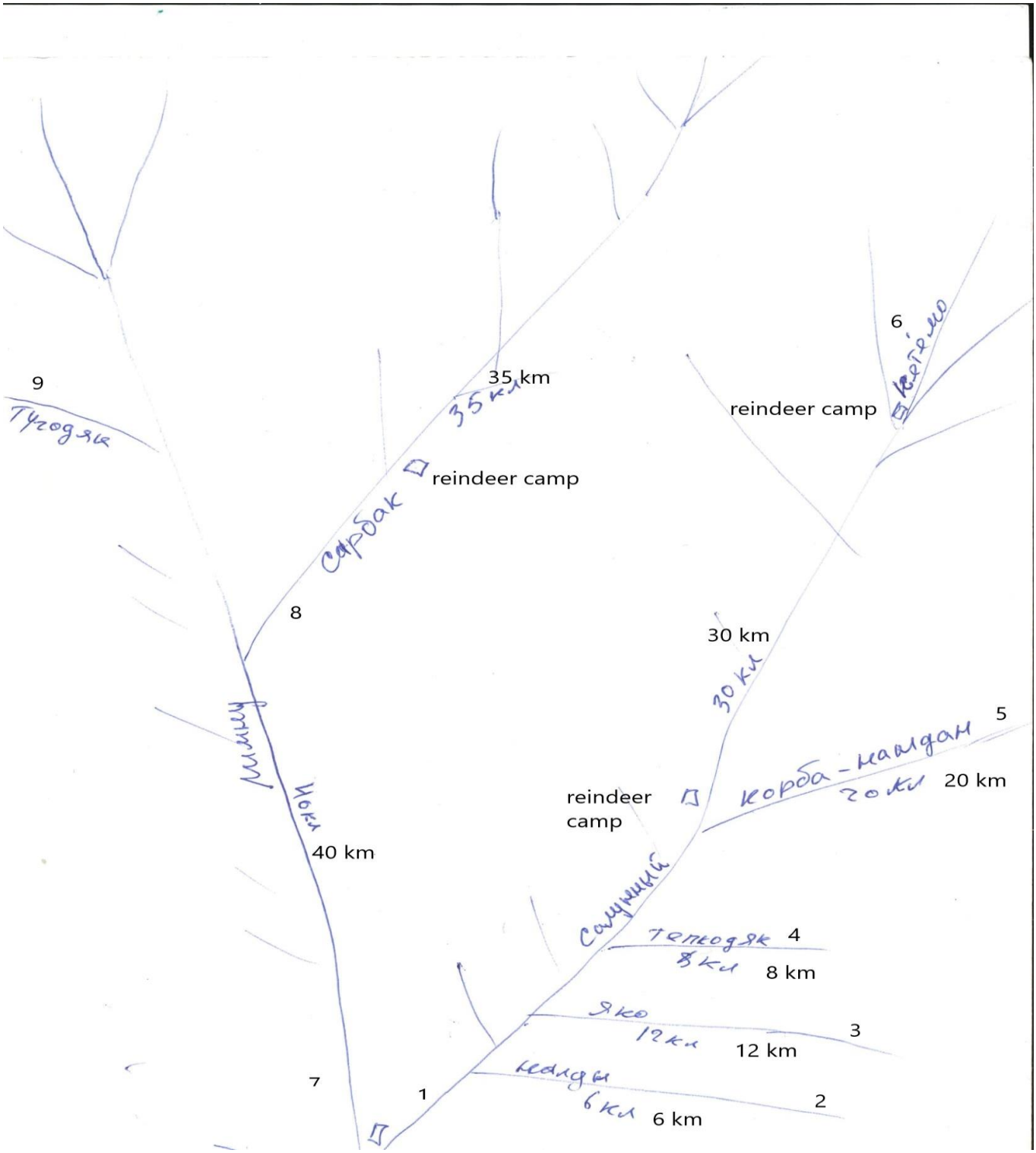
Готкан (Gotkan; the river is a dwelling place of a spirit, some community members consider the riverine name as the spirit's name), 7. Някатын (N'akatyn marshes), 8. Алгандя (Algand'a; see 5), 9. Сихи-бира (Sihi-bira 'spruce forest – river'), 10. Дягдах (D'agdah 'pine tree'), 11. Бори (Bori; *bori* 'stony hillock', 'hillock covered with burnt trees' Vasilevich 1958b: 61), 12. Гасакан (Gasakan), 13. Икандяк (Ikand'ak 'the place for dancing'), 14. Улдырандя (Uldyrand'a; *uldyr* 'stitch'), 15. Гасандя (Gasand'a), 16. Улдуракан (Uldurakan 'little stitch', see 14), 17. Чалбукчан (Chalbukchan 'birch tree'), 18. Куни (Kuni 'howl'), 19. Нюман (N'uman 'bad mood'), 20. сигдилынгэ (sigdylange 'place between two rivers covered with trees'), 21. Гирамкичан (Giramkichan 'small grave'), 22. Сивах (Sivah 'equisetum'), 23. Торомкон (Toromkon 'little Torom'), 24 and 25. burial places, 26. Иннагле (Innagle 'bird-cherry tree'), 27. Луча бурган (Lucha burgan 'Russian forest'; the forest where a Russian got lost), 28. Паян (Pajan 'bald hillock'), 29. Бургале (Burgale 'spruce dark forest'), 30. Чопко (Chopko 'pit', the river with lots of pits).

Map 13. The system of the Dzhana River. Created by Denis Struchkov, Algazeya, August 2017.



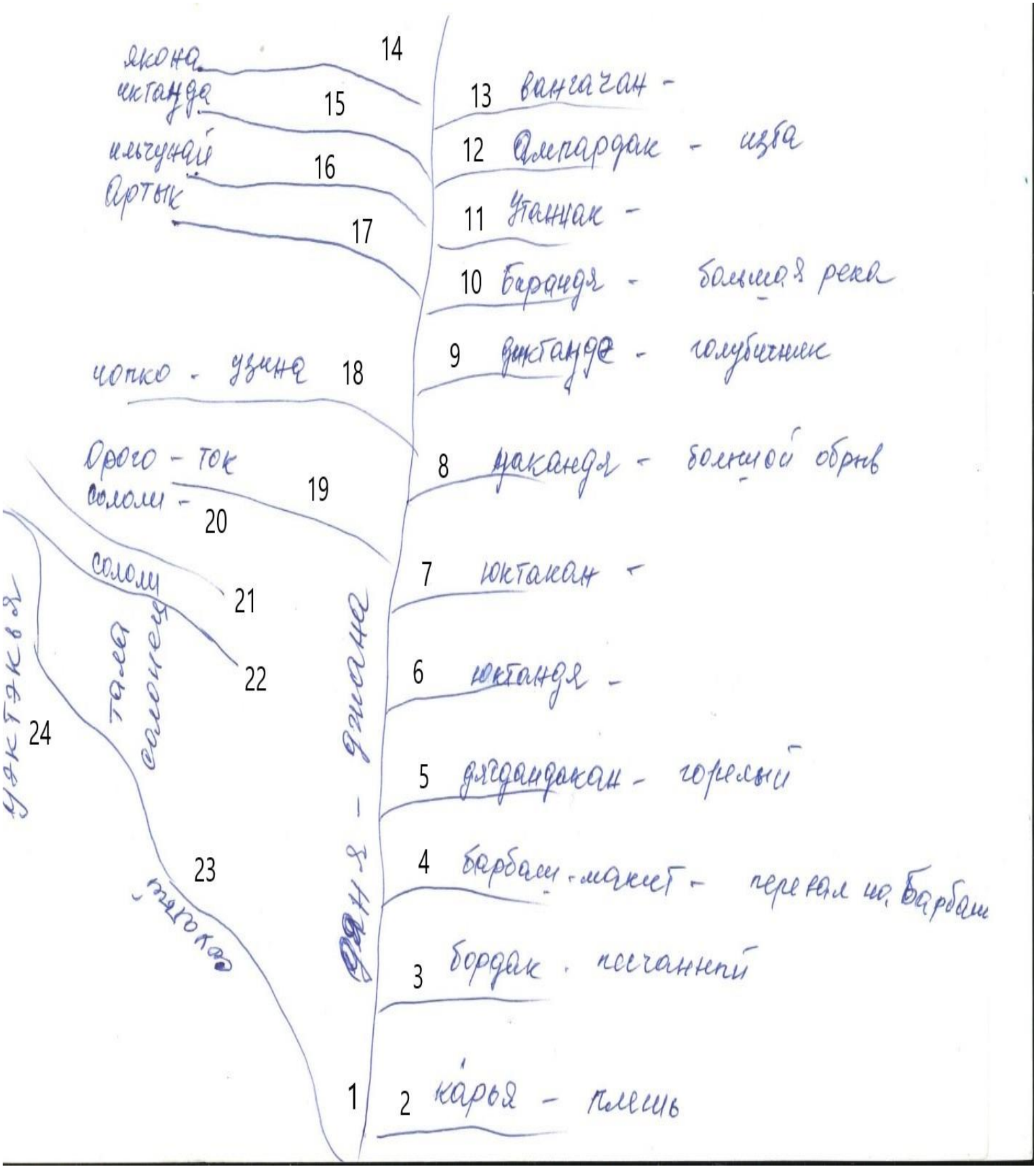
Place names: 1. Джана (Dzhana), 2. Бордак (Bordak ‘sandy’? *bori* ‘stony hillock’, ‘hillock covered with burnt trees’), 3. Карер (Karer; probably from *karja* ‘old furless parka’, ‘bald patch’), 4. Барбашмакит (Barbashmakit), 5. Дягдандакан (D’agdandakan ‘burnt place’), 6. Юктандя (Juktand’a ‘big spring’), 7. Юктакан (Juktakan ‘small spring’), 8 and 9. Орого (Orogo ‘lek’), 10 and 11. Диктанда (Diktanda ‘blueberry’), 12. Чопко (Chopko ‘pit’, a narrow river), 13. Бирандя (Birand’a ‘large river’), 14. Биракан (Birakan ‘small river’), 15. Утаннак (Utannak; probably from *ute* ‘child’ + -nnAk), 16. Артык (Artyk, Yakut), 17. Итнда (Itnda), 18. Ампардак (Ampardak ‘the place of a hut’), 19. Амнундакан (Amnundakan ‘wide, flat area along the river bank without vegetation’), 20. Вангучан (Vanguchan), 21. Якона (Jakona ‘Yakut’), 22. Джонгин (Dzhongin ‘burnt place’, from *d’annge-mi* ‘to burn’), 23. Дулисмар (Dulismar ‘double’, ‘twin’), 24. Курунг (Kurung ‘old burnt place’), 25. Аюм (Ajum ‘backwater’ used as a good fishing place), 26. Сарбак-макит (Sarbak-makit ‘the place of sable’, from Yakut *sarbak* ‘sable’), 27. Лимну (Limnu), 28. Салунный (Salunnyj, Rus.; from Ewenki *soloki* ‘upstream’), 29. Корба-намдан (Korba-namdan ‘bull skin’), 30. Кетемо (Ketemo ‘low and wide place covered with sphagnum’), 31 and 32. marshes, 33. 34. Антыкан (Antykan ‘right’), 35. Чуткиткан (Chukitkan), 36. Салгат (Salgat), 37. Огнё (Ogn’o ‘pattern’), 38. Киран (Kiran ‘eagle’), 39. Киранкан (Kirankan ‘small eagle’), 40. Алгамда (Algamda), 41. М. Джелан (Malyj Dzhelan; probably from Ewenki *d’olo* ‘stone’), 42. Луктан (Luktan), 43. Б. Джелан (Bolshoj Dzhelan; see 41).

Map 14. A hunting territory along Limnu and Solonniy glens. Created by Denis Struchkov, Algazeya, August 2017.



Place names: 1. Салунный (Salunnyj, Rus.; from Ewenki *soloki* ‘upstream’), 2. Налды (Naldy ‘river arm’), 3. Яко (Yako ‘Yakut’), 4. Тепкедяк (Tepked’ak ‘the place where someone roared’), 5. Корба-намдан (Korba-Namdan ‘bull skin’), 6. Кетемо (Ketemo ‘low and wide place covered with sphagnum’), 7. Лимну (Limnu), 8. Сарбак (Sarbak ‘sable’, Yakut), 9. Тугодяк (Tugod’ak ‘the place to winter’).

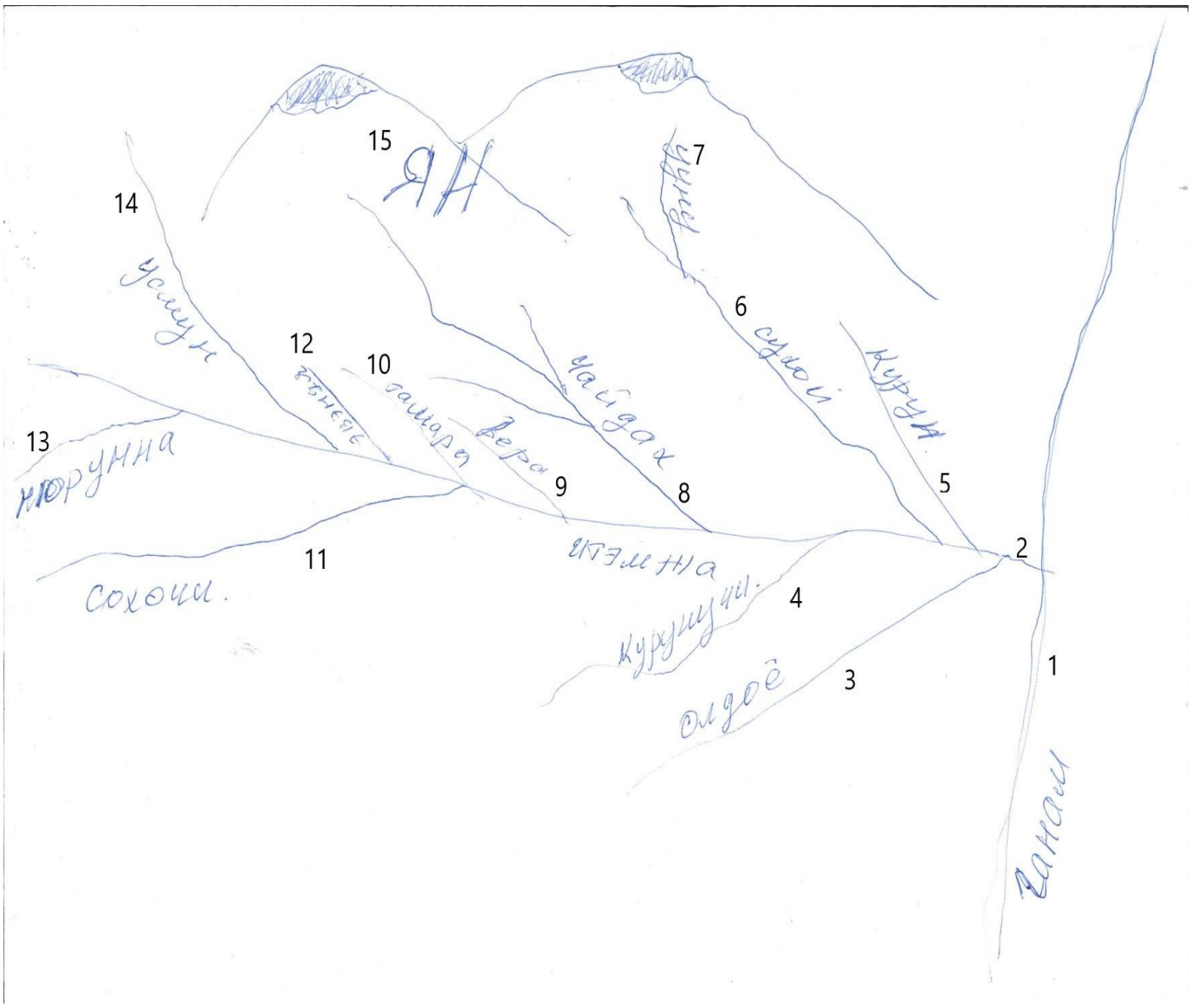
Map 15. The system of the Dzhana River. Created by Vladimir Kolesov (from Algazeya), Chumikan, August 2017.



Place names: 1. Джана / Дяна (Dzhana / D’ana), 2. Карья (Karja ‘old furless parka’, ‘bald patch’), 3. Бордак (Bordak ‘sandy’? bori ‘stony hillock’, ‘hillock covered with burnt trees’), 4. Барбаш-макит (Barbash-makit; the river surves to pass to the Barbash mountain), 5. Дякдандакан (D’agdandakan ‘burnt place’), 6. Юктандя (Juktand’a ‘big spring’), 7. Юктакан (Juktakan ‘small spring’), 8. Нгакандя (Ngakand’a ‘huge cliff’), 9. Диктангде (Diktangde ‘blueberry’), 10. Бирандя (Birand’a ‘large river’), 11. Утаннак (Utannak; probably from *ute* ‘child’ + -nnAk), 12. Ампардак (Ampardak ‘the place of a hut’, from ampar ← ambar ‘barn’), 13. Вангачан (Vangachan ‘old female reindeer’), 14. Якона (Jakona ‘Yakut’), 15. Иктангда (Iktangda), 16. Ильчунай (Il’chunaj, Yakut ?), 17. Артык (Artyk, Yakut), 18. Чопко (Chopko ‘pit’, ‘narrow place’), 19. Орого (Orogo ‘lek’), 20. Сололи (Sololi ‘upstream’), 21. Эдигу Сололи (Edigu Sololi ‘lower upstream’), 22. Тала (Tala ‘salt-lick’), 23. Сохатый (Sohatyj ‘moose’, Rus.), 24. Нгэктэкья (Ngektekja; from *ngukte* ‘ashberry tree’?).

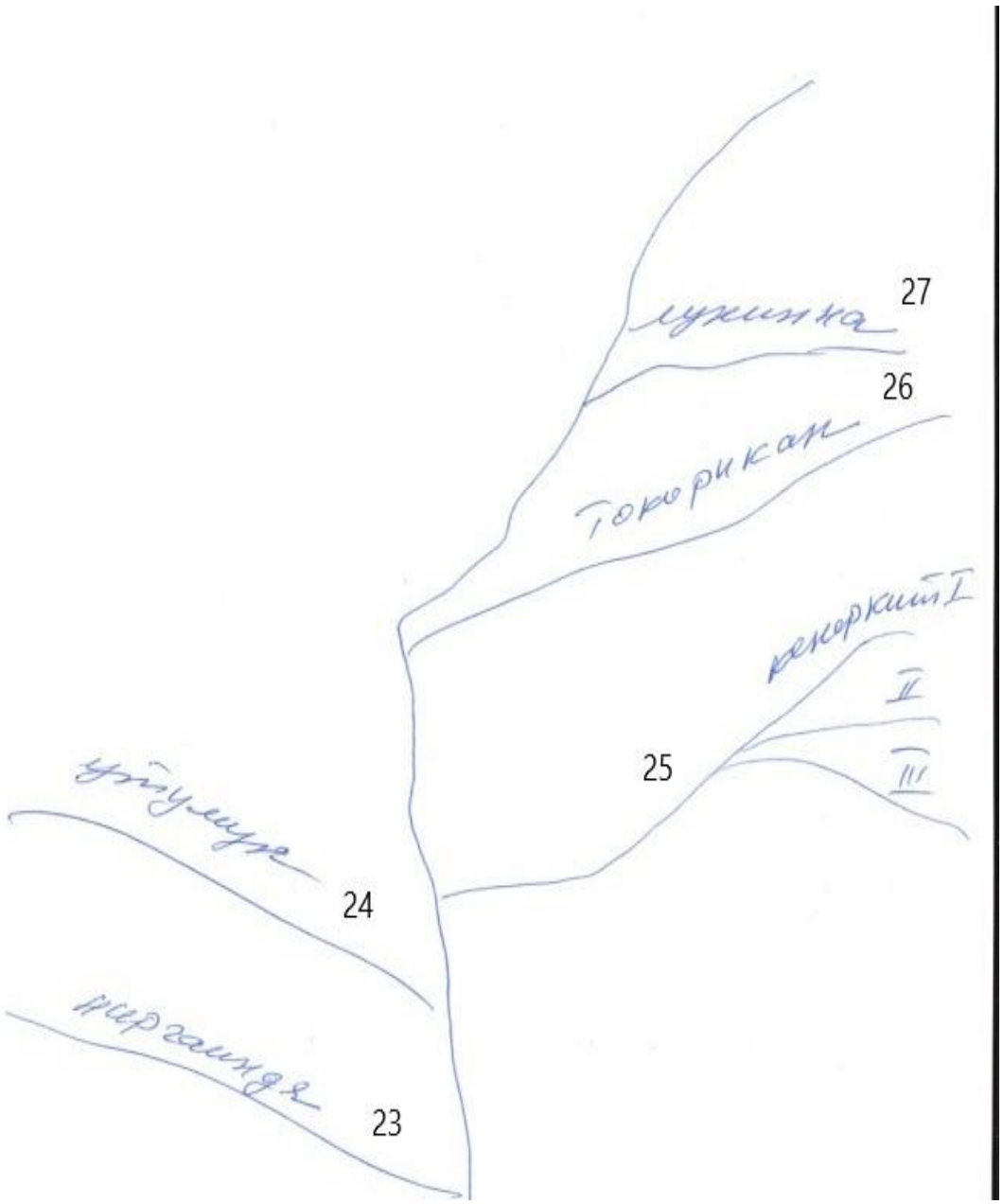
5.2. Ewenki hand-written maps from Iengra village, Neryungri District, Yakutia, 2018

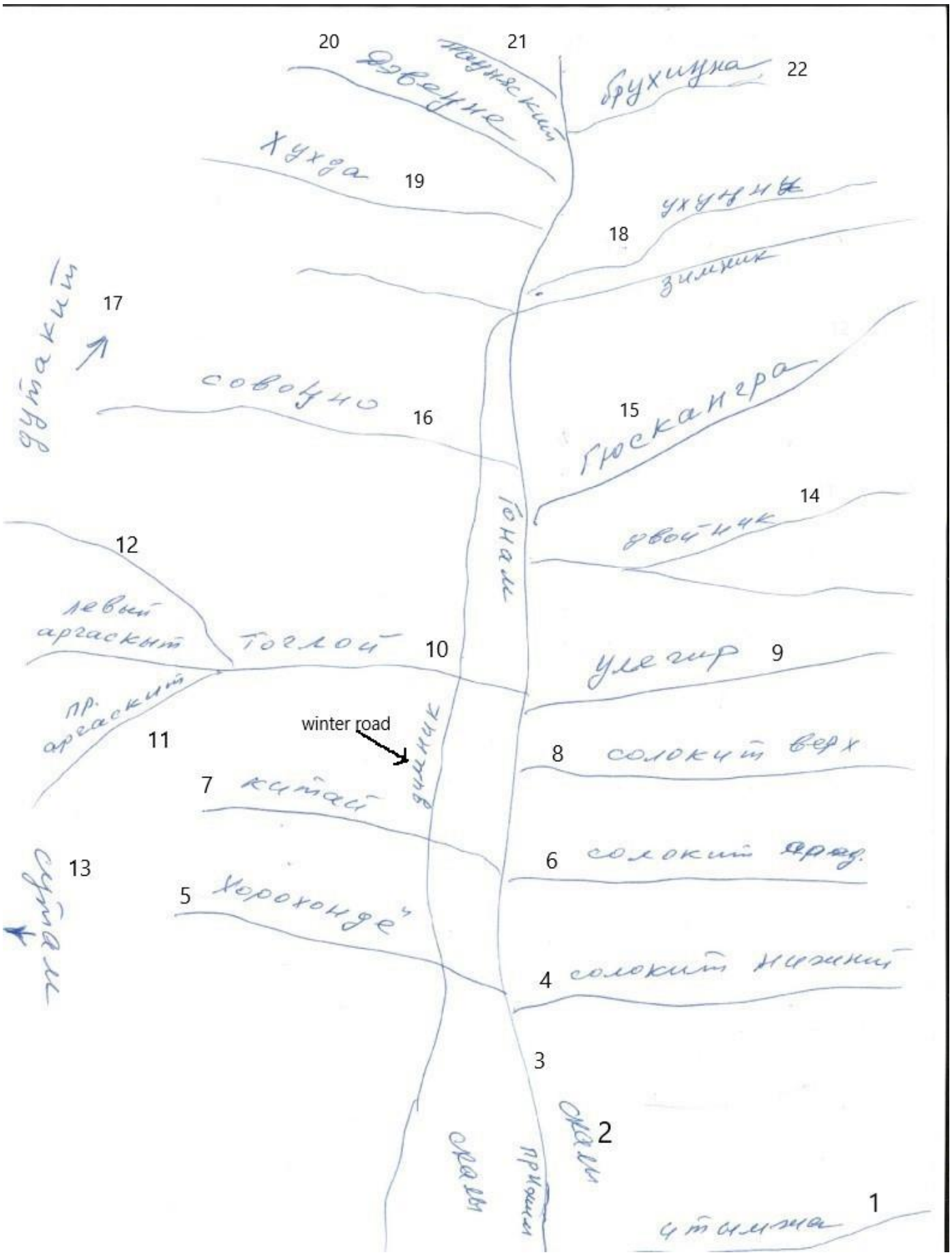
Map 16. The system of the Itymzha River, a tributary of the Gonam River, with the mountains (jang in Ewenki) at the back. Created by Ayal Odintsov anf Aleksey Ermolin, Iengra, September 2018.



Place names: 1. Ганам / Нгонам (Ganam / Ngonam ‘long’), 2. Итэмжа (Itemzha), 3. Олдоё (Oldojo ‘fish’), 4. Курунучи (Kurunuchi ‘with a burnt place’), 5. Курун(г) (Kurun(g) ‘burnt place’), 6. Сухой (Suhoj ‘dry’, Rus.), 7. Уун(г)у (Uun(g)u), 8. Чайдах (Chajdah, Yakut), 9. Вера (Vera, a Russian female name), 10. Тамара (Tamara, a Russian female name), 11. Сохочи (Sohochi), 12. Эвэняя (Even’aja), 13. Нюрунна (N’urunna ‘grayling’), 14. Усмун (Usmun, Yakut), 15. Ян(г) (Jan(g) ‘a salient elevation covered with snow’).

Map 17. The system of the Gonam River. Created by Yakov Safronov, Iengra, September 2018.




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4
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1
winter road

Place names: 1. Итымжа (Itmzha), 2. rocks, 3. Гонам / Нгонам (Gonam / Ngonam ‘long’), 4. Солокит Нижний (Solokit Nizhnij ‘lower upstream’), 5. Хорохондё (Horohond’o ‘big lek’), 6. Солокит Средний (Solokit Srednij ‘middle upstream’), 7. Китай (Kitaj ‘China’, Rus.), 8. Солокит Верхний (Solokit Verhnij ‘upper upstream’), 9. Улегир (Ulegir, a clan name), 10. Тоглой (Togloj), 11. Правый Аргаскит (Pravyj Argaskit ‘right mountain passage’), 12. Левый Аргаскит (Levyj Argaskit ‘left mountain passage’), 13. Сутам (Sutam), 14. Двойник (Dvojnik ‘double’, ‘twin’, Rus.), 15. Гюскангра (G’uskungra ‘wolf’), 16. Совонгно (Sovongno ‘crucian’), 17. Дутакит (durakit ‘a place to cut your way through [to get to another river]’), 18. Ухунгну (Uhungnu), 19. Хухда (Huhda; probably from Ewenki *hugda* ‘not deep snow’), 20. Дэвенгне (Devengne ‘minium’), 21. Нангняскит (Nangn’askit ‘a place for a spring camp’), 22. Брухингна (Bruhingna ‘whetting tool’, from Rus. *brusok*), 23. Ниргаиндя (Nirgaind’a ‘prunella’; a plant which reindeer feed on in the spring), 24. Утумук (Utumuk ‘honeysuckle’), 25. Кен(г)еркит I, II, III (Ken(g)erkit ‘the place for a fishing trap’), 26. Токорикан (Tokorikan; *tokorikan* ‘river bend’ Vasilevich 1958b: 391), 27. Лухинна (Luhinna).

Appendix 6. Place Names Database

Name	Motivation	River system	Affixes
Läŋʒər	landscape	Olyokma-Tungir river system	NULL
Ʒуктоли	physical features	Olyokma-Tungir river system	ли
Ʒэлу	material	Olyokma-Tungir river system	NULL
Ʒэлэ	material	Olyokma-Tungir river system	NULL
Ʒэсэгли	unknown	Nidym-Taymura river system	NULL
Ʒэховул	unknown	Olyokma-Tungir river system	NULL
Абирир	unknown	Algoma river system	NULL
Абирир (?)	unknown	Algoma river system	NULL
Абрамов	foreign language	Sutam-Gonam river system	NULL
Абрамов	foreign language	Algoma river system	NULL
Авлакар	fauna	Algoma river system	PL
Авсат	unknown	Muya-Khani river system	т
Авунгнукит	motion	Muya-Khani river system	кит
Агавытатак	foreign language	Algoma river system	NULL
Аглан	landscape	Muya-Khani river system	NULL
Аглан	landscape	Olyokma-Tungir river system	NULL
Аглан	landscape	Sutam-Gonam river system	NULL
Акакан	unknown	Muya-Khani river system	NULL
Акакан	unknown	Sutam-Gonam river system	NULL
Акакан	unknown	Olyokma-Tungir river system	NULL
Акачоль	unknown	Kamo-Taiga river system	NULL
Акрак (?)	unknown	Olyokma-Tungir river system	NULL
Акрак (?)	unknown	Muya-Khani river system	NULL
Акрак (?)	unknown	Sutam-Gonam river system	NULL
Аку	unknown	Sutam-Gonam river system	NULL
Аку	unknown	Olyokma-Tungir river system	NULL
Аку	unknown	Muya-Khani river system	NULL
Акукан	unknown	Muya-Khani river system	NULL
Акукан	unknown	Olyokma-Tungir river system	NULL
Акукан	unknown	Sutam-Gonam river system	NULL
Аланмакит	landscape	Muya-Khani river system	ма
Аланмакит	landscape	Olyokma-Tungir river system	кит
Аланмакит	landscape	Muya-Khani river system	кит
Аланмакит	landscape	Olyokma-Tungir river system	ма
Аланмакит	landscape	Sutam-Gonam river system	кит
Аланмакит	landscape	Sutam-Gonam river system	ма
Алаткит	place	Muya-Khani river system	кит
Алаткит	place	Sutam-Gonam river system	кит
Алаткит	place	Olyokma-Tungir river system	кит
Алаткиткан	place	Muya-Khani river system	кит
Алаткиткан	place	Olyokma-Tungir river system	кит
Алаткиткан	place	Sutam-Gonam river system	кит
Алаткиткан	place	Sutam-Gonam river system	кан

Алаткиткан	place	Olyokma-Tungir river system	кан
Алаткиткан	place	Muya-Khani river system	кан
Алгама	landscape	Podkamennaya Tunguska river system	ма
Алгома	landscape	Algoma river system	ма
Алгома	landscape	Algoma river system	ма
Алдакай	foreign language	Olyokma-Tungir river system	NULL
Алдакай	foreign language	Sutam-Gonam river system	NULL
Алдакай	foreign language	Muya-Khani river system	NULL
Алнгама	unknown	Podkamennaya Tunguska river system	NULL
Алнгама	unknown	Kamo-Taiga river system	NULL
Алсым	foreign language	Tym-Sym river system	NULL
(?)амакан илин	unknown	Sutam-Gonam river system	NULL
(?)амакан илин	unknown	Muya-Khani river system	NULL
(?)амакан илин	unknown	Olyokma-Tungir river system	NULL
Аммунакта	landscape	Sutam-Gonam river system	кта
Аммунакта	landscape	Muya-Khani river system	кта
Амнунда	landscape	Algoma river system	NULL
Амнунда	landscape	Algoma river system	NULL
Амнундачи	landscape	Algoma river system	чи
Амнуннакачи	landscape	Olyokma-Tungir river system	кан
Амнуннакачи	landscape	Olyokma-Tungir river system	чи
Амнуннакта	landscape	Sutam-Gonam river system	кта
Амнуннакта	landscape	Sutam-Gonam river system	кта
Амнуннакта	landscape	Muya-Khani river system	кта
Амнуннакта	landscape	Muya-Khani river system	кта
Ампардак	house	Olyokma-Tungir river system	дак
Ампардакмакит	place	Algoma river system	дак
Ампардакмакит	place	Algoma river system	ма
Ампардакмакит	place	Algoma river system	кит
Амуткачи	landscape	Sutam-Gonam river system	чи
Амуткачи	landscape	Muya-Khani river system	чи
Амуткачи	landscape	Olyokma-Tungir river system	чи
Амуткачи	landscape	Sutam-Gonam river system	кан
Амуткачи	landscape	Olyokma-Tungir river system	кан
Амуткачи	landscape	Muya-Khani river system	кан
Андреевский	foreign language	Zeya river system	NULL
Анукан	unknown	Chunya river system	NULL
Апанас хутэлин гирамнатын	sacred	Olyokma-Tungir river system	NULL
Арангас	house	Algoma river system	NULL
Арангастак	house	Algoma river system	дак
Арбагас	object	Sutam-Gonam river system	NULL
Арбагас	object	Olyokma-Tungir river system	NULL
Арбагас	object	Muya-Khani river system	NULL
Арбачас	object	Muya-Khani river system	NULL
Арбачас	object	Olyokma-Tungir river system	NULL

Арбачас	object	Sutam-Gonam river system	NULL
Аргунь	unknown	Olyokma-Tungir river system	NULL
Аргунь	unknown	Sutam-Gonam river system	NULL
Аргунь	unknown	Muya-Khani river system	NULL
Аририкта	landscape	Algoma river system	рикта
Артык	foreign language	Algoma river system	NULL
Артык	foreign language	Algoma river system	NULL
Артык	foreign language	Algoma river system	NULL
Артыккан	foreign language	Algoma river system	NULL
Атара	object	Olyokma-Tungir river system	NULL
Атарак	object	Sutam-Gonam river system	к
Атарак	object	Olyokma-Tungir river system	к
Атарак	object	Muya-Khani river system	к
Атбастак	foreign language	Muya-Khani river system	NULL
Атбастак	foreign language	Sutam-Gonam river system	NULL
Атбастак	foreign language	Olyokma-Tungir river system	NULL
Атолак	unknown	Podkamennaya Tunguska river system	NULL
Атолак	unknown	Kamo-Taiga river system	NULL
Атыркокон	kinship term	Podkamennaya Tunguska river system	кан
Атыркокон	kinship term	Kamo-Taiga river system	кан
Атыркукон	kinship term	Podkamennaya Tunguska river system	кан
Ахингамакит	fauna	Sutam-Gonam river system	ма
Ахингамакит	fauna	Algoma river system	кит
Ахингамакит	fauna	Algoma river system	ма
Ахингамакит	fauna	Sutam-Gonam river system	кит
Ахингачи	fauna	Olyokma-Tungir river system	чи
Ахингачи	fauna	Muya-Khani river system	чи
Ахингачи	fauna	Sutam-Gonam river system	чи
Ахингичи	fauna	Olyokma-Tungir river system	чи
Ахинкана	unknown	Muya-Khani river system	NULL
Ахинкана	unknown	Sutam-Gonam river system	NULL
Ахинкана	unknown	Olyokma-Tungir river system	NULL
Аюга	unknown	Kamo-Taiga river system	NULL
Аюнга	unknown	Olyokma-Tungir river system	NULL
Аюнга	unknown	Sutam-Gonam river system	NULL
Аюнга	unknown	Muya-Khani river system	NULL
Аян	landscape	Sutam-Gonam river system	NULL
Аян	landscape	Muya-Khani river system	NULL
Аян	landscape	Olyokma-Tungir river system	NULL
Аяя	assessment	Algoma river system	а
Багдарин	physical features	Olyokma-Tungir river system	NULL
Байкит	assessment	Chunya river system	кит
Байкит	assessment	Chunya river system	кит
Балыктак	fauna	Olyokma-Tungir river system	дак
Бармакит	place	Olyokma-Tungir river system	кит

Баякит	assessment	Kamo-Taiga river system	кит
Б. Делинда	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Бергима	physical features	Chunya river system	ма
Бернакит	unknown	Olyokma-Tungir river system	NULL
Бернакит	unknown	Sutam-Gonam river system	NULL
Бернакит	unknown	Muya-Khani river system	NULL
Билга	anatomical reference	Algoma river system	NULL
Биллак	kinship term	Olyokma-Tungir river system	NULL
Биллак	kinship term	Sutam-Gonam river system	NULL
Биллак	kinship term	Muya-Khani river system	NULL
Биракан	landscape	Algoma river system	кан
Биракан	landscape	Kamo-Taiga river system	кан
Бираликан	landscape	Kamo-Taiga river system	кан
Бираликан	landscape	Kamo-Taiga river system	ли
Бирамнян	landscape	Muya-Khani river system	мна
Бирамнян	landscape	Sutam-Gonam river system	мна
Бирамнян	landscape	Olyokma-Tungir river system	мна
Бирамнян	landscape	Muya-Khani river system	POSS
Бирамнян	landscape	Olyokma-Tungir river system	POSS
Бирамнян	landscape	Sutam-Gonam river system	POSS
Бирандя	landscape	Algoma river system	ндя
Бираната	landscape	Zeya river system	нта
Бираякан	landscape	Algoma river system	кан
Бираярчан	landscape	Kamo-Taiga river system	чан
Бираярчан	landscape	Kamo-Taiga river system	PL
Биргама	assessment	Podkamennaya Tunguska river system	ма
Бирея	landscape	Sutam-Gonam river system	а
Бирея	landscape	Muya-Khani river system	а
Бирея	landscape	Olyokma-Tungir river system	а
Бирнакачи	unknown	Sutam-Gonam river system	NULL
Бирнакачи	unknown	Olyokma-Tungir river system	NULL
Бирнакачи	unknown	Muya-Khani river system	NULL
Битаик	unknown	Kamo-Taiga river system	NULL
Битый (?)	foreign language	Sutam-Gonam river system	NULL
Битый (?)	foreign language	Muya-Khani river system	NULL
Битый (?)	foreign language	Olyokma-Tungir river system	NULL
Б. Калар	object	Muya-Khani river system	PL
Богодикта	flora	Olyokma-Tungir river system	кта
Бого диктэ	flora	Muya-Khani river system	NULL
Бого диктэ	flora	Olyokma-Tungir river system	NULL
Бойе былин	unknown	Sutam-Gonam river system	NULL
Бойе былин	unknown	Muya-Khani river system	NULL
Бойе былин	unknown	Olyokma-Tungir river system	NULL
Болгик	flora	Algoma river system	NULL
Болгикта	flora	Muya-Khani river system	кта
Болгикта	flora	Sutam-Gonam river system	кта

Болгикта	flora	Olyokma-Tungir river system	кта
Болгиктакан	flora	Muya-Khani river system	кта
Болгиктакан	flora	Olyokma-Tungir river system	кан
Болгиктакан	flora	Sutam-Gonam river system	кта
Болгиктакан	flora	Olyokma-Tungir river system	кта
Болгиктакан	flora	Sutam-Gonam river system	кан
Болгиктакан	flora	Muya-Khani river system	кан
Болдикта	flora	Muya-Khani river system	кта
Болдикта	flora	Sutam-Gonam river system	кта
Болдикта	flora	Olyokma-Tungir river system	кта
Болодекит	nomadic circle	Kamo-Taiga river system	кит
Болодекит	nomadic circle	Podkamennaya Tunguska river system	кит
Болодёкит	nomadic circle	Podkamennaya Tunguska river system	кит
Болодёкит	nomadic circle	Podkamennaya Tunguska river system	кит
Болсоира Тугульчес	foreign language	Yenisei-Yeloguy river system	NULL
Бохорук	unknown	Muya-Khani river system	NULL
Бохорук	unknown	Sutam-Gonam river system	NULL
Бохорук	unknown	Olyokma-Tungir river system	NULL
Буарик	landscape	Kamo-Taiga river system	NULL
Буарик	landscape	Kamo-Taiga river system	NULL
Буарикта	landscape	Kamo-Taiga river system	кта
Буарикта	landscape	Podkamennaya Tunguska river system	кта
Буарикта	landscape	Kamo-Taiga river system	кта
Буарикта	landscape	Podkamennaya Tunguska river system	кта
Буаркан	landscape	Kamo-Taiga river system	кан
Буаркон	landscape	Kamo-Taiga river system	кан
Бугадзикта	unknown	Muya-Khani river system	NULL
Бугадзикта	unknown	Olyokma-Tungir river system	NULL
Бугадзикта	unknown	Sutam-Gonam river system	NULL
Буга игикан	unknown	Algoma river system	NULL
Бугали	physical features	Algoma river system	NULL
Бугаликан	physical features	Algoma river system	кан
Бугарик	landscape	Olyokma-Tungir river system	к
Бугарик	landscape	Muya-Khani river system	к
Бугарикта	landscape	Sutam-Gonam river system	кта
Бугарикта	landscape	Olyokma-Tungir river system	кта
Бугарикта	landscape	Sutam-Gonam river system	кта
Бугарикта	landscape	Muya-Khani river system	кта
Бугарикта	landscape	Olyokma-Tungir river system	кта
Бугарикта	landscape	Muya-Khani river system	кта
Бугарикта	landscape	Muya-Khani river system	кта
Бугарикта	landscape	Sutam-Gonam river system	кта
Бугарикта	landscape	Olyokma-Tungir river system	кта

Бугда	unknown	Olyokma-Tungir river system	NULL
Бугунар	unknown	Olyokma-Tungir river system	NULL
Бугунар	unknown	Muya-Khani river system	NULL
Бугунар	unknown	Sutam-Gonam river system	NULL
(Б)удунг хуруя	unknown	Muya-Khani river system	NULL
(Б)удунг хуруя	unknown	Sutam-Gonam river system	NULL
(Б)удунг хуруя	unknown	Olyokma-Tungir river system	NULL
Букта	nature phenomenon	Olyokma-Tungir river system	NULL
Букта	nature phenomenon	Sutam-Gonam river system	NULL
Букта	nature phenomenon	Muya-Khani river system	NULL
Буктачи	nature phenomenon	Olyokma-Tungir river system	чи
Буктэчи	phenomenon	Zeya river system	чи
Булак	landscape	Olyokma-Tungir river system	NULL
Буликан	anatomical reference	Olyokma-Tungir river system	NULL
Буликан	anatomical reference	Sutam-Gonam river system	NULL
Буликан	anatomical reference	Muya-Khani river system	NULL
Бургак	nature phenomenon	Sutam-Gonam river system	к
Бургак	nature phenomenon	Olyokma-Tungir river system	к
Бургак	phenomenon	Muya-Khani river system	к
Бургали	landscape	Algoma river system	ли
Бургали	landscape	Algoma river system	ли
Бургаликан	landscape	Olyokma-Tungir river system	ли
Бургаликан	landscape	Sutam-Gonam river system	ли
Бургаликан	landscape	Muya-Khani river system	ли
Бургаликан	landscape	Sutam-Gonam river system	кан
Бургаликан	landscape	Olyokma-Tungir river system	кан
Бургаликан	landscape	Muya-Khani river system	кан
Бургокан	landscape	Kamo-Taiga river system	кан
Буричи	landscape	Sutam-Gonam river system	чи
Буричи	landscape	Muya-Khani river system	чи
Буричи	landscape	Olyokma-Tungir river system	чи
Бурунгна	material	Muya-Khani river system	нгна/нгда/нда/нгра
Бурунгна	material	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Бурунгна	material	Sutam-Gonam river system	нгна/нгда/нда/нгра
Бурусовый	foreign language	Sym-Yenisei river system	NULL
Бурухингра	object	Muya-Khani river system	нгна/нгда/нда/нгра
Бурухингра	object	Sutam-Gonam river system	нгна/нгда/нда/нгра
Бурушил	object	Sym-Yenisei river system	PL

Бутуйдак	unknown	Sutam-Gonam river system	NULL
Бутуйдак	unknown	Algoma river system	NULL
Буҳукар	unknown	Olyokma-Tungir river system	NULL
Буҳунар	unknown	Olyokma-Tungir river system	NULL
Бухарик	landscape	Kamo-Taiga river system	к
Бухунар	unknown	Olyokma-Tungir river system	NULL
Бухунар	unknown	Muya-Khani river system	NULL
Бухунар	unknown	Sutam-Gonam river system	NULL
Бухурья	unknown	Sutam-Gonam river system	NULL
Бухурья	unknown	Olyokma-Tungir river system	NULL
Бухурья	unknown	Muya-Khani river system	NULL
Бэедулин	unknown	Olyokma-Tungir river system	NULL
Бэлгикта	flora	Olyokma-Tungir river system	кта
Бэлгиктакан	flora	Olyokma-Tungir river system	кта
Бэлгиктакан	flora	Olyokma-Tungir river system	кан
Бэргимэ	unknown	Chunya river system	NULL
Бэхуруё	unknown	Olyokma-Tungir river system	NULL
Вагаркит	unknown	Tributary of Tunguska River?	NULL
Варгэмэ	unknown	Nidym-Taymura river system	NULL
Ведреша	unknown	Kamo-Taiga river system	NULL
Ведреше	unknown	Kamo-Taiga river system	NULL
Вептенгне	unknown	Nidym-Taymura river system	NULL
Викторовский	foreign language	Zeya river system	NULL
Витим	unknown	Muya-Khani river system	NULL
Витим	unknown	Sutam-Gonam river system	NULL
Витим	unknown	Olyokma-Tungir river system	NULL
В. Ларбо	unknown	Muya-Khani river system	NULL
В. Ларбо	unknown	Olyokma-Tungir river system	NULL
В. Ларбо	unknown	Sutam-Gonam river system	NULL
Волгыгокто	unknown	Podkamennaya Tunguska river system	NULL
Вотакит	place	Nidym-Taymura river system	кит
Вэнггэ	fauna	Algoma river system	NULL
Вэнггэ	fauna	Algoma river system	NULL
Гавгила	name	Algoma river system	NULL
Гаенде	fauna	Chunya river system	кан
Гайгна	fauna	Sutam-Gonam river system	NULL
Гайгна	fauna	Olyokma-Tungir river system	NULL
Гайгна	fauna	Muya-Khani river system	NULL
Гайгна	fauna	Kamo-Taiga river system	NULL
Гайна	fauna	Kamo-Taiga river system	NULL
Гайна	fauna	Podkamennaya Tunguska river system	NULL
Гайнде	fauna	Podkamennaya Tunguska river system	NULL
Гананчин	name	Olyokma-Tungir river system	NULL
Гананчин	name	Muya-Khani river system	NULL
Гангна	fauna	Muya-Khani river system	NULL

Гангна	fauna	Sutam-Gonam river system	NULL
Гангна	fauna	Olyokma-Tungir river system	NULL
Гарпани	name	Sutam-Gonam river system	NULL
Гарпани	name	Olyokma-Tungir river system	NULL
Гарпани	name	Muya-Khani river system	NULL
Гарпуматчиктын	event	Muya-Khani river system	чик
Гарпуматчиктын	event	Muya-Khani river system	POSS
Гарпуматчиктын	event	Sutam-Gonam river system	POSS
Гарпуматчиктын	event	Sutam-Gonam river system	мат
Гарпуматчиктын	event	Muya-Khani river system	мат
Гарпуматчиктын	event	Sutam-Gonam river system	чик
Гелтамда	physical features	Algoma river system	мда
Гелтамда	physical features	Sutam-Gonam river system	мда
Гелтамда (?)	physical features	Algoma river system	мда
Гида	object	Algoma river system	NULL
Гида	object	Sutam-Gonam river system	NULL
Гидасча	unknown	Sym-Yenisei river system	с
Гидасча	unknown	Sym-Yenisei river system	ча
Гидат	object	Sutam-Gonam river system	т
Гидат	object	Muya-Khani river system	т
Гилюй	unknown	Muya-Khani river system	NULL
Гилюй	unknown	Sutam-Gonam river system	NULL
Гилюй	unknown	Olyokma-Tungir river system	NULL
Гимобудекин	sacred	Olyokma-Tungir river system	POSS
Гимобудекин	sacred	Muya-Khani river system	POSS
Гимобудекин	sacred	Sutam-Gonam river system	POSS
Гирамначи	sacred	Muya-Khani river system	чи
Гирамначи	sacred	Olyokma-Tungir river system	чи
Гирамначи	sacred	Sutam-Gonam river system	чи
Глубокий	foreign language	Muya-Khani river system	NULL
Глубокий	foreign language	Olyokma-Tungir river system	NULL
Глубокий	foreign language	Sutam-Gonam river system	NULL
Гонам (Нгонам)	physical features	Sutam-Gonam river system	NULL
Гонанкин	unknown	Sutam-Gonam river system	NULL
Гонанкин	unknown	Muya-Khani river system	NULL
Гонанкин	unknown	Olyokma-Tungir river system	NULL
Гопкочон	unknown	Muya-Khani river system	NULL
Гопкочон	unknown	Sutam-Gonam river system	NULL
Гопкочон	unknown	Olyokma-Tungir river system	NULL
Горбылях	foreign language	Sutam-Gonam river system	NULL
Горбылях	foreign language	Muya-Khani river system	NULL
Горбылях	foreign language	Olyokma-Tungir river system	NULL
Горингда	fauna	Algoma river system	нгна/нгда/нда/нгра
Горингдак	fauna	Algoma river system	дак
Гувкунэ	unknown	Algoma river system	NULL
Гула	landscape	Muya-Khani river system	NULL
Гула	landscape	Olyokma-Tungir river system	NULL
Гула	landscape	Sutam-Gonam river system	NULL

Гулокан	house	Podkamennaya Tunguska river system	кан
Гулокан	house	Kamo-Taiga river system	кан
Гулэ	house	Olyokma-Tungir river system	NULL
Гулэкочан	house	Olyokma-Tungir river system	кан
Гулэкочан	house	Olyokma-Tungir river system	чан
Гураника	fauna	Olyokma-Tungir river system	ка
Гураника	fauna	Muya-Khani river system	ка
Гураникан	fauna	Olyokma-Tungir river system	кан
Гурунгэ	unknown	Algoma river system	NULL
Гускэнгэнгрэ	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Гускэнгэнгрэ	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Гуткомокит	fauna	Podkamennaya Tunguska river system	кит
Гуткомокит	fauna	Kamo-Taiga river system	кит
Гуткомокит	fauna	Kamo-Taiga river system	ма
Гуткомокит	fauna	Podkamennaya Tunguska river system	ма
Гуткэнгдэ	fauna	Algoma river system	нгна/нгда/нда/нгра
Гухингрэ	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Гухингрэ	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Гуяун	object	Podkamennaya Tunguska river system	NULL
Гэрунгэ	unknown	Algoma river system	NULL
Дабдакан	unknown	Podkamennaya Tunguska river system	NULL
Дабдакон	unknown	Podkamennaya Tunguska river system	NULL
Даваган	name	Olyokma-Tungir river system	ган
Даваган	name	Kamo-Taiga river system	ган
Даван	landscape	Olyokma-Tungir river system	NULL
Даван	landscape	Olyokma-Tungir river system	NULL
Давюдукон	unknown	Tributary of Tunguska River?	NULL
Даннэчи	object	Sutam-Gonam river system	чи
Даннэчи	object	Muya-Khani river system	чи
Даптычи (?)	landscape	Olyokma-Tungir river system	чи
Даптычи (?)	landscape	Sutam-Gonam river system	чи
Даптычи (?)	landscape	Muya-Khani river system	чи
Дасонда	unknown	Kamo-Taiga river system	NULL
Дасонда	unknown	Podkamennaya Tunguska river system	NULL
Даурка	unknown	Sutam-Gonam river system	NULL
Даурка	unknown	Algoma river system	NULL
Даурkачан	unknown	Sutam-Gonam river system	NULL
Даурkачан	unknown	Algoma river system	NULL
Даюдакон	unknown	Podkamennaya Tunguska river system	NULL
Дебинакит	unknown	Muya-Khani river system	NULL
Дебинакит	unknown	Sutam-Gonam river system	NULL

Дебинакит	unknown	Olyokma-Tungir river system	NULL
Девонок	material	Muya-Khani river system	NULL
Девонок	material	Olyokma-Tungir river system	NULL
Девонок	material	Sutam-Gonam river system	NULL
Дегдочо	landscape	Muya-Khani river system	ча
Дегдочо	landscape	Sutam-Gonam river system	ча
Дегдочо	landscape	Olyokma-Tungir river system	ча
Деенгдо	object	Algoma river system	нгна/нгда/нда/нгра
Делимокит	fauna	Podkamennaya Tunguska river system	кит
Делимокит	fauna	Podkamennaya Tunguska river system	ма
Делимокит	fauna	Kamo-Taiga river system	кит
Делимокит	fauna	Kamo-Taiga river system	ма
Делинда	fauna	Zeya river system	нгна/нгда/нда/нгра
Делиндэкан	fauna	Sutam-Gonam river system	кан
Делиндэкан	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Деловучи	material	Sutam-Gonam river system	чи
Деловучи	material	Muya-Khani river system	чи
Деловучи	material	Sutam-Gonam river system	вун
Деловучи	material	Muya-Khani river system	вун
Демкучи	flora	Zeya river system	чи
Денбркан	unknown	Kamo-Taiga river system	NULL
Дендочан	unknown	Kamo-Taiga river system	NULL
Дендочан	unknown	Podkamennaya Tunguska river system	NULL
Дерпок	unknown	Olyokma-Tungir river system	NULL
Дерпок	unknown	Sutam-Gonam river system	NULL
Дерпок	unknown	Muya-Khani river system	NULL
Дес	landscape	Algoma river system	NULL
Дес	landscape	Algoma river system	NULL
Дес	landscape	Zeya river system	NULL
Дёвёнок	material	Sutam-Gonam river system	NULL
Дёвёнок	material	Olyokma-Tungir river system	NULL
Дёвёнок	material	Muya-Khani river system	NULL
Дёко	unknown	Kamo-Taiga river system	NULL
Дёловун	material	Muya-Khani river system	вун
Дёловун	material	Sutam-Gonam river system	вун
Дёловун	material	Olyokma-Tungir river system	вун
Дёлое	material	Algoma river system	а
Дёнто(нрзб)	unknown	Algoma river system	NULL
Джербегалях	foreign language	Olyokma-Tungir river system	NULL
Джербегалях	foreign language	Sutam-Gonam river system	NULL
Джербегалях	foreign language	Muya-Khani river system	NULL
Джербибелях	foreign language	Muya-Khani river system	NULL
Джолони	material	Kamo-Taiga river system	ни
Дзаховул	unknown	Muya-Khani river system	NULL
Дзаховул	unknown	Sutam-Gonam river system	NULL

Дзаховул	unknown	Olyokma-Tungir river system	NULL
Дзелингнокан	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Дзелингнокан	fauna	Olyokma-Tungir river system	кан
Дзелингнокан	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Дзелингнокан	fauna	Muya-Khani river system	кан
Дзелингнокан	fauna	Sutam-Gonam river system	кан
Дзелингнокан	fauna	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Дзело	material	Muya-Khani river system	NULL
Дзело	material	Muya-Khani river system	NULL
Дзело	material	Olyokma-Tungir river system	NULL
Дзело	material	Sutam-Gonam river system	NULL
Дзело	material	Olyokma-Tungir river system	NULL
Дзело	material	Sutam-Gonam river system	NULL
Дзелу	material	Sutam-Gonam river system	NULL
Дзелу	material	Olyokma-Tungir river system	NULL
Дзелу	material	Muya-Khani river system	NULL
Дземку	flora	Sutam-Gonam river system	NULL
Дземку	flora	Olyokma-Tungir river system	NULL
Дземку	flora	Muya-Khani river system	NULL
Дзёмку	flora	Sutam-Gonam river system	NULL
Дзёмку	flora	Muya-Khani river system	NULL
Дзёмку	flora	Olyokma-Tungir river system	NULL
Дзюр Даптычи	landscape	Muya-Khani river system	чи
Дзюр Даптычи	landscape	Olyokma-Tungir river system	чи
Дзюр Даптычи	landscape	Sutam-Gonam river system	чи
Дивекит (?)	unknown	Tributary of Tunguska River?	NULL
Диктанга	flora	Muya-Khani river system	нга
Диктанга	flora	Sutam-Gonam river system	нга
Диктанга	flora	Olyokma-Tungir river system	нга
Диктэнгрэ	flora	Kamo-Taiga river system	нгна/нгда/нда/нгра
Диктэнгрэ	flora	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Догалдын	unknown	Kamo-Taiga river system	NULL
Догалдын	unknown	Podkamennaya Tunguska river system	NULL
Дождливый	foreign language	Zeya river system	NULL
Долачан	unknown	Sutam-Gonam river system	NULL
Долачан	unknown	Muya-Khani river system	NULL
Долачан	unknown	Olyokma-Tungir river system	NULL
Долгикокты	unknown	Kamo-Taiga river system	NULL
Долгой	foreign language	Kamo-Taiga river system	NULL
Долгой	foreign language	Olyokma-Tungir river system	NULL
Долгыгокты	unknown	Podkamennaya Tunguska river system	NULL
Долгыгокты	unknown	Kamo-Taiga river system	NULL
Долгыхокты	unknown	Kamo-Taiga river system	NULL
Долкочи	house	Muya-Khani river system	чи
Долкочи	house	Sutam-Gonam river system	чи
Долкочи	house	Olyokma-Tungir river system	чи

Донгото	unknown	Yenisei-Yeloguy river system	NULL
Донунгна	unknown	Muya-Khani river system	NULL
Дорос	unknown	Olyokma-Tungir river system	NULL
Дорос	unknown	Muya-Khani river system	NULL
Дорос	unknown	Sutam-Gonam river system	NULL
Дотыкта	unknown	Podkamennaya Tunguska river system	NULL
Дотыкта	unknown	Kamo-Taiga river system	NULL
Дотыкто	unknown	Kamo-Taiga river system	NULL
Дотыкто	unknown	Podkamennaya Tunguska river system	NULL
Дубчас	foreign language	Tym-Sym river system	NULL
Дугачанна	landscape	Muya-Khani river system	на
Дугачанна	landscape	Sutam-Gonam river system	чан
Дугачанна	landscape	Muya-Khani river system	чан
Дугачанна	landscape	Sutam-Gonam river system	на
Дугачанна	landscape	Olyokma-Tungir river system	на
Дугачанна	landscape	Olyokma-Tungir river system	чан
Дулисмар	position	Algoma river system	мар
Дулкума	flora	Chunya river system	ма
Дулус Неннедекит	nomadic circle	Tributary of Tunguska River?	кит
Дупчес	foreign language	Yenisei-Yeloguy river system	NULL
Дурай	unknown	Olyokma-Tungir river system	NULL
Дурай	unknown	Muya-Khani river system	NULL
Дурай	unknown	Sutam-Gonam river system	NULL
Дуранга	unknown	Olyokma-Tungir river system	NULL
Дурангна	unknown	Muya-Khani river system	NULL
Дурангна	unknown	Olyokma-Tungir river system	NULL
Дурангна	unknown	Sutam-Gonam river system	NULL
Дутокиткон	landscape	Olyokma-Tungir river system	кан
Дутокиткон	landscape	Sutam-Gonam river system	кан
Дутокиткон	landscape	Muya-Khani river system	кан
Дыгачанна	position	Sutam-Gonam river system	на
Дыгачанна	position	Muya-Khani river system	на
Дыгачанна	position	Olyokma-Tungir river system	на
Дыгачанна	position	Sutam-Gonam river system	чан
Дыгачанна	position	Olyokma-Tungir river system	чан
Дыгачанна	position	Muya-Khani river system	чан
Дыгдычэ	unknown	Olyokma-Tungir river system	NULL
Дымогококто	unknown	Kamo-Taiga river system	NULL
Дырин	unknown	Algoma river system	NULL
Дыронгба	unknown	Sutam-Gonam river system	NULL
Дыронгба	unknown	Muya-Khani river system	NULL
Дыронгба	unknown	Olyokma-Tungir river system	NULL
Дыронгномок	landscape	Olyokma-Tungir river system	ннга
Дыронгномок	landscape	Muya-Khani river system	мак
Дыронгномок	landscape	Olyokma-Tungir river system	мак
Дыронгномок	landscape	Sutam-Gonam river system	мак

Дыронгномок	landscape	Sutam-Gonam river system	ннга
Дыронгномок	landscape	Muya-Khani river system	ннга
Дэвонок	material	Olyokma-Tungir river system	к
Дэвэнгрэ	material	Sutam-Gonam river system	нгна/нгда/нда/нгра
Дэвэнгрэ	material	Sutam-Gonam river system	нгна/нгда/нда/нгра
Дэвэнэк	material	Olyokma-Tungir river system	к
Дэгилде	fauna	Sym-Yenisei river system	PL
Дэгилде	fauna	Sym-Yenisei river system	да
Дэдикта	unknown	Kamo-Taiga river system	NULL
Дэлбэргэ	unknown	Zeya river system	NULL
Дэлкэчи	house	Olyokma-Tungir river system	чи
Дэнгкэрбэ	unknown	Algoma river system	NULL
Дэтиктэ	landscape	Tributary of Tunguska River?	кта
Дэткэктэ	landscape	Nidym-Taymura river system	кан
Дэткэктэ	landscape	Nidym-Taymura river system	кта
Дюани	nomadic circle	Muya-Khani river system	NULL
Дюани	nomadic circle	Sutam-Gonam river system	NULL
Дюани	nomadic circle	Olyokma-Tungir river system	NULL
Дюани	nomadic circle	Kamo-Taiga river system	NULL
Дюлок	position	Sutam-Gonam river system	к
Дюлок	position	Muya-Khani river system	к
Дюлок	position	Olyokma-Tungir river system	к
Дюргэктэ	unknown	Chunya river system	NULL
Дявугдакит	event	Olyokma-Tungir river system	кит
Дявугдакит	event	Olyokma-Tungir river system	кит
Дявугдакит	event	Muya-Khani river system	кит
Дявугдакит	event	Muya-Khani river system	кит
Дягдагли	flora	Kamo-Taiga river system	гли
Дягдагли	flora	Chunya river system	гли
Дягдачанги	flora	Podkamennaya Tunguska river system	ги
Дягдачанги	flora	Podkamennaya Tunguska river system	чан
Дягдачи	flora	Olyokma-Tungir river system	чи
Дягдачи	flora	Muya-Khani river system	чи
Дягдачи	flora	Sutam-Gonam river system	чи
Дямкокта	flora	Kamo-Taiga river system	кта
Дямкокта	flora	Podkamennaya Tunguska river system	кта
Дярбундя	house	Kamo-Taiga river system	ндя
Егонда	unknown	Kamo-Taiga river system	NULL
Елогуй	unknown	Yenisei-Yeloguy river system	NULL
Ёнгидо	unknown	Kamo-Taiga river system	NULL
Ёрабо	fauna	Podkamennaya Tunguska river system	ба
Ёрабо	fauna	Kamo-Taiga river system	ба
Зелинда	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Зелинда	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра

Зелинда	fauna	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Зея	unknown	Zeya river system	NULL
Золотой	foreign language	Sutam-Gonam river system	NULL
Золотой	foreign language	Muya-Khani river system	NULL
Золотой	foreign language	Olyokma-Tungir river system	NULL
Ивгурначаги	unknown	Olyokma-Tungir river system	NULL
Ивгурначаги	unknown	Muya-Khani river system	NULL
Ивгурначаги	unknown	Sutam-Gonam river system	NULL
Ивэк	place	Algoma river system	к
Игигин	object	Olyokma-Tungir river system	гин
Игуннакачи	unknown	Sutam-Gonam river system	NULL
Игуннакачи	unknown	Olyokma-Tungir river system	NULL
Игуннакачи	unknown	Muya-Khani river system	NULL
Игыток	name	Sym-Yenisei river system	NULL
Иенгра	anatomical reference	Sutam-Gonam river system	нгна/нгда/нда/нгра
Иенгра	anatomical reference	Sutam-Gonam river system	нгна/нгда/нда/нгра
Иенгро	anatomical reference	Muya-Khani river system	нгна/нгда/нда/нгра
Иенгро	anatomical reference	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Иенгро	anatomical reference	Sutam-Gonam river system	нгна/нгда/нда/нгра
Икагия	unknown	Sutam-Gonam river system	NULL
Икагия	unknown	Olyokma-Tungir river system	NULL
Икагия	unknown	Muya-Khani river system	NULL
Икагьякан	unknown	Muya-Khani river system	NULL
Икагьякан	unknown	Sutam-Gonam river system	NULL
Икагьякан	unknown	Olyokma-Tungir river system	NULL
Икиоиткэн	unknown	Nidym-Taymura river system	NULL
Икон	landscape	Muya-Khani river system	NULL
Икон	landscape	Olyokma-Tungir river system	NULL
Икон	landscape	Kamo-Taiga river system	NULL
Икон	landscape	Sutam-Gonam river system	NULL
Икондёкит	sacred	Chunya river system	кит
Илань	unknown	Podkamennaya Tunguska river system	NULL
Илань	unknown	Podkamennaya Tunguska river system	NULL
Иликэн	unknown	Zeya river system	NULL
Ин	object	Yenisei-Yeloguy river system	NULL
Ингак	material	Sutam-Gonam river system	к
Ингак	material	Muya-Khani river system	к
Ингак	material	Olyokma-Tungir river system	к
Ингамакит	material	Muya-Khani river system	ма
Ингамакит	material	Sutam-Gonam river system	ма
Ингамакит	material	Olyokma-Tungir river system	ма
Ингамакит	material	Olyokma-Tungir river system	кит

Ингамакит	material	Sutam-Gonam river system	кит
Ингамакит	material	Muya-Khani river system	кит
Инэткит	nomadic circle	Sutam-Gonam river system	кит
Инэткит	nomadic circle	Muya-Khani river system	кит
Иркинеева	foreign language	Kamo-Taiga river system	NULL
Иркитыдёк	unknown	Olyokma-Tungir river system	NULL
Иркитыдёк	unknown	Sutam-Gonam river system	NULL
Иркитыдёк	unknown	Muya-Khani river system	NULL
Иркитыдяк	place	Sutam-Gonam river system	дак
Иркитыдяк	place	Sutam-Gonam river system	ты
Иркитыдяк	place	Olyokma-Tungir river system	ты
Иркитыдяк	place	Muya-Khani river system	ты
Иркитыдяк	place	Olyokma-Tungir river system	дак
Иркитыдяк	place	Muya-Khani river system	дак
Иркичнон	unknown	Olyokma-Tungir river system	NULL
Иркичнон	unknown	Muya-Khani river system	NULL
Иркичнон	unknown	Sutam-Gonam river system	NULL
Ирунгнакан	fauna	Podkamennaya Tunguska river system	нгна/нгда/нда/нгра
Ирунгнакан	fauna	Podkamennaya Tunguska river system	кан
Итмакандя	nature phenomenon	Sutam-Gonam river system	ндя
Итмакандя	nature phenomenon	Algoma river system	ндя
Итматакан	physical features	Algoma river system	кан
Итматандя	physical features	Algoma river system	ндя
Итымдя	sacred	Muya-Khani river system	мда
Итымдя	sacred	Sutam-Gonam river system	мда
Иханнонигдо	unknown	Olyokma-Tungir river system	NULL
Иханнонигдо	unknown	Sutam-Gonam river system	NULL
Иханнонигдо	unknown	Muya-Khani river system	NULL
Ичандзекит	unknown	Muya-Khani river system	NULL
Ичандзекит	unknown	Olyokma-Tungir river system	NULL
Ичандзекит	unknown	Sutam-Gonam river system	NULL
Ичанчикит	unknown	Muya-Khani river system	NULL
Ия	house	Podkamennaya Tunguska river system	NULL
Ия	house	Kamo-Taiga river system	NULL
Йэкэнгро	fauna	Sym-Yenisei river system	нгна/нгда/нда/нгра
Каатакан	unknown	Zeya river system	NULL
Кабара	unknown	Sutam-Gonam river system	NULL
Кабара	unknown	Olyokma-Tungir river system	NULL
Кабара	unknown	Muya-Khani river system	NULL
Кабаритгелак	unknown	Muya-Khani river system	NULL
Кабаритгелак	unknown	Olyokma-Tungir river system	NULL
Кабаритгелак	unknown	Sutam-Gonam river system	NULL
Кабачи	unknown	Muya-Khani river system	NULL

Кабачи	unknown	Sutam-Gonam river system	NULL
Кабачи	unknown	Olyokma-Tungir river system	NULL
Каваликан	material	Muya-Khani river system	кан
Каваликан	material	Olyokma-Tungir river system	кан
Каваликан	material	Sutam-Gonam river system	кан
Кавикия	unknown	Sutam-Gonam river system	NULL
Кавикия	unknown	Algoma river system	NULL
Кадара	landscape	Olyokma-Tungir river system	NULL
Кала	unknown	Sutam-Gonam river system	NULL
Кала	unknown	Muya-Khani river system	NULL
Кала	unknown	Olyokma-Tungir river system	NULL
Калакан	object	Muya-Khani river system	кан
Калар	object	Olyokma-Tungir river system	PL
Калар	object	Muya-Khani river system	PL
Калар	object	Sutam-Gonam river system	PL
Каманга	object	Kamo-Taiga river system	нга
Каменка	foreign language	Kamo-Taiga river system	NULL
Каменный	foreign language	Sutam-Gonam river system	NULL
Камо	unknown	Kamo-Taiga river system	NULL
Кангаллэ	object	Podkamennaya Tunguska river system	NULL
Кангаллэ	object	Kamo-Taiga river system	NULL
Кани	unknown	Muya-Khani river system	NULL
Кани	unknown	Sutam-Gonam river system	NULL
Кани	unknown	Olyokma-Tungir river system	NULL
Каньякит	nomadic circle	Kamo-Taiga river system	кит
Канярма	unknown	Kamo-Taiga river system	NULL
Капа	unknown	Sutam-Gonam river system	NULL
Капа	unknown	Olyokma-Tungir river system	NULL
Капа	unknown	Muya-Khani river system	NULL
Каптан	unknown	Olyokma-Tungir river system	NULL
Каптан	unknown	Sutam-Gonam river system	NULL
Каптан	unknown	Muya-Khani river system	NULL
Капчирэ	object	Podkamennaya Tunguska river system	NULL
Капчура	object	Kamo-Taiga river system	NULL
Карав	fauna	Olyokma-Tungir river system	NULL
Карав	fauna	Sutam-Gonam river system	NULL
Карав	fauna	Muya-Khani river system	NULL
Каравкит	fauna	Olyokma-Tungir river system	кит
Каравкит	fauna	Muya-Khani river system	кит
Каравкит	fauna	Sutam-Gonam river system	кит
Караврак	fauna	Algoma river system	рак
Каравул	fauna	Algoma river system	PL
Кара урэх	foreign language	Muya-Khani river system	NULL
Кара урэх	foreign language	Sutam-Gonam river system	NULL
Карая	object	Olyokma-Tungir river system	NULL
Каренча	unknown	Muya-Khani river system	NULL

Карея	object	Sutam-Gonam river system	NULL
Карея	object	Olyokma-Tungir river system	NULL
Карея	object	Muya-Khani river system	NULL
Кареякон	object	Muya-Khani river system	кан
Кареякон	object	Sutam-Gonam river system	кан
Кареякон	object	Olyokma-Tungir river system	кан
Кареялак	object	Algoma river system	лак
Карлот	name	Algoma river system	NULL
Карпэт	name	Algoma river system	NULL
Карурак	foreign language	Olyokma-Tungir river system	NULL
Карурак	foreign language	Sutam-Gonam river system	NULL
Карурак	foreign language	Muya-Khani river system	NULL
Карэя	object	Olyokma-Tungir river system	NULL
Карэякан	object	Olyokma-Tungir river system	кан
Карэялак	object	Algoma river system	лак
Каси	unknown	Sutam-Gonam river system	NULL
Каси	unknown	Muya-Khani river system	NULL
Каси	unknown	Olyokma-Tungir river system	NULL
Катагарчи	unknown	Sutam-Gonam river system	NULL
Катагарчи	unknown	Muya-Khani river system	NULL
Катагарчи	unknown	Olyokma-Tungir river system	NULL
Катанга	unknown	Podkamennaya Tunguska river system	NULL
Катанга	unknown	Chunya river system	NULL
Катанга	unknown	Kamo-Taiga river system	NULL
Катангаткан	unknown	Chunya river system	NULL
Катарамба	unknown	Chunya river system	NULL
Катогин	unknown	Olyokma-Tungir river system	NULL
Катогин	unknown	Sutam-Gonam river system	NULL
Катогин	unknown	Muya-Khani river system	NULL
Катырган	unknown	Olyokma-Tungir river system	NULL
Катырган	unknown	Muya-Khani river system	NULL
Катырган	unknown	Sutam-Gonam river system	NULL
Катыргачи	unknown	Olyokma-Tungir river system	NULL
Кашалон	unknown	Kamo-Taiga river system	NULL
Кашалон	unknown	Podkamennaya Tunguska river system	NULL
Кашилов	foreign language	Sym-Yenisei river system	NULL
Кевёлу	unknown	Sutam-Gonam river system	NULL
Кевёлу	unknown	Muya-Khani river system	NULL
Кевёлу	unknown	Olyokma-Tungir river system	NULL
Келейстак	unknown	Sutam-Gonam river system	NULL
Келейстак	unknown	Olyokma-Tungir river system	NULL
Келейстак	unknown	Muya-Khani river system	NULL
Кенгилчеш	foreign language	Yenisei-Yeloguy river system	NULL
Керук	unknown	Sutam-Gonam river system	NULL
Керук	unknown	Olyokma-Tungir river system	NULL
Керук	unknown	Muya-Khani river system	NULL

Кетко (?)	unknown	Chunya river system	NULL
Кеть	unknown	Sym-Yenisei river system	NULL
Кидынчес	foreign language	Sym-Yenisei river system	NULL
Кидынчес	foreign language	Sym-Yenisei river system	NULL
Килачи	landscape	Algoma river system	чи
Килачи	landscape	Algoma river system	чи
Кильдит	object	Sutam-Gonam river system	т
Кильдит	object	Algoma river system	т
Кинахурэк	foreign language	Algoma river system	NULL
Кипчикан	landscape	Muya-Khani river system	кан
Кипчикан	landscape	Sutam-Gonam river system	кан
Кипчиндя	landscape	Muya-Khani river system	ндя
Кипчиндя	landscape	Sutam-Gonam river system	ндя
Киргисяк	foreign language	Muya-Khani river system	NULL
Киргисяк	foreign language	Sutam-Gonam river system	NULL
Киромки	object	Podkamennaya Tunguska river system	NULL
Кичатэк	unknown	Muya-Khani river system	NULL
Кичо	unknown	Podkamennaya Tunguska river system	NULL
Кичо	unknown	Kamo-Taiga river system	NULL
Ковактакин	landscape	Olyokma-Tungir river system	кта
Ковактакин	landscape	Sutam-Gonam river system	кта
Ковактакин	landscape	Muya-Khani river system	кин
Ковактакин	landscape	Olyokma-Tungir river system	кин
Ковактакин	landscape	Sutam-Gonam river system	кин
Ковактакин	landscape	Muya-Khani river system	кта
Коваликан	material	Olyokma-Tungir river system	кан
Ковач	unknown	Sutam-Gonam river system	NULL
Ковач	unknown	Olyokma-Tungir river system	NULL
Ковач	unknown	Muya-Khani river system	NULL
Ковикта	landscape	Olyokma-Tungir river system	кта
Ковикта	landscape	Muya-Khani river system	кта
Ковикта	landscape	Kamo-Taiga river system	кта
Ковикта	landscape	Sutam-Gonam river system	кта
Кодон	unknown	Algoma river system	NULL
Койвосира	unknown	Yenisei-Yeloguy river system	NULL
Кокичо	unknown	Tym-Sym river system	NULL
Кокчан	anatomical reference	Kamo-Taiga river system	NULL
Кокчан	anatomical reference	Podkamennaya Tunguska river system	NULL
Колбон	house	Sutam-Gonam river system	POSS
Колбон	house	Muya-Khani river system	POSS
Колбон	house	Olyokma-Tungir river system	POSS
Колбо(чи)	house	Muya-Khani river system	чи
Колбо(чи)	house	Olyokma-Tungir river system	чи
Колбочи	house	Olyokma-Tungir river system	чи

Колбочи	house	Muya-Khani river system	чи
Колбочи	house	Sutam-Gonam river system	чи
Колчум	unknown	Sym-Yenisei river system	NULL
Комо	unknown	Kamo-Taiga river system	NULL
Комо	unknown	Podkamennaya Tunguska river system	NULL
Комонго	object	Kamo-Taiga river system	нга
Конгагин	name	Muya-Khani river system	гин
Конгагин	name	Sutam-Gonam river system	гин
Конганга	name	Muya-Khani river system	нга
Конганга	name	Sutam-Gonam river system	нга
Конганга	name	Olyokma-Tungir river system	нга
Конгикачи	object	Olyokma-Tungir river system	чи
Конгикачи	object	Muya-Khani river system	кан
Конгикачи	object	Olyokma-Tungir river system	кан
Конгикачи	object	Sutam-Gonam river system	кан
Конгикачи	object	Muya-Khani river system	чи
Конгикачи	object	Muya-Khani river system	чи
Конгикачи	object	Olyokma-Tungir river system	чи
Конгикачи	object	Sutam-Gonam river system	чи
Конгикачи	object	Muya-Khani river system	кан
Конгикачи	object	Olyokma-Tungir river system	кан
Конгикачи	object	Sutam-Gonam river system	кан
Конгикачи	object	Sutam-Gonam river system	чи
Конгули	unknown	Podkamennaya Tunguska river system	NULL
Контохиро	unknown	Sutam-Gonam river system	NULL
Контохиро	unknown	Muya-Khani river system	NULL
Контохиро	unknown	Olyokma-Tungir river system	NULL
Кончана	unknown	Muya-Khani river system	NULL
Копри	unknown	Sutam-Gonam river system	NULL
Копри	unknown	Muya-Khani river system	NULL
Копри	unknown	Olyokma-Tungir river system	NULL
Копчан	landscape	Podkamennaya Tunguska river system	NULL
Копчара	object	Podkamennaya Tunguska river system	а
Копчара	object	Kamo-Taiga river system	а
Корба	fauna	Podkamennaya Tunguska river system	NULL
Корбаннак	fauna	Muya-Khani river system	ннак
Корбаннак	fauna	Olyokma-Tungir river system	ннак
Корбаннак	fauna	Sutam-Gonam river system	ннак
Корда	unknown	Podkamennaya Tunguska river system	NULL
Кордака	unknown	Chunya river system	NULL
Кордакаткан	unknown	Chunya river system	NULL
Корок	unknown	Muya-Khani river system	NULL

Корок	unknown	Sutam-Gonam river system	NULL
Корок	unknown	Olyokma-Tungir river system	NULL
Корсуӯа	unknown	Olyokma-Tungir river system	NULL
Корсуга	unknown	Muya-Khani river system	NULL
Корсуга	unknown	Olyokma-Tungir river system	NULL
Корсуга	unknown	Muya-Khani river system	NULL
Корсуга	unknown	Sutam-Gonam river system	NULL
Корсуга	unknown	Sutam-Gonam river system	NULL
Корсуга	unknown	Olyokma-Tungir river system	NULL
Косьмина	foreign language	Kamo-Taiga river system	NULL
Кочар	unknown	Olyokma-Tungir river system	NULL
Кочур	landscape	Olyokma-Tungir river system	PL
Кочур	landscape	Sutam-Gonam river system	PL
Кочур	landscape	Muya-Khani river system	PL
Крамки	object	Podkamennaya Tunguska river system	NULL
Крангна	unknown	Olyokma-Tungir river system	NULL
Крангна	unknown	Sutam-Gonam river system	NULL
Крангна	unknown	Muya-Khani river system	NULL
Кривой	foreign language	Sutam-Gonam river system	NULL
Кривой	foreign language	Sutam-Gonam river system	NULL
Кривой	foreign language	Muya-Khani river system	NULL
Кривой	foreign language	Olyokma-Tungir river system	NULL
Кривой	foreign language	Muya-Khani river system	NULL
Кривой	foreign language	Olyokma-Tungir river system	NULL
Кривотанго	unknown	Kamo-Taiga river system	NULL
Крямки	object	Podkamennaya Tunguska river system	NULL
Куанда	unknown	Muya-Khani river system	NULL
Куанда	unknown	Sutam-Gonam river system	NULL
Куанда	unknown	Olyokma-Tungir river system	NULL
Кубакан	unknown	Sutam-Gonam river system	NULL
Кубакан	unknown	Muya-Khani river system	NULL
Кубакан	unknown	Olyokma-Tungir river system	NULL
Кубир	unknown	Olyokma-Tungir river system	NULL
Кубир	unknown	Muya-Khani river system	NULL
Кубир	unknown	Sutam-Gonam river system	NULL
Куболунгу	unknown	Sutam-Gonam river system	NULL
Куболунгу	unknown	Olyokma-Tungir river system	NULL
Куболунгу	unknown	Muya-Khani river system	NULL
Кубули	unknown	Sutam-Gonam river system	NULL
Кубули	unknown	Olyokma-Tungir river system	NULL
Кубули	unknown	Muya-Khani river system	NULL
Кубуликан	unknown	Olyokma-Tungir river system	NULL
Кубуликан	unknown	Olyokma-Tungir river system	NULL
Кубуликан	unknown	Muya-Khani river system	NULL
Кубуликан	unknown	Sutam-Gonam river system	NULL
Кубуликан	unknown	Muya-Khani river system	NULL

Кубуликан	unknown	Sutam-Gonam river system	NULL
Кувас	fauna	Sutam-Gonam river system	NULL
Кувас	fauna	Algoma river system	NULL
Кугама	unknown	Podkamennaya Tunguska river system	NULL
Кугдыка	object	Sutam-Gonam river system	NULL
Кугдыка	object	Muya-Khani river system	NULL
Кугдыка	object	Olyokma-Tungir river system	NULL
Кудукта	landscape	Olyokma-Tungir river system	кта
Кудулак	landscape	Muya-Khani river system	лак
Кудулак	landscape	Sutam-Gonam river system	лак
Кудучи	landscape	Sutam-Gonam river system	чи
Кукар	unknown	Algoma river system	NULL
Куктылингин	fauna	Olyokma-Tungir river system	ли
Куктылингин	fauna	Sutam-Gonam river system	ли
Куктылингин	fauna	Muya-Khani river system	нг
Куктылингин	fauna	Sutam-Gonam river system	POSS
Куктылингин	fauna	Olyokma-Tungir river system	POSS
Куктылингин	fauna	Muya-Khani river system	POSS
Куктылингин	fauna	Sutam-Gonam river system	нг
Куктылингин	fauna	Olyokma-Tungir river system	нг
Куктылингин	fauna	Muya-Khani river system	ли
Кукчудо	object	Muya-Khani river system	NULL
Кукчудо	object	Sutam-Gonam river system	NULL
Кукчудо	object	Olyokma-Tungir river system	NULL
Кукшидо (?)	unknown	Kamo-Taiga river system	NULL
Кукшиды	unknown	Podkamennaya Tunguska river system	NULL
Кулаэ	unknown	Podkamennaya Tunguska river system	NULL
Кулаэ	unknown	Kamo-Taiga river system	NULL
Куликан	fauna	Algoma river system	NULL
Кулингра	fauna	Tym-Sym river system	нгна/нгда/нда/нгра
Кулинда	fauna	Kamo-Taiga river system	NULL
Кулинда	fauna	Podkamennaya Tunguska river system	NULL
Куманга	fauna	Kamo-Taiga river system	нга
Кумандя	fauna	Kamo-Taiga river system	ндя
Куматкан	fauna	Kamo-Taiga river system	ткан
Кунанилак	unknown	Olyokma-Tungir river system	NULL
Кунанилак	unknown	Muya-Khani river system	NULL
Кунанилак	unknown	Sutam-Gonam river system	NULL
Кунгагда	unknown	Algoma river system	гда
Кунгкуй	fauna	Algoma river system	NULL
Кунгкуй	fauna	Algoma river system	NULL
Кунгкуймукит	place	Algoma river system	ма
Кунгкуймукит	place	Algoma river system	кит
Кунгкуймукит	place	Algoma river system	ма

Кунгкуймукит	place	Algoma river system	кит
Кунгус	unknown	Algoma river system	NULL
Кур	unknown	Yenisei-Yeloguy river system	NULL
Куракагда	fauna	Algoma river system	гда
Куранок	landscape	Muya-Khani river system	к
Куранок	landscape	Olyokma-Tungir river system	к
Куранок	landscape	Sutam-Gonam river system	к
Кургама	physical features	Podkamennaya Tunguska river system	ма
Кургlак	landscape	Algoma river system	лак
Кургэлэк	landscape	Algoma river system	лак
Курейкангра	fauna	Algoma river system	нгна/нгда/нда/нгра
Курейкангра	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Куресчи	unknown	Muya-Khani river system	NULL
Куресчи	unknown	Sutam-Gonam river system	NULL
Куресчи	unknown	Olyokma-Tungir river system	NULL
Куречи	object	Muya-Khani river system	чи
Куречи	object	Sutam-Gonam river system	чи
Куречи	object	Olyokma-Tungir river system	чи
Курсуха	event	Olyokma-Tungir river system	NULL
Куртукан	fauna	Olyokma-Tungir river system	кан
Куру	landscape	Algoma river system	NULL
Куру	landscape	Sutam-Gonam river system	NULL
Куру	landscape	Sutam-Gonam river system	NULL
Куру	landscape	Algoma river system	NULL
Курум	event	Muya-Khani river system	NULL
Курум	event	Sutam-Gonam river system	NULL
Курум бира	event	Algoma river system	NULL
Курум биракан	event	Algoma river system	кан
Курумрак	event	Olyokma-Tungir river system	NULL
Курумрак	event	Muya-Khani river system	NULL
Курумрак	event	Sutam-Gonam river system	NULL
Курунг	landscape	Muya-Khani river system	NULL
Курунг	landscape	Sutam-Gonam river system	NULL
Курунг	landscape	Olyokma-Tungir river system	NULL
Куруча	unknown	Sutam-Gonam river system	NULL
Курэлдя	unknown	Algoma river system	NULL
Кускомдя	unknown	Olyokma-Tungir river system	NULL
Кускомдя	unknown	Muya-Khani river system	NULL
Кускомдя	unknown	Sutam-Gonam river system	NULL
Кутира	unknown	Kamo-Taiga river system	NULL
Куткан	landscape	Kamo-Taiga river system	кан
Куюмба	unknown	Kamo-Taiga river system	NULL
Куюмба	unknown	Kamo-Taiga river system	NULL
Куюмба	unknown	Podkamennaya Tunguska river system	NULL
Куюмба	unknown	Podkamennaya Tunguska river system	NULL

Куюрла	unknown	Muya-Khani river system	NULL
Куюрла	unknown	Sutam-Gonam river system	NULL
Куюрла	unknown	Olyokma-Tungir river system	NULL
Кэвэктэ	landscape	Sutam-Gonam river system	кта
Кэвэктэ	landscape	Muya-Khani river system	кта
Кэвэктэ В.	landscape	Sutam-Gonam river system	кта
Кэвэктэ Н.	landscape	Sutam-Gonam river system	кта
Кэвэтылах	unknown	Muya-Khani river system	NULL
Кэвэтылах	unknown	Sutam-Gonam river system	NULL
Кэвэтылах	unknown	Olyokma-Tungir river system	NULL
Кэйведэ	unknown	Podkamennaya Tunguska river system	NULL
Кэнгэркит	landscape	Sutam-Gonam river system	кит
Кэнгэркит	landscape	Muya-Khani river system	кит
Кэрдыстугэс	unknown	Olyokma-Tungir river system	NULL
Кэхурак	foreign language	Algoma river system	NULL
Кэхурак	foreign language	Algoma river system	NULL
Кэютэкит	assessment	Muya-Khani river system	кит
Кэютэкит	assessment	Olyokma-Tungir river system	кит
Кэютэкит	assessment	Sutam-Gonam river system	кит
Лавман	unknown	Muya-Khani river system	NULL
Лавман	unknown	Sutam-Gonam river system	NULL
Лавман	unknown	Olyokma-Tungir river system	NULL
Лалиги	unknown	Algoma river system	NULL
Лалук (?)	unknown	Muya-Khani river system	NULL
Лалук (?)	unknown	Olyokma-Tungir river system	NULL
Лалук (?)	unknown	Sutam-Gonam river system	NULL
Ламака	physical features	Algoma river system	ка
Лапоэ	unknown	Kamo-Taiga river system	NULL
Лемакай	unknown	Sym-Yenisei river system	NULL
Логловос	unknown	Olyokma-Tungir river system	NULL
Логловос	unknown	Olyokma-Tungir river system	NULL
Локомочи	house	Sutam-Gonam river system	чи
Локомочи	house	Algoma river system	чи
Ломипчо	name	Sym-Yenisei river system	NULL
Лонгдор	landscape	Algoma river system	NULL
Лопчакан	anatomical reference	Olyokma-Tungir river system	кан
Лопчакан	anatomical reference	Muya-Khani river system	кан
Лопчакан	anatomical reference	Sutam-Gonam river system	кан
Лукунга	assessment	Olyokma-Tungir river system	нга
Лукунга	assessment	Sutam-Gonam river system	нга
Лукунга	assessment	Muya-Khani river system	нга
Лунчес	foreign language	Sym-Yenisei river system	NULL
Луча	name	Algoma river system	NULL
Луча биран	name	Muya-Khani river system	NULL

Луча биран	name	Olyokma-Tungir river system	NULL
Луча биран	name	Sutam-Gonam river system	NULL
Лэвэктэ	landscape	Sutam-Gonam river system	кта
Лэвэктэ	landscape	Algoma river system	кта
Люча	name	Kamo-Taiga river system	NULL
Мавручи	unknown	Algoma river system	NULL
Мадра	unknown	Kamo-Taiga river system	NULL
Мадра	unknown	Kamo-Taiga river system	NULL
Майгуна	fauna	Podkamennaya Tunguska river system	NULL
Малэй Дес	landscape	Zeya river system	NULL
Мангус	unknown	Algoma river system	NULL
Мармачи	house	Olyokma-Tungir river system	чи
Мармачи	house	Muya-Khani river system	чи
Мармачи	house	Muya-Khani river system	чи
Мармачи	house	Olyokma-Tungir river system	чи
Мармачикан	house	Muya-Khani river system	чи
Мармачикан	house	Sutam-Gonam river system	чи
Мармачикан	house	Olyokma-Tungir river system	чи
Мармачикан	house	Muya-Khani river system	кан
Мармачикан	house	Sutam-Gonam river system	кан
Мармачикан	house	Olyokma-Tungir river system	кан
Марсака	unknown	Algoma river system	NULL
Марэкта	landscape	Olyokma-Tungir river system	кта
Маура	unknown	Kamo-Taiga river system	NULL
Мевачан	anatomical reference	Algoma river system	чан
Мевачан бираканин	anatomical reference	Algoma river system	POSS
Мевачан бираканин	anatomical reference	Algoma river system	чан
Мевачан бираканин	anatomical reference	Algoma river system	кан
Меректа	landscape	Sutam-Gonam river system	кта
Меректа	landscape	Olyokma-Tungir river system	кта
Меректа	landscape	Muya-Khani river system	кта
Микчанда	fauna	Kamo-Taiga river system	нгна/нгда/нда/нгра
Минмока	unknown	Kamo-Taiga river system	NULL
Миро	anatomical reference	Sutam-Gonam river system	NULL
Миро	anatomical reference	Olyokma-Tungir river system	NULL
Миро	anatomical reference	Muya-Khani river system	NULL
Мирюки	unknown	Kamo-Taiga river system	NULL
Мирюки	unknown	Podkamennaya Tunguska river system	NULL
Мискэ	name	Sutam-Gonam river system	NULL
Мискэ	name	Muya-Khani river system	NULL

Могота	fauna	Olyokma-Tungir river system	NULL
Могота	fauna	Muya-Khani river system	NULL
Могота	fauna	Sutam-Gonam river system	NULL
Мойгунэ	fauna	Podkamennaya Tunguska river system	NULL
Мокли	flora	Olyokma-Tungir river system	NULL
Мокурье	unknown	Olyokma-Tungir river system	NULL
Мокурья	unknown	Muya-Khani river system	NULL
Мокурья	unknown	Olyokma-Tungir river system	NULL
Мокурья	unknown	Sutam-Gonam river system	NULL
Мокчали	fauna	Sutam-Gonam river system	ли
Мокчали	fauna	Olyokma-Tungir river system	ли
Мокчали	fauna	Muya-Khani river system	ли
Мокчон	unknown	Sutam-Gonam river system	NULL
Мокчон	unknown	Olyokma-Tungir river system	NULL
Мокчон	unknown	Muya-Khani river system	NULL
Молодей	unknown	Nidym-Taymura river system	NULL
Монапкич	event	Yenisei-Yeloguy river system	кит
Монапкич	event	Yenisei-Yeloguy river system	в
Монгнорин	assessment	Muya-Khani river system	рин
Монгнорин	assessment	Sutam-Gonam river system	рин
Монгнорин	assessment	Olyokma-Tungir river system	рин
Монгокту	flora	Sym-Yenisei river system	кта
Монгыдёкто (?)	unknown	Podkamennaya Tunguska river system	NULL
Монсоли	unknown	Olyokma-Tungir river system	NULL
Монсоли	unknown	Muya-Khani river system	NULL
Монсоли	unknown	Sutam-Gonam river system	NULL
Морнга	flora	Podkamennaya Tunguska river system	NULL
Моча	landscape	Olyokma-Tungir river system	NULL
Моча	landscape	Muya-Khani river system	NULL
Моча	landscape	Sutam-Gonam river system	NULL
Моша	landscape	Sym-Yenisei river system	NULL
Мудапкит	landscape	Olyokma-Tungir river system	кит
Мудапкит	landscape	Sutam-Gonam river system	кит
Мудапкит	landscape	Muya-Khani river system	кит
Мудылто	name	Sutam-Gonam river system	NULL
Мудылто	name	Muya-Khani river system	NULL
Мудылто	name	Olyokma-Tungir river system	NULL
Мукунда	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Мукунда	fauna	Algoma river system	нгна/нгда/нда/нгра
Мукундэ	fauna	Algoma river system	нгна/нгда/нда/нгра
Мулам	unknown	Algoma river system	NULL
Мулэм	unknown	Algoma river system	NULL
Мулэмэкит	place	Algoma river system	ма
Мулэмэкит	place	Algoma river system	кит
Мурин онгкон	flora	Algoma river system	POSS

Муртыдаг	unknown	Algoma river system	NULL
Муртыдяк	unknown	Sutam-Gonam river system	NULL
Муртыдяк	unknown	Algoma river system	NULL
Муртык	unknown	Algoma river system	NULL
Муртык	unknown	Sutam-Gonam river system	NULL
Мухуктэ	landscape	Sutam-Gonam river system	кта
Мухуктэ	landscape	Algoma river system	кта
Муя	physical features	Sutam-Gonam river system	а
Муя	physical features	Muya-Khani river system	а
Муя	physical features	Olyokma-Tungir river system	а
Мэкчэнэй	name	Algoma river system	NULL
Мэкчэнэй	name	Algoma river system	NULL
Мэкэчу	unknown	Algoma river system	NULL
Мэхэк	unknown	Algoma river system	NULL
Накипелая	foreign language	Kamo-Taiga river system	NULL
Накита	sacred	Podkamennaya Tunguska river system	NULL
Накита	sacred	Kamo-Taiga river system	NULL
Налдындя	event	Algoma river system	ндя
Налурак	object	Algoma river system	NULL
Налурак	object	Algoma river system	NULL
Намакар	object	Kamo-Taiga river system	PL
Наминар	unknown	Olyokma-Tungir river system	NULL
Наминга	unknown	Sutam-Gonam river system	NULL
Наминга	unknown	Muya-Khani river system	NULL
Наминга	unknown	Olyokma-Tungir river system	NULL
Наминир	unknown	Muya-Khani river system	NULL
Наминир	unknown	Olyokma-Tungir river system	NULL
Намурак	landscape	Olyokma-Tungir river system	к
Наптакит	landscape	Muya-Khani river system	кит
Наптакит	landscape	Olyokma-Tungir river system	кит
Наптакит	landscape	Sutam-Gonam river system	кит
Нара	fauna	Sym-Yenisei river system	NULL
Нара (?)	fauna	Muya-Khani river system	NULL
Нарбай	unknown	Olyokma-Tungir river system	NULL
Нардакан	unknown	Kamo-Taiga river system	NULL
Нардакан	unknown	Podkamennaya Tunguska river system	NULL
Нардокан	unknown	Podkamennaya Tunguska river system	NULL
Нача	unknown	Sym-Yenisei river system	ча
Нгингандэ	unknown	Kamo-Taiga river system	NULL
Нгокла	flora	Muya-Khani river system	NULL
Нгокла	flora	Olyokma-Tungir river system	NULL
Нгокла	flora	Sutam-Gonam river system	NULL
Нгоклакан	flora	Sutam-Gonam river system	кан
Нгоклакан	flora	Olyokma-Tungir river system	кан
Нгоклакан	flora	Muya-Khani river system	кан

Нгонам	physical features	Algoma river system	NULL
Нгонам	physical features	Sutam-Gonam river system	NULL
Небэнгу	unknown	Kamo-Taiga river system	NULL
Неван	anatomical reference	Sutam-Gonam river system	NULL
Неван	anatomical reference	Olyokma-Tungir river system	NULL
Неван	anatomical reference	Muya-Khani river system	NULL
Недешеме	unknown	Kamo-Taiga river system	NULL
Недешеме	unknown	Podkamennaya Tunguska river system	NULL
Недешэмэ	unknown	Podkamennaya Tunguska river system	NULL
Недешэмэ	unknown	Kamo-Taiga river system	NULL
Некорак	fauna	Kamo-Taiga river system	рак
Некэнгрэ	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Некэнгрэ	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Некэнгрэ	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Некэнгрэ	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Нельго	flora	Sutam-Gonam river system	NULL
Нельго	flora	Olyokma-Tungir river system	NULL
Нельго	flora	Muya-Khani river system	NULL
Нембе	unknown	Podkamennaya Tunguska river system	NULL
Нембе	unknown	Kamo-Taiga river system	NULL
Немнуги	unknown	Olyokma-Tungir river system	NULL
Немнуги	unknown	Sutam-Gonam river system	NULL
Немнуги	unknown	Muya-Khani river system	NULL
Ненгнегинде	nomadic circle	Sutam-Gonam river system	нгна/нгда/нда/нгра
Ненгнегинде	nomadic circle	Sutam-Gonam river system	гин
Ненгнегинде	nomadic circle	Muya-Khani river system	гин
Ненгнегинде	nomadic circle	Muya-Khani river system	нгна/нгда/нда/нгра
Ненгнекит	nomadic circle	Olyokma-Tungir river system	кит
Ненгнекит	nomadic circle	Muya-Khani river system	кит
Ненгнекит	nomadic circle	Sutam-Gonam river system	кит
Ненгнескит	nomadic circle	Sutam-Gonam river system	кит
Ненгнескит	nomadic circle	Sutam-Gonam river system	кит
Непен хоронгитын	position	Algoma river system	ги
Непен хоронгитын	position	Algoma river system	POSS
Нерунгна	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Нерунгна	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Нерунгна	fauna	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Нерунгна	fauna	Kamo-Taiga river system	нгна/нгда/нда/нгра
Нерча	event	Sutam-Gonam river system	NULL
Нерча	event	Muya-Khani river system	NULL
Нерча	event	Olyokma-Tungir river system	NULL
Нетэлка	unknown	Podkamennaya Tunguska river system	NULL

Нетэлка	unknown	Kamo-Taiga river system	NULL
Нечики	unknown	Sutam-Gonam river system	NULL
Нечики	unknown	Olyokma-Tungir river system	NULL
Нечики	unknown	Muya-Khani river system	NULL
Нёнгэро	assessment	Algoma river system	ра
Нё(?)пурьон	unknown	Muya-Khani river system	NULL
Нё(?)пурьон	unknown	Sutam-Gonam river system	NULL
Нё(?)пурьон	unknown	Olyokma-Tungir river system	NULL
Нидым	unknown	Nidym-Taymura river system	NULL
Нидымкан	unknown	Nidym-Taymura river system	NULL
Нижний Юктокон	landscape	Chunya river system	кан
Нимганзек	unknown	Muya-Khani river system	NULL
Нимганзек	unknown	Sutam-Gonam river system	NULL
Нимганзек	unknown	Olyokma-Tungir river system	NULL
Нирунгда	fauna	Algoma river system	нгна/нгда/нда/нгра
Нирунгда	fauna	Algoma river system	нгна/нгда/нда/нгра
Нирунгнакит	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Нирунгнакит	fauna	Muya-Khani river system	кит
Нирунгнакит	fauna	Olyokma-Tungir river system	кит
Нирунгнакит	fauna	Sutam-Gonam river system	кит
Нирунгнакит	fauna	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Нирунгнакит	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Нирунгра	fauna	Sym-Yenisei river system	нгна/нгда/нда/нгра
Нирунгра	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Нирунгра	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Нирунгра	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Нирунгра	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Нирунда	fauna	Algoma river system	нгна/нгда/нда/нгра
Ниручи	fauna	Algoma river system	чи
Нирэчи	landscape	Sutam-Gonam river system	чи
Нирэчи	landscape	Sutam-Gonam river system	чи
Нитомакта	unknown	Muya-Khani river system	NULL
Н. Ларбо	unknown	Muya-Khani river system	NULL
Н. Ларбо	unknown	Sutam-Gonam river system	NULL
Н. Ларбо	unknown	Olyokma-Tungir river system	NULL
Нокукон	house	Kamo-Taiga river system	кан
Нолба	unknown	Sutam-Gonam river system	NULL
Нолба	unknown	Olyokma-Tungir river system	NULL
Нолба	unknown	Muya-Khani river system	NULL
Нонгото	nature phenomenon	Algoma river system	NULL
Нонгыдёкит	unknown	Podkamennaya Tunguska river system	NULL
Нонгыдёкит	unknown	Kamo-Taiga river system	NULL
Нукакто	unknown	Olyokma-Tungir river system	NULL
Нукконо	unknown	Muya-Khani river system	NULL
Нукконо	unknown	Olyokma-Tungir river system	NULL
Нукконо	unknown	Sutam-Gonam river system	NULL

Нульгаки	nomadic circle	Muya-Khani river system	ки
Нульгаки	nomadic circle	Olyokma-Tungir river system	ки
Нульгаки	nomadic circle	Sutam-Gonam river system	ки
Нульги	nomadic circle	Kamo-Taiga river system	NULL
Нуям	unknown	Algoma river system	NULL
Нуям	unknown	Sutam-Gonam river system	NULL
Нэлгэ	flora	Algoma river system	NULL
Нэлгэ	flora	Sutam-Gonam river system	NULL
Нэлгэ	flora	Olyokma-Tungir river system	NULL
Нэлэгэр	unknown	Olyokma-Tungir river system	NULL
Нэлэгэр	unknown	Muya-Khani river system	NULL
Нэлэгэр	unknown	Sutam-Gonam river system	NULL
Нэмбэ	unknown	Kamo-Taiga river system	NULL
Нэмбэ	unknown	Podkamennaya Tunguska river system	NULL
Нэюмку онгкия	flora	Sym-Yenisei river system	NULL
Нюнюлгэ	unknown	Tym-Sym river system	NULL
Нячикий	unknown	Olyokma-Tungir river system	NULL
Нячикий	unknown	Muya-Khani river system	NULL
Нячикий	unknown	Sutam-Gonam river system	NULL
Овик	unknown	Muya-Khani river system	NULL
Овик	unknown	Olyokma-Tungir river system	NULL
Овик	unknown	Sutam-Gonam river system	NULL
Овоян	unknown	Kamo-Taiga river system	NULL
Овунгнукит	motion	Sutam-Gonam river system	кит
Овунгнукит	motion	Muya-Khani river system	кит
Овунгнукит	motion	Olyokma-Tungir river system	кит
Овунгнукит	motion	Sutam-Gonam river system	кит
Овунгнукит	motion	Muya-Khani river system	кит
Овунгнукит	motion	Olyokma-Tungir river system	кит
Огекта	unknown	Sutam-Gonam river system	NULL
Огекта	unknown	Algoma river system	NULL
Огнокон	unknown	Kamo-Taiga river system	NULL
Огнякон	unknown	Kamo-Taiga river system	NULL
Огор	motion	Algoma river system	NULL
Огор бира	motion	Algoma river system	NULL
Олгодо	physical features	Olyokma-Tungir river system	да
Олгокон	physical features	Olyokma-Tungir river system	кан
Олгокон	physical features	Muya-Khani river system	кан
Олгокон	physical features	Sutam-Gonam river system	кан
Олдое	position	Muya-Khani river system	NULL
Олдое	position	Sutam-Gonam river system	NULL
Олдонгдо	fauna	Algoma river system	нгна/нгда/нда/нгра
Оледа	unknown	Algoma river system	NULL
Олекма	unknown	Olyokma-Tungir river system	NULL
Олешка	foreign language	Muya-Khani river system	NULL
Олешка	foreign language	Olyokma-Tungir river system	NULL
Олешка	foreign language	Sutam-Gonam river system	NULL

Олёшка (?)	unknown	Olyokma-Tungir river system	NULL
Оллокон	fauna	Podkamennaya Tunguska river system	кан
Оллокон	fauna	Kamo-Taiga river system	кан
Олломокит	fauna	Muya-Khani river system	кит
Олломокит	fauna	Sutam-Gonam river system	кит
Олломокит	fauna	Olyokma-Tungir river system	кит
Олломокит	fauna	Sutam-Gonam river system	ма
Олломокит	fauna	Olyokma-Tungir river system	ма
Олломокит	fauna	Muya-Khani river system	ма
Олломокит	fauna	Muya-Khani river system	кит
Олломокит	fauna	Olyokma-Tungir river system	кит
Олломокит	fauna	Sutam-Gonam river system	кит
Оллонгро	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Оллонгро	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Оллонгро	fauna	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Оллонгро	fauna	Zeya river system	нгна/нгда/нда/нгра
Оллоннгно	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Оллоннокон	fauna	Podkamennaya Tunguska river system	нгна/нгда/нда/нгра
Оллоннокон	fauna	Podkamennaya Tunguska river system	кан
Оллонокон	fauna	Kamo-Taiga river system	на
Оллонокон	fauna	Kamo-Taiga river system	кан
Оллончин	fauna	Olyokma-Tungir river system	чи
Оллончин	fauna	Olyokma-Tungir river system	POSS
Оллончин	fauna	Olyokma-Tungir river system	POSS
Оллур	object	Olyokma-Tungir river system	PL
Олода	event	Algoma river system	да
Олокома (Олекма)	unknown	Olyokma-Tungir river system	NULL
Олонгнокон	motion	Podkamennaya Tunguska river system	кан
Олонгнокон	motion	Podkamennaya Tunguska river system	нгна/нгда/нда/нгра
Олонтурак	unknown	Sutam-Gonam river system	NULL
Олонтурак	unknown	Olyokma-Tungir river system	NULL
Олонтурак	unknown	Muya-Khani river system	NULL
Ольбоксо	unknown	Olyokma-Tungir river system	NULL
Ольбоксо	unknown	Muya-Khani river system	NULL
Ольбоксо	unknown	Sutam-Gonam river system	NULL
Ольгодо	physical features	Kamo-Taiga river system	да
Онгкие	flora	Sym-Yenisei river system	NULL
Онгно	physical features	Chunya river system	NULL
Онгнокочи	fauna	Sutam-Gonam river system	кан
Онгнокочи	fauna	Muya-Khani river system	чи
Онгнокочи	fauna	Olyokma-Tungir river system	чи
Онгнокочи	fauna	Sutam-Gonam river system	чи
Онгнокочи	fauna	Muya-Khani river system	кан

Онгнокочи	fauna	Olyokma-Tungir river system	кан
Онгокит	flora	Kamo-Taiga river system	кит
Онёронгда	object	Algoma river system	нгна/нгда/нда/нгра
Онкок	unknown	Podkamennaya Tunguska river system	NULL
Онкон	unknown	Podkamennaya Tunguska river system	NULL
Онкта	unknown	Muya-Khani river system	NULL
Онкта	unknown	Olyokma-Tungir river system	NULL
Онкта	unknown	Sutam-Gonam river system	NULL
Оннё	unknown	Tributary of Tunguska River?	NULL
Онок	place	Kamo-Taiga river system	к
Оньокомокто	fauna	Kamo-Taiga river system	макта
Орочи	fauna	Muya-Khani river system	чи
Орочи	fauna	Olyokma-Tungir river system	чи
Орочи	fauna	Sutam-Gonam river system	чи
Орыльгокто	unknown	Podkamennaya Tunguska river system	NULL
Орыргокто	unknown	Podkamennaya Tunguska river system	NULL
Оскоба	unknown	Podkamennaya Tunguska river system	NULL
Охокток	foreign language	Sutam-Gonam river system	NULL
Охоткток	foreign language	Muya-Khani river system	NULL
Охоткток	foreign language	Sutam-Gonam river system	NULL
Пала	object	Olyokma-Tungir river system	NULL
Пала	object	Olyokma-Tungir river system	NULL
Парама	unknown	Sutam-Gonam river system	NULL
Парама	unknown	Muya-Khani river system	NULL
Парама	unknown	Olyokma-Tungir river system	NULL
Певаин	unknown	Olyokma-Tungir river system	NULL
Певаин	unknown	Muya-Khani river system	NULL
Певаин	unknown	Sutam-Gonam river system	NULL
Пенкин	foreign language	Olyokma-Tungir river system	NULL
Пенкин	foreign language	Muya-Khani river system	NULL
Пенкин	foreign language	Sutam-Gonam river system	NULL
Пескачан	unknown	Muya-Khani river system	NULL
Пескачан	unknown	Sutam-Gonam river system	NULL
Пескачан	unknown	Olyokma-Tungir river system	NULL
Петнак	unknown	Algoma river system	NULL
Петнак	unknown	Sutam-Gonam river system	NULL
Петный	unknown	Muya-Khani river system	NULL
Петный	unknown	Olyokma-Tungir river system	NULL
Петный	unknown	Sutam-Gonam river system	NULL
Петровский	foreign language	Zeya river system	NULL
Покое	unknown	Muya-Khani river system	NULL
Покое	unknown	Olyokma-Tungir river system	NULL
Поктыроньок	event	Olyokma-Tungir river system	к

Поктыроньок	event	Muya-Khani river system	к
Поктыроньок	event	Sutam-Gonam river system	к
Полигус	name	Kamo-Taiga river system	NULL
Полпоро	unknown	Chunya river system	NULL
Полпоты	unknown	Podkamennaya Tunguska river system	NULL
Полпоты	unknown	Kamo-Taiga river system	NULL
Полпоты	unknown	Podkamennaya Tunguska river system	NULL
Полпоты	unknown	Kamo-Taiga river system	NULL
Польпоро	unknown	Kamo-Taiga river system	NULL
Помо	unknown	Sutam-Gonam river system	NULL
Помо	unknown	Olyokma-Tungir river system	NULL
Помо	unknown	Podkamennaya Tunguska river system	NULL
Помо	unknown	Muya-Khani river system	NULL
Посидокто (нрзб)	unknown	Tributary of Tunguska River?	NULL
Пулванэнгра	unknown	Tym-Sym river system	NULL
Пурикан	house	Olyokma-Tungir river system	кан
Пурикан	house	Muya-Khani river system	кан
Пурикан	house	Sutam-Gonam river system	кан
Пурча	object	Sym-Yenisei river system	NULL
Пэйэнгу	unknown	Tym-Sym river system	NULL
Пятной (Pätnoj)	unknown	Olyokma-Tungir river system	NULL
Ролонокон	unknown	Kamo-Taiga river system	NULL
Ромокон	unknown	Podkamennaya Tunguska river system	NULL
Росолка	foreign language	Podkamennaya Tunguska river system	NULL
Рускуль	unknown	Muya-Khani river system	NULL
Рускуль	unknown	Olyokma-Tungir river system	NULL
Рускуль	unknown	Sutam-Gonam river system	NULL
Саивакан	house	Olyokma-Tungir river system	кан
Сакатыка	unknown	Olyokma-Tungir river system	NULL
Сакатыка	unknown	Muya-Khani river system	NULL
Сакатыка	unknown	Sutam-Gonam river system	NULL
Сапан	name	Algoma river system	NULL
Саркиняк	unknown	Sutam-Gonam river system	NULL
Саркиняк	unknown	Olyokma-Tungir river system	NULL
Саркиняк	unknown	Muya-Khani river system	NULL
Сарсакат	unknown	Olyokma-Tungir river system	NULL
Сатмарани	fauna	Algoma river system	ни
Сатымар	flora	Algoma river system	NULL
Свирыгли	unknown	Sutam-Gonam river system	NULL
Свирыгли	unknown	Olyokma-Tungir river system	NULL
Свирыгли	unknown	Muya-Khani river system	NULL
Севенак	sacred	Muya-Khani river system	к
Севенак	sacred	Sutam-Gonam river system	к

Севенак	sacred	Olyokma-Tungir river system	к
Севэнак	sacred	Olyokma-Tungir river system	к
Седластый	foreign language	Sym-Yenisei river system	NULL
Седовичи	unknown	Sutam-Gonam river system	NULL
Селая	unknown	Muya-Khani river system	NULL
Селая	unknown	Olyokma-Tungir river system	NULL
Селая	unknown	Sutam-Gonam river system	NULL
Селокир	unknown	Muya-Khani river system	NULL
Селокир	unknown	Sutam-Gonam river system	NULL
Селокир	unknown	Olyokma-Tungir river system	NULL
Селыя	unknown	Muya-Khani river system	NULL
Селыя	unknown	Sutam-Gonam river system	NULL
Селыя	unknown	Olyokma-Tungir river system	NULL
Сельбидан	unknown	Kamo-Taiga river system	NULL
Семондя	name	Algoma river system	ндя
Сенганнгна	fauna	Chunya river system	нгна/нгда/нда/нгра
Серби	unknown	Algoma river system	NULL
Сергакит	sacred	Sutam-Gonam river system	кит
Сергакит	sacred	Muya-Khani river system	кит
Сергакит	sacred	Olyokma-Tungir river system	кит
Серсекат	unknown	Muya-Khani river system	NULL
Серсекат	unknown	Sutam-Gonam river system	NULL
Серсекат	unknown	Olyokma-Tungir river system	NULL
Сетекекит	unknown	Muya-Khani river system	NULL
Сетекекит	unknown	Sutam-Gonam river system	NULL
Сетекекит	unknown	Olyokma-Tungir river system	NULL
Сивак	flora	Olyokma-Tungir river system	NULL
Сивак	flora	Sutam-Gonam river system	NULL
Сивак	flora	Muya-Khani river system	NULL
Сивака	flora	Sutam-Gonam river system	а
Сивачи	flora	Muya-Khani river system	чи
Сивачи	flora	Olyokma-Tungir river system	чи
Сивачи	flora	Muya-Khani river system	чи
Сивачи	flora	Sutam-Gonam river system	чи
Сивачи	flora	Olyokma-Tungir river system	чи
Сивачи	flora	Sutam-Gonam river system	чи
Сивелукта	unknown	Olyokma-Tungir river system	NULL
Сивелукта	unknown	Sutam-Gonam river system	NULL
Сивелукта	unknown	Muya-Khani river system	NULL
Сививдочи (?)	unknown	Olyokma-Tungir river system	NULL
Сививья	unknown	Olyokma-Tungir river system	NULL
Сививья	unknown	Muya-Khani river system	NULL
Сививья	unknown	Sutam-Gonam river system	NULL
Сивилук	landscape	Olyokma-Tungir river system	NULL
Сивэгликэн	flora	Algoma river system	кан
Сивэглиндя	flora	Algoma river system	ндя
Сивэглиндя	flora	Algoma river system	ли
Сигулэчи	assessment	Muya-Khani river system	чи

Сигулэчи	assessment	Sutam-Gonam river system	чи
Сидор	name	Algoma river system	NULL
Сипсики	unknown	Olyokma-Tungir river system	NULL
Сиригли	fauna	Olyokma-Tungir river system	гли
Сируги	landscape	Kamo-Taiga river system	NULL
Сиругли	fauna	Olyokma-Tungir river system	гли
Сиручи	fauna	Olyokma-Tungir river system	чи
Сйоэг	unknown	Algoma river system	NULL
Сокоен	unknown	Algoma river system	NULL
Сокоен	unknown	Sutam-Gonam river system	NULL
Солакмакит	place	Algoma river system	ма
Солакмакит	place	Algoma river system	кит
Солатун	unknown	Nidym-Taymura river system	NULL
Сологи	position	Algoma river system	ги
Солог Неннедекит	nomadic circle	Tributary of Tunguska River?	кит
Солокит	fauna	Sutam-Gonam river system	кит
Солокит	fauna	Muya-Khani river system	кит
Солокит	fauna	Tributary of Tunguska River?	кит
Солокиткия	fauna	Muya-Khani river system	кит
Солокиткия	fauna	Sutam-Gonam river system	ки
Солокиткия	fauna	Muya-Khani river system	ки
Солокиткия	fauna	Sutam-Gonam river system	кит
Солокичиндя	motion	Sutam-Gonam river system	чи
Солокичиндя	motion	Muya-Khani river system	чи
Солокичиндя	motion	Sutam-Gonam river system	ндя
Солокичиндя	motion	Muya-Khani river system	ндя
Солококит	fauna	Olyokma-Tungir river system	кит
Солокшо	unknown	Kamo-Taiga river system	NULL
Соломо	fauna	Podkamennaya Tunguska river system	ма
Соломо	fauna	Kamo-Taiga river system	ма
Солонгро	fauna	Muya-Khani river system	нгна/нгда/нда/нгра
Солонгро	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Сонама	object	Podkamennaya Tunguska river system	ма
Сонама	object	Podkamennaya Tunguska river system	ма
Сорбоко	unknown	Olyokma-Tungir river system	NULL
Сорганкангда	fauna	Algoma river system	нгна/нгда/нда/нгра
Сотококит	foreign language	Muya-Khani river system	NULL
Сотококит	foreign language	Olyokma-Tungir river system	NULL
Средняя	foreign language	Olyokma-Tungir river system	NULL
Средняя	foreign language	Sutam-Gonam river system	NULL
Средняя	foreign language	Muya-Khani river system	NULL
Сувиннгэтыдек	place	Algoma river system	дак
Сугдэккэн	fauna	Algoma river system	кан
Сугдюкан	fauna	Kamo-Taiga river system	кан
Сугдягиндя	fauna	Algoma river system	ндя

Судал	unknown	Olyokma-Tungir river system	NULL
Судэт	unknown	Algoma river system	NULL
Судям	unknown	Sutam-Gonam river system	NULL
Судям	unknown	Muya-Khani river system	NULL
Судям	unknown	Olyokma-Tungir river system	NULL
Сулаки	fauna	Muya-Khani river system	NULL
Сулаки	fauna	Olyokma-Tungir river system	NULL
Сулаки	fauna	Sutam-Gonam river system	NULL
Сунгнуктак	landscape	Muya-Khani river system	дак
Сунгнуктак	landscape	Olyokma-Tungir river system	дак
Сунгнуктак	landscape	Sutam-Gonam river system	дак
Сунтапча	unknown	Podkamennaya Tunguska river system	NULL
Сунтапча(?)	assessment	Podkamennaya Tunguska river system	ча
Сунтапча(?)	assessment	Podkamennaya Tunguska river system	в
Суптуктур	object	Zeya river system	ктур
Сурингна	fauna	Chunya river system	нгна/нгда/нда/нгра
Суругикан	unknown	Olyokma-Tungir river system	NULL
Сурутыкит	unknown	Olyokma-Tungir river system	кит
Сутам	unknown	Sutam-Gonam river system	NULL
Сутам	unknown	Muya-Khani river system	NULL
Сутуролак	unknown	Algoma river system	NULL
Сывельбе	unknown	Muya-Khani river system	NULL
Сывельбе	unknown	Olyokma-Tungir river system	NULL
Сывельбе	unknown	Sutam-Gonam river system	NULL
Сывэлгэ	unknown	Olyokma-Tungir river system	NULL
Сывэлгэ	unknown	Olyokma-Tungir river system	NULL
Сыругикан	landscape	Olyokma-Tungir river system	кан
Сыругикан	landscape	Sutam-Gonam river system	кан
Сыругикан	landscape	Muya-Khani river system	кан
Сыручи	landscape	Muya-Khani river system	чи
Сыручи	landscape	Muya-Khani river system	чи
Сыручи	landscape	Olyokma-Tungir river system	чи
Сыручи	landscape	Sutam-Gonam river system	чи
Сыручи	landscape	Olyokma-Tungir river system	чи
Сыручи	landscape	Sutam-Gonam river system	чи
Сысук	unknown	Podkamennaya Tunguska river system	NULL
Сэгикта	object	Podkamennaya Tunguska river system	NULL
Сэикта	object	Podkamennaya Tunguska river system	NULL
Тагдылон	object	Yenisei-Yeloguy river system	NULL
Таик	nature phenomenon	Algoma river system	NULL
Таик	nature phenomenon	Algoma river system	NULL

Таимба	unknown	Podkamennaya Tunguska river system	NULL
Таимба	unknown	Podkamennaya Tunguska river system	NULL
Тайга	foreign language	Kamo-Taiga river system	NULL
Тайги	foreign language	Kamo-Taiga river system	NULL
Тайги	foreign language	Podkamennaya Tunguska river system	NULL
Тайгикундя	unknown	Kamo-Taiga river system	NULL
Таймура	unknown	Nidym-Taymura river system	NULL
Такко	unknown	Olyokma-Tungir river system	NULL
Такко	unknown	Muya-Khani river system	NULL
Такко	unknown	Sutam-Gonam river system	NULL
Тактыкан	flora	Kamo-Taiga river system	NULL
Тактыкан	flora	Podkamennaya Tunguska river system	NULL
Такура	unknown	Kamo-Taiga river system	NULL
Такура	unknown	Podkamennaya Tunguska river system	NULL
Такура	unknown	Kamo-Taiga river system	NULL
Такура	unknown	Podkamennaya Tunguska river system	NULL
Тала	landscape	Sutam-Gonam river system	NULL
Тала	landscape	Algoma river system	NULL
Тала	landscape	Algoma river system	NULL
Тала	landscape	Olyokma-Tungir river system	NULL
Тала	landscape	Muya-Khani river system	NULL
Талакан	landscape	Muya-Khani river system	кан
Талакан	landscape	Olyokma-Tungir river system	кан
Талакан	landscape	Sutam-Gonam river system	кан
Талама	landscape	Muya-Khani river system	ма
Талама	landscape	Sutam-Gonam river system	ма
Талама	landscape	Olyokma-Tungir river system	ма
Таланда	landscape	Algoma river system	нгна/нгда/нда/нгра
Таланда	landscape	Sutam-Gonam river system	нгна/нгда/нда/нгра
Талая	landscape	Kamo-Taiga river system	а
Таликит	unknown	Sutam-Gonam river system	NULL
Таликит	unknown	Muya-Khani river system	NULL
Таликит	unknown	Olyokma-Tungir river system	NULL
Талоги	unknown	Podkamennaya Tunguska river system	NULL
Талочи	unknown	Podkamennaya Tunguska river system	NULL
Талу	flora	Algoma river system	NULL
Талу	flora	Algoma river system	NULL
Талума	flora	Podkamennaya Tunguska river system	ма
Талэк	unknown	Muya-Khani river system	NULL
Талэма	flora	Olyokma-Tungir river system	ма

Тамарог	unknown	Olyokma-Tungir river system	NULL
Тамарог	unknown	Olyokma-Tungir river system	NULL
Тамкан	unknown	Sutam-Gonam river system	NULL
Тамкан	unknown	Muya-Khani river system	NULL
Тамкан	unknown	Olyokma-Tungir river system	NULL
Таморог	object	Muya-Khani river system	NULL
Таморог	object	Muya-Khani river system	NULL
Таморог	object	Olyokma-Tungir river system	NULL
Таморог	object	Olyokma-Tungir river system	NULL
Танемо	unknown	Kamo-Taiga river system	NULL
Тапоуль (?)	name	Podkamennaya Tunguska river system	NULL
Тапоуль (?)	name	Kamo-Taiga river system	NULL
Тапта	unknown	Podkamennaya Tunguska river system	NULL
Тапта	unknown	Kamo-Taiga river system	NULL
Таптакан	unknown	Algoma river system	NULL
Таптакан	unknown	Algoma river system	NULL
Тарадак	unknown	Kamo-Taiga river system	NULL
Тарадак	unknown	Podkamennaya Tunguska river system	NULL
Тараку	unknown	Sutam-Gonam river system	NULL
Тараку	unknown	Muya-Khani river system	NULL
Тарбакил	object	Algoma river system	PL
Тарбакил	object	Algoma river system	PL
Таринак	unknown	Algoma river system	NULL
Тарынгак	unknown	Olyokma-Tungir river system	NULL
Тарынгак	unknown	Muya-Khani river system	NULL
Тарынгак	unknown	Sutam-Gonam river system	NULL
Тарынгна	unknown	Sutam-Gonam river system	NULL
Тарынгна	unknown	Muya-Khani river system	NULL
Тарынгна	unknown	Olyokma-Tungir river system	NULL
Тарэнгак	unknown	Algoma river system	NULL
Тас (?)	unknown	Muya-Khani river system	NULL
Тас (?)	unknown	Olyokma-Tungir river system	NULL
Тас (?)	unknown	Sutam-Gonam river system	NULL
Тастея	object	Algoma river system	NULL
Тастур	unknown	Muya-Khani river system	NULL
Тастур	unknown	Olyokma-Tungir river system	NULL
Тастур	unknown	Sutam-Gonam river system	NULL
Тастэя	object	Algoma river system	NULL
Татынгнок	flora	Muya-Khani river system	нак
Татынгнок	flora	Sutam-Gonam river system	нак
Татынгнок	flora	Olyokma-Tungir river system	нак
Тахонграк	unknown	Sutam-Gonam river system	NULL
Тахурак	foreign language	Muya-Khani river system	NULL
Тахурак	foreign language	Sutam-Gonam river system	NULL
Тахурак	foreign language	Muya-Khani river system	NULL

Тахурак	foreign language	Sutam-Gonam river system	NULL
Темок ?	unknown	Kamo-Taiga river system	NULL
Тепрокан	fauna	Olyokma-Tungir river system	NULL
Тепрокан	fauna	Muya-Khani river system	NULL
Тепрокан	fauna	Sutam-Gonam river system	NULL
Терем	unknown	Sutam-Gonam river system	NULL
Терем	unknown	Muya-Khani river system	NULL
Терем	unknown	Olyokma-Tungir river system	NULL
Тери	unknown	Kamo-Taiga river system	NULL
Теря	unknown	Kamo-Taiga river system	NULL
Тимптон	unknown	Sutam-Gonam river system	NULL
Тимптон	unknown	Muya-Khani river system	NULL
Тимптон	unknown	Olyokma-Tungir river system	NULL
Тимтон	unknown	Sutam-Gonam river system	NULL
Товок	unknown	Olyokma-Tungir river system	NULL
Тоглой	unknown	Muya-Khani river system	NULL
Тоглой	unknown	Sutam-Gonam river system	NULL
Токарикан	landscape	Sutam-Gonam river system	NULL
Токарикан	landscape	Muya-Khani river system	NULL
Токингда	fauna	Algoma river system	нгна/нгда/нда/нгра
Токко	unknown	Muya-Khani river system	NULL
Токсимо	unknown	Sutam-Gonam river system	NULL
Токсимо	unknown	Olyokma-Tungir river system	NULL
Токсимо	unknown	Muya-Khani river system	NULL
Токукан	unknown	Algoma river system	кан
Токун	unknown	Algoma river system	NULL
Токчако	landscape	Muya-Khani river system	NULL
Толбовой	foreign language	Olyokma-Tungir river system	NULL
Толбовой	foreign language	Muya-Khani river system	NULL
Толиндамакит (?)	place	Algoma river system	ма
Толиндамакит (?)	place	Sutam-Gonam river system	ма
Толок	unknown	Olyokma-Tungir river system	NULL
Толок	unknown	Sutam-Gonam river system	NULL
Толок	unknown	Muya-Khani river system	NULL
Тонгак	unknown	Sutam-Gonam river system	NULL
Тонгак	unknown	Olyokma-Tungir river system	NULL
Тонгак	unknown	Muya-Khani river system	NULL
Тонгурчикан	landscape	Olyokma-Tungir river system	кан
Тонгурчикан	landscape	Sutam-Gonam river system	кан
Тонгурчикан	landscape	Muya-Khani river system	чи
Тонгурчикан	landscape	Olyokma-Tungir river system	чи
Тонгурчикан	landscape	Sutam-Gonam river system	чи
Тонгурчикан	landscape	Muya-Khani river system	кан
Тоннак	unknown	Muya-Khani river system	NULL
Топкит	unknown	Kamo-Taiga river system	NULL
Топу	unknown	Kamo-Taiga river system	NULL
Тора	position	Olyokma-Tungir river system	NULL
Тора	position	Sutam-Gonam river system	NULL

Тора	position	Muya-Khani river system	NULL
Тотынгнак	object	Muya-Khani river system	нгна/нгда/нда/нгра
Тотынгнак	object	Sutam-Gonam river system	нгна/нгда/нда/нгра
Тотынгнак	object	Muya-Khani river system	к
Тотынгнак	object	Olyokma-Tungir river system	к
Тотынгнак	object	Sutam-Gonam river system	к
Тотынгнак	object	Olyokma-Tungir river system	NULL
Тотынгнак	object	Sutam-Gonam river system	NULL
Тотынгнак	object	Muya-Khani river system	NULL
Тотынгнак	object	Olyokma-Tungir river system	NULL
Тотынгнак	object	Muya-Khani river system	NULL
Тотынгнак	object	Olyokma-Tungir river system	нгна/нгда/нда/нгра
Тотынгнак	object	Sutam-Gonam river system	NULL
Тохомо	unknown	Kamo-Taiga river system	NULL
Точес	foreign language	Yenisei-Yeloguy river system	NULL
Труктак	unknown	Muya-Khani river system	NULL
Труктак	unknown	Olyokma-Tungir river system	NULL
Труктак	unknown	Sutam-Gonam river system	NULL
Тугурук	physical features	Muya-Khani river system	NULL
Тугурук	physical features	Sutam-Gonam river system	NULL
Тугэичи	phenomenon nature	Sutam-Gonam river system	чи
Тугэичи	phenomenon	Muya-Khani river system	чи
Тукалак	material	Sutam-Gonam river system	кан
Тукалак	material	Muya-Khani river system	кан
Тукалак	material	Olyokma-Tungir river system	кан
Туконча	name	Podkamennaya Tunguska river system	NULL
Туконча	name	Kamo-Taiga river system	NULL
Туксани	name	Algoma river system	NULL
Туксаникан	name	Algoma river system	кан
Туксаникан	name	Algoma river system	кан
Туксанни	name	Algoma river system	NULL
Тукулукэн (?)	material	Nidym-Taymura river system	кан
Тулэдек	place	Algoma river system	дак
Тунган	unknown	Olyokma-Tungir river system	NULL
Тунган	unknown	Sutam-Gonam river system	NULL
Тунган	unknown	Muya-Khani river system	NULL
Тунгир	object	Olyokma-Tungir river system	NULL
Тунгир	object	Olyokma-Tungir river system	NULL
Тунгиркан	object	Sutam-Gonam river system	кан
Тунгиркан	object	Muya-Khani river system	кан
Тунгиркан	object	Olyokma-Tungir river system	кан
Тунгирнгикан	object	Olyokma-Tungir river system	кан
Тунгирнгикан	object	Olyokma-Tungir river system	нги
Тунгон	phenomenon nature	Olyokma-Tungir river system	NULL

Тунгурикон	landscape	Sutam-Gonam river system	кан
Тунгурикон	landscape	Olyokma-Tungir river system	кан
Тунгурикон	landscape	Muya-Khani river system	кан
Тунгурча	unknown	Olyokma-Tungir river system	NULL
Тунгурча	unknown	Sutam-Gonam river system	NULL
Тунгурча	unknown	Muya-Khani river system	NULL
Тунирук	unknown	Olyokma-Tungir river system	NULL
Тунульчес	foreign language	Yenisei-Yeloguy river system	NULL
Тунчан	unknown	Muya-Khani river system	NULL
Тунчан	unknown	Sutam-Gonam river system	NULL
Тунчан	unknown	Olyokma-Tungir river system	NULL
Тупик (?)	unknown	Olyokma-Tungir river system	NULL
Турами	unknown	Podkamennaya Tunguska river system	NULL
Турами	unknown	Kamo-Taiga river system	NULL
Турами	unknown	Chunya river system	NULL
Турга	event	Olyokma-Tungir river system	NULL
Турга	event	Kamo-Taiga river system	NULL
Турука	material	Kamo-Taiga river system	a
Туруко	material	Kamo-Taiga river system	NULL
Туруко	material	Podkamennaya Tunguska river system	NULL
Туруконча	unknown	Podkamennaya Tunguska river system	NULL
Тушоль	unknown	Kamo-Taiga river system	NULL
Тыгдэлэн	object	Sym-Yenisei river system	NULL
Тым	unknown	Tym-Sym river system	NULL
Тын	unknown	Algoma river system	NULL
Тырак Мостах	foreign language	Sutam-Gonam river system	NULL
Тырак Мостах	foreign language	Muya-Khani river system	NULL
Тырак Мостах	foreign language	Olyokma-Tungir river system	NULL
Тыральгокта	unknown	Podkamennaya Tunguska river system	NULL
Тырольчокта	unknown	Podkamennaya Tunguska river system	NULL
Тыхачи	name	Sutam-Gonam river system	NULL
Тыхачи	name	Muya-Khani river system	NULL
Тычана	unknown	Podkamennaya Tunguska river system	NULL
Тычана	unknown	Podkamennaya Tunguska river system	NULL
Тычано	unknown	Podkamennaya Tunguska river system	NULL
Тычаны	unknown	Chunya river system	NULL
Тэку(?)кэ	unknown	Zeya river system	NULL
Тэпкун	object	Olyokma-Tungir river system	NULL
Тэтынгнок	flora	Olyokma-Tungir river system	нак
Уа	unknown	Podkamennaya Tunguska river system	NULL

Убанге	unknown	Kamo-Taiga river system	NULL
Угенгангдэ	unknown	Algoma river system	NULL
Угоян	unknown	Kamo-Taiga river system	NULL
Угунг хуруя	unknown	Muya-Khani river system	NULL
Угунг хуруя	unknown	Sutam-Gonam river system	NULL
Угунг хуруя	unknown	Olyokma-Tungir river system	NULL
Удик	anatomical reference	Olyokma-Tungir river system	NULL
Удугуй	unknown	Algoma river system	NULL
Удугуй	unknown	Sutam-Gonam river system	NULL
Удум	unknown	Algoma river system	NULL
Удунгхуруя	unknown	Muya-Khani river system	NULL
Удунгхуруя	unknown	Sutam-Gonam river system	NULL
Удунгхуруя	unknown	Olyokma-Tungir river system	NULL
Удунгхуруя	unknown	Muya-Khani river system	NULL
Удунгхуруя	unknown	Sutam-Gonam river system	NULL
Удунгхуруя	unknown	Olyokma-Tungir river system	NULL
Уингандэ	unknown	Podkamennaya Tunguska river system	NULL
Уинганда	unknown	Podkamennaya Tunguska river system	NULL
Уинганда	unknown	Kamo-Taiga river system	NULL
Укикит	place	Algoma river system	кит
Укикиткэн	place	Algoma river system	кит
Укикиткэн	place	Algoma river system	кан
Уксиктэ	landscape	Chunya river system	кта
Улгэндя	landscape	Sutam-Gonam river system	ндя
Улгэндя	landscape	Algoma river system	ндя
Уллур	unknown	Muya-Khani river system	NULL
Уллур	unknown	Sutam-Gonam river system	NULL
Уллур	unknown	Olyokma-Tungir river system	NULL
Уллурчик	unknown	Olyokma-Tungir river system	NULL
Уллурчик	unknown	Muya-Khani river system	NULL
Уллурчик	unknown	Sutam-Gonam river system	NULL
Уллэгириндя	name	Sutam-Gonam river system	ндя
Уллэгириндя	name	Muya-Khani river system	ндя
Улунган	unknown	Muya-Khani river system	NULL
Улунган	unknown	Olyokma-Tungir river system	NULL
Улунган	unknown	Sutam-Gonam river system	NULL
Улунгон	unknown	Olyokma-Tungir river system	NULL
Улунгру	landscape	Muya-Khani river system	нгна/нгда/нда/нгра
Улунгру	landscape	Sutam-Gonam river system	нгна/нгда/нда/нгра
Улунгру	landscape	Olyokma-Tungir river system	нгна/нгда/нда/нгра
(?)улурак	unknown	Sutam-Gonam river system	NULL
(?)улурак	unknown	Algoma river system	NULL
Умды	unknown	Algoma river system	NULL
Умдыткэн	unknown	Algoma river system	NULL
Умкуркэй	unknown	Olyokma-Tungir river system	NULL

Уммукон	unknown	Podkamennaya Tunguska river system	NULL
Умунма	anatomical reference	Muya-Khani river system	ма
Умунма	anatomical reference	Olyokma-Tungir river system	ма
Умунма	anatomical reference	Sutam-Gonam river system	ма
Унаха	unknown	Zeya river system	NULL
Унгапта	unknown	Kamo-Taiga river system	NULL
Унгкуркей	unknown	Sutam-Gonam river system	NULL
Унгкуркей	unknown	Olyokma-Tungir river system	NULL
Унгкуркей	unknown	Muya-Khani river system	NULL
Унды	unknown	Algoma river system	NULL
Ункур	unknown	Olyokma-Tungir river system	NULL
Ункур	unknown	Muya-Khani river system	NULL
Ункур	unknown	Sutam-Gonam river system	NULL
Уно	unknown	Podkamennaya Tunguska river system	NULL
Унту	unknown	Kamo-Taiga river system	NULL
Унту	unknown	Podkamennaya Tunguska river system	NULL
Унтувул	name	Tym-Sym river system	NULL
Унтугун	sacred	Podkamennaya Tunguska river system	NULL
Унтугун	sacred	Kamo-Taiga river system	NULL
Уоян	unknown	Podkamennaya Tunguska river system	NULL
Уоян (угоян?)	unknown	Podkamennaya Tunguska river system	NULL
Уоян (угоян?)	unknown	Kamo-Taiga river system	NULL
Ургэли	assessment	Zeya river system	ли
Урнги	unknown	Muya-Khani river system	NULL
Урнги	unknown	Sutam-Gonam river system	NULL
Урнги	unknown	Olyokma-Tungir river system	NULL
Урэгэчи	landscape	Sutam-Gonam river system	NULL
Урэгэчи	landscape	Muya-Khani river system	NULL
Уское	unknown	Muya-Khani river system	NULL
Усмун	unknown	Sutam-Gonam river system	NULL
Усмун	unknown	Muya-Khani river system	NULL
Усмун	unknown	Muya-Khani river system	NULL
Усмун	unknown	Sutam-Gonam river system	NULL
Усмуптыкив (неразб)	unknown	Olyokma-Tungir river system	NULL
Успенский	foreign language	Sutam-Gonam river system	NULL
Успенский	foreign language	Algoma river system	NULL
Утувлиг	unknown	Kamo-Taiga river system	NULL
Утугэй	unknown	Zeya river system	NULL
Утук	house	Algoma river system	NULL
Утумуг	unknown	Olyokma-Tungir river system	NULL

Утумук	flora	Muya-Khani river system	NULL
Утумук	flora	Sutam-Gonam river system	NULL
Утумук	flora	Kamo-Taiga river system	NULL
Учакикка (?) Угакикка	unknown	Olyokma-Tungir river system	NULL
Учакикка (?) Угакикка	unknown	Sutam-Gonam river system	NULL
Учакикка (?) Угакикка	unknown	Muya-Khani river system	NULL
Учикин	unknown	Algoma river system	NULL
Ушмукон	unknown	Podkamennaya Tunguska river system	NULL
Уялак	unknown	Algoma river system	NULL
Хагдынго Натрушка	object	Yenisei-Yeloguy river system	NULL
Хаку	assessment	Sutam-Gonam river system	NULL
Хаку	assessment	Olyokma-Tungir river system	NULL
Хаку	assessment	Muya-Khani river system	NULL
Хакунан	fauna	Muya-Khani river system	NULL
Хакунан	fauna	Sutam-Gonam river system	NULL
Хакунан	fauna	Sutam-Gonam river system	NULL
Хакунан	fauna	Olyokma-Tungir river system	NULL
Хакунан	fauna	Muya-Khani river system	NULL
Хакунан	fauna	Olyokma-Tungir river system	NULL
Хакунан	fauna	Sutam-Gonam river system	NULL
Хакунан	fauna	Muya-Khani river system	NULL
Хакунан	fauna	Olyokma-Tungir river system	NULL
Хакэ	object	Muya-Khani river system	NULL
Халпа	unknown	Olyokma-Tungir river system	NULL
Халэму	unknown	Olyokma-Tungir river system	NULL
Хангули	assessment	Podkamennaya Tunguska river system	ли
Ханитикта	unknown	Sutam-Gonam river system	NULL
Ханитикта	unknown	Muya-Khani river system	NULL
Ханитикта	unknown	Olyokma-Tungir river system	NULL
Хатан	unknown	Tributary of Tunguska River?	NULL
Хатангаткан	unknown	Tributary of Tunguska River?	NULL
Хелангда	fauna	Algoma river system	нгна/нгда/нда/нгра
Хигикэл	unknown	Sym-Yenisei river system	NULL
Хигкэнгрэ	unknown	Sutam-Gonam river system	NULL
Хигкэнгрэ	unknown	Muya-Khani river system	NULL
Хилирикта	fauna	Muya-Khani river system	рикта
Хилирикта	fauna	Sutam-Gonam river system	рикта
Хилирикта	fauna	Olyokma-Tungir river system	рикта
Химингра	object	Sym-Yenisei river system	нгна/нгда/нда/нгра
Хиндракич	object	Yenisei-Yeloguy river system	кит
Хихири (?)	unknown	Olyokma-Tungir river system	NULL
Ходюн	anatomical reference	Kamo-Taiga river system	NULL
Хоикта	landscape	Kamo-Taiga river system	кта
Хоикта	landscape	Podkamennaya Tunguska river system	кта

Хоил (?)	landscape	Sutam-Gonam river system	PL
Хоил (?)	landscape	Muya-Khani river system	PL
Хоил (?)	landscape	Olyokma-Tungir river system	PL
Хокей	unknown	Kamo-Taiga river system	NULL
Хорого	fauna	Algoma river system	NULL
Хорогочи	fauna	Muya-Khani river system	чи
Хорогочи	fauna	Sutam-Gonam river system	чи
Хорогочи	fauna	Sutam-Gonam river system	чи
Хорогочи	fauna	Muya-Khani river system	чи
Хугда	nature phenomenon	Sutam-Gonam river system	NULL
Хугда	nature phenomenon	Muya-Khani river system	NULL
Худонча	unknown	Kamo-Taiga river system	NULL
Худум	unknown	Algoma river system	NULL
Худуткэн	unknown	Algoma river system	NULL
Хуйен	unknown	Nidym-Taymura river system	NULL
Хуларин	physical features	Podkamennaya Tunguska river system	NULL
Хуларин	physical features	Kamo-Taiga river system	NULL
Хули	position	Algoma river system	NULL
Хулиг	flora	Algoma river system	к
Хули Натруска	object	Yenisei-Yeloguy river system	NULL
Хутекочон	unknown	Olyokma-Tungir river system	чан
Хутекочон	unknown	Olyokma-Tungir river system	кан
Хутекочон	unknown	Sutam-Gonam river system	кан
Хутекочон	unknown	Sutam-Gonam river system	чан
Хутекочон	unknown	Muya-Khani river system	кан
Хутекочон	unknown	Muya-Khani river system	чан
Хутеннок	unknown	Sutam-Gonam river system	нак
Хутеннок	unknown	Olyokma-Tungir river system	нак
Хутеннок	unknown	Muya-Khani river system	нак
Хутумуг	flora	Algoma river system	NULL
Хутымук	unknown	Algoma river system	NULL
Хэвчингкур	unknown	Algoma river system	NULL
Хэглан (?)	unknown	Algoma river system	NULL
Хэльпа	unknown	Muya-Khani river system	NULL
Хэльпа	unknown	Sutam-Gonam river system	NULL
Хэльпа	unknown	Olyokma-Tungir river system	NULL
Хэрэлгэк	landscape	Chunya river system	к
Хэюмурэк	unknown	Algoma river system	NULL
Чавида	material	Podkamennaya Tunguska river system	NULL
Чавида	material	Kamo-Taiga river system	NULL
Чавидакан	material	Chunya river system	кан
Чавидакан	material	Tributary of Tunguska River?	кан
Чадашомо	unknown	Kamo-Taiga river system	NULL

Чадашомо	unknown	Podkamennaya Tunguska river system	NULL
Чадошомо	unknown	Podkamennaya Tunguska river system	NULL
Чадукчей	unknown	Kamo-Taiga river system	NULL
Чадупча	unknown	Kamo-Taiga river system	NULL
Чадьбо	unknown	Kamo-Taiga river system	NULL
Чаичина	unknown	Kamo-Taiga river system	NULL
Чайдак	object	Muya-Khani river system	к
Чайдак	object	Sutam-Gonam river system	к
Чакатай	unknown	Algoma river system	NULL
Чакаэ	unknown	Podkamennaya Tunguska river system	NULL
Чалбачи	flora	Olyokma-Tungir river system	чи
Чалинга	unknown	Olyokma-Tungir river system	NULL
Чалинга	unknown	Sutam-Gonam river system	NULL
Чалинга	unknown	Muya-Khani river system	NULL
Чалка	fauna	Algoma river system	NULL
Чалка	fauna	Sutam-Gonam river system	NULL
Чалкичан	fauna	Olyokma-Tungir river system	чан
Чалкичан	fauna	Olyokma-Tungir river system	чан
Чангнули	unknown	Olyokma-Tungir river system	NULL
Чандандох	unknown	Kamo-Taiga river system	NULL
Чандымбо	unknown	Podkamennaya Tunguska river system	NULL
Чандымбо	unknown	Kamo-Taiga river system	NULL
Чанниктак	unknown	Sutam-Gonam river system	NULL
Чанниктак	unknown	Olyokma-Tungir river system	NULL
Чанниктак	unknown	Muya-Khani river system	NULL
Чара	foreign language	Muya-Khani river system	NULL
Чара	foreign language	Sutam-Gonam river system	NULL
Чара	foreign language	Olyokma-Tungir river system	NULL
Часкилах	unknown	Olyokma-Tungir river system	NULL
Часкилах	unknown	Muya-Khani river system	NULL
Часкилах	unknown	Sutam-Gonam river system	NULL
Чатканна	unknown	Olyokma-Tungir river system	NULL
Чатканна	unknown	Sutam-Gonam river system	NULL
Чатканна	unknown	Muya-Khani river system	NULL
Чатканнэ	unknown	Muya-Khani river system	NULL
Чевичина	unknown	Kamo-Taiga river system	NULL
Челтамда	unknown	Algoma river system	NULL
Ченча	physical features	Sutam-Gonam river system	NULL
Ченча	physical features	Olyokma-Tungir river system	NULL
Ченча	physical features	Muya-Khani river system	NULL
Черби (Серби)	unknown	Algoma river system	NULL
Червендер	unknown	Olyokma-Tungir river system	NULL
Червендер	unknown	Sutam-Gonam river system	NULL
Червендер	unknown	Muya-Khani river system	NULL

Череколак	unknown	Olyokma-Tungir river system	NULL
Череколак	unknown	Muya-Khani river system	NULL
Череколак	unknown	Sutam-Gonam river system	NULL
Черема	unknown	Podkamennaya Tunguska river system	NULL
Черемка	unknown	Kamo-Taiga river system	NULL
Черемный	foreign language	Muya-Khani river system	NULL
Черемный	foreign language	Sutam-Gonam river system	NULL
Черемный	foreign language	Olyokma-Tungir river system	NULL
Черемный	foreign language	Muya-Khani river system	NULL
Черемный	foreign language	Olyokma-Tungir river system	NULL
Черемный	foreign language	Sutam-Gonam river system	NULL
Черепчес	foreign language	Sym-Yenisei river system	NULL
Черес	unknown	Kamo-Taiga river system	NULL
Чечило	unknown	Olyokma-Tungir river system	NULL
Чечило	unknown	Muya-Khani river system	NULL
Чечило	unknown	Sutam-Gonam river system	NULL
Чивкан	fauna	Muya-Khani river system	кан
Чивкан	fauna	Sutam-Gonam river system	кан
Чильчамакит	name	Podkamennaya Tunguska river system	кит
Чина	unknown	Muya-Khani river system	NULL
Чингирикэн	fauna	Algoma river system	NULL
Чингирикэн	fauna	Sutam-Gonam river system	NULL
Чипчиндя	fauna	Sutam-Gonam river system	ндя
Чирамо	unknown	Kamo-Taiga river system	NULL
Чирамо	unknown	Podkamennaya Tunguska river system	NULL
Чирбэ	unknown	Nidym-Taymura river system	NULL
Чирикон	object	Podkamennaya Tunguska river system	NULL
Чирикон	object	Podkamennaya Tunguska river system	NULL
Чирода	anatomical reference	Muya-Khani river system	NULL
Чирода	anatomical reference	Sutam-Gonam river system	NULL
Чирода	anatomical reference	Olyokma-Tungir river system	NULL
Чиромо	unknown	Podkamennaya Tunguska river system	NULL
Чирумый (??)	foreign language	Olyokma-Tungir river system	NULL
Чирэмбу (Сым)	anatomical reference	Sym-Yenisei river system	ба
Чирэмбэкон	anatomical reference	Tym-Sym river system	кан
Чирэмбэкон	anatomical reference	Tym-Sym river system	ба
Чичакун	fauna	Algoma river system	NULL

Чоблочинэ	unknown	Chunya river system	NULL
Чокаэ	unknown	Podkamennaya Tunguska river system	NULL
Чокур	physical features	Olyokma-Tungir river system	NULL
Чокур	physical features	Muya-Khani river system	NULL
Чокур	physical features	Olyokma-Tungir river system	NULL
Чокур	physical features	Sutam-Gonam river system	NULL
Чокур	physical features	Muya-Khani river system	NULL
Чокур	physical features	Sutam-Gonam river system	NULL
Чокчоку	physical features	Sutam-Gonam river system	NULL
Чокчоку	physical features	Muya-Khani river system	NULL
Чокчоку	physical features	Olyokma-Tungir river system	NULL
Чокчокур	physical features	Olyokma-Tungir river system	NULL
Чокчокур	physical features	Sutam-Gonam river system	NULL
Чокчокур	physical features	Muya-Khani river system	NULL
Чолипчон	unknown	Kamo-Taiga river system	NULL
Чолипчон	unknown	Podkamennaya Tunguska river system	NULL
Чоло	unknown	Kamo-Taiga river system	NULL
Чондешешь	unknown	Yenisei-Yeloguy river system	NULL
Чопки	landscape	Tym-Sym river system	NULL
Чопкокон	landscape	Olyokma-Tungir river system	кан
Чопкокон	landscape	Olyokma-Tungir river system	кан
Чопкочи	landscape	Olyokma-Tungir river system	чи
Чуль	unknown	Sutam-Gonam river system	NULL
Чуль	unknown	Muya-Khani river system	NULL
Чуль	unknown	Olyokma-Tungir river system	NULL
Чульбан	material	Muya-Khani river system	NULL
Чульман	material	Sutam-Gonam river system	NULL
Чульман	material	Olyokma-Tungir river system	NULL
Чульман	material	Muya-Khani river system	NULL
Чуна	unknown	Chunya river system	NULL
Чуна	unknown	Podkamennaya Tunguska river system	NULL
Чуна	unknown	Kamo-Taiga river system	NULL
Чунаткан	unknown	Chunya river system	NULL
Чунгку	unknown	Chunya river system	NULL
Чунку	unknown	Chunya river system	NULL
Чуня	unknown	Podkamennaya Tunguska river system	NULL
Чуня	unknown	Kamo-Taiga river system	NULL
Чуняткан	unknown	Podkamennaya Tunguska river system	NULL
Чупкуро	landscape	Sutam-Gonam river system	ра
Чупкуро	landscape	Muya-Khani river system	ра
Чупкуро	landscape	Olyokma-Tungir river system	ра
Чургимо	landscape	Kamo-Taiga river system	ма
Чэра	foreign language	Olyokma-Tungir river system	NULL

Чэра	foreign language	Muya-Khani river system	NULL
Чэра	foreign language	Sutam-Gonam river system	NULL
Чэрэкэлэк	unknown	Olyokma-Tungir river system	NULL
Чэрэмко	unknown	Olyokma-Tungir river system	NULL
Чэрэмкэлэк	unknown	Olyokma-Tungir river system	NULL
Чэтканна	unknown	Sutam-Gonam river system	NULL
Чэтканна	unknown	Olyokma-Tungir river system	NULL
Чэтканна	unknown	Muya-Khani river system	NULL
Шангали	landscape	Kamo-Taiga river system	ли
Шектамэ	flora	Sym-Yenisei river system	ма
Шиво	unknown	Podkamennaya Tunguska river system	NULL
Шивок (?)	unknown	Kamo-Taiga river system	NULL
Шилка	landscape	Olyokma-Tungir river system	NULL
Шилка	landscape	Muya-Khani river system	NULL
Шилка	landscape	Sutam-Gonam river system	NULL
Шинкурок	unknown	Kamo-Taiga river system	NULL
Шоконангро	fauna	Yenisei-Yeloguy river system	нгна/нгда/нда/нгра
Шолокит	flora	Podkamennaya Tunguska river system	кит
Шолокут	unknown	Kamo-Taiga river system	NULL
Шолокут	unknown	Podkamennaya Tunguska river system	NULL
Шонамо	object	Podkamennaya Tunguska river system	ма
Шубдюкан	unknown	Kamo-Taiga river system	NULL
Шубдюкан	unknown	Podkamennaya Tunguska river system	NULL
Шубдякан	unknown	Kamo-Taiga river system	NULL
Шуберт	foreign language	Zeya river system	NULL
Шугдю	unknown	Kamo-Taiga river system	NULL
Шурингра	fauna	Yenisei-Yeloguy river system	нгна/нгда/нда/нгра
Эвунгукит	motion	Muya-Khani river system	кит
Эвэнгукит	unknown	Olyokma-Tungir river system	NULL
Эголпоты	unknown	Podkamennaya Tunguska river system	NULL
Эголпоты	unknown	Kamo-Taiga river system	NULL
Эдемнгу	name	Algoma river system	нга
Эдиг Неннедекит	nomadic circle	Tributary of Tunguska River?	кит
Эдигу	position	Algoma river system	ги
Элгэ	object	Algoma river system	NULL
Эллумэ	object	Chunya river system	ма
Энгэшун	unknown	Sym-Yenisei river system	NULL
Эннеги	unknown	Podkamennaya Tunguska river system	NULL
Эннеги	unknown	Kamo-Taiga river system	NULL
Этыркон	kinship term	Muya-Khani river system	NULL
Этыркон	kinship term	Sutam-Gonam river system	NULL
Этыркон	kinship term	Olyokma-Tungir river system	NULL

Этэпкэ	unknown	Tym-Sym river system	NULL
Эхэл биракангитын	fauna	Algoma river system	нги
Эхэл биракангитын	fauna	Algoma river system	кан
Эхэл биракангитын	fauna	Algoma river system	POSS
Эхэл биракангитын	fauna	Algoma river system	PL
Эхэнгрэ	fauna	Sutam-Gonam river system	нгна/нгда/нда/нгра
Эюга	unknown	Olyokma-Tungir river system	NULL
Юдукон	fauna	Kamo-Taiga river system	кан
Юдукон	fauna	Chunya river system	кан
Юдухоги	fauna	Tributary of Tunguska River?	хаги
Юкта	landscape	Kamo-Taiga river system	NULL
Юкта	landscape	Kamo-Taiga river system	NULL
Юкта	landscape	Podkamennaya Tunguska river system	NULL
Юктамокит	landscape	Kamo-Taiga river system	ма
Юктамокит	landscape	Kamo-Taiga river system	кит
Юктокон	landscape	Chunya river system	кан
Юктоли	landscape	Sutam-Gonam river system	ли
Юктоли	landscape	Olyokma-Tungir river system	ли
Юктоли	landscape	Muya-Khani river system	ли
Юктомокит	landscape	Kamo-Taiga river system	ма
Юктомокит	landscape	Kamo-Taiga river system	кит
Юктукор	landscape	Kamo-Taiga river system	кан
Юктукор	landscape	Kamo-Taiga river system	PL
Юрабо	unknown	Kamo-Taiga river system	NULL
Юхтукор	landscape	Kamo-Taiga river system	PL
Юхтукор	landscape	Kamo-Taiga river system	кан
Ягдули	unknown	Kamo-Taiga river system	NULL
Ядули	physical features	Kamo-Taiga river system	NULL
Якра	unknown	Sutam-Gonam river system	NULL
Якра	unknown	Sutam-Gonam river system	NULL
Якра	unknown	Muya-Khani river system	NULL
Якра	unknown	Olyokma-Tungir river system	NULL
Якра	unknown	Muya-Khani river system	NULL
Якра	unknown	Olyokma-Tungir river system	NULL
Якта	landscape	Podkamennaya Tunguska river system	NULL
Якты	landscape	Kamo-Taiga river system	NULL
Якты	landscape	Podkamennaya Tunguska river system	NULL
Ямокит	sacred	Podkamennaya Tunguska river system	кит
Ямокит	sacred	Podkamennaya Tunguska river system	кит
Ярманга	event	Kamo-Taiga river system	NULL
Ясный	foreign language	Zeya river system	NULL
Я	sacred	Tributary of Tunguska River?	NULL

Appendix 7. Participant information sheet

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Spatial Knowledge, Language, and Adaptation to the Landscape among the Ewenki of Central and Northeastern Siberia

PARTICIPANT INFORMATION SHEET

Ethics Approval Reference: SOGE 17A-199

1. *Background and aims of the study*

The topic of this research is the comparative study of spatial knowledge, language and adaptation to the diverse environments among the Ewenki people of Northeastern and Central Siberia. In this research I aim to examine this terminology in terms of how the language encodes space and the landscape, and what this reveals about people's experience and adaptation in new environments. I posit that mobility has played a key role in maintaining this system. Considering that a particular landscape facilitates the development of the unique landscape category system, my intention here is to find out whether there is any difference in terms of how the Ewenki people living in diverse surroundings use landscape terminology and concepts.

This study seeks to answer the following questions: 1. What kind of spatial concepts do the Ewenki people utilize to mark landscape features? Are there any differences in terms of how the people perceive the space and landscape along the Ewenki dialect continuum? 2. How do Ewenki spatial concepts mediate apperception of and adaptation to new ecosystems and what role do the river systems, vital conduits of travel, trade, and subsistence play in this process? 3. How do the Ewenki nomadic practices and patterns of mobility facilitate the incorporation of new landscapes and spaces into the people's cognitive system and which role does ontology play in this process?

This study is funded by the Environmental Change Institute (ECI Small Grant), University of Oxford, and Moscow State University

2. *Why have I been invited to take part?*

You have been invited because you are fluent in Ewenki and / or possess unique knowledge about the native language and traditional culture.

The exclusion / inclusion criteria are the age (individuals under 18).

3. ***Do I have to take part?***

No. You can ask questions about the study before deciding whether or not to participate. If you do agree to participate, you may withdraw yourself and your data from the study at any time, without giving a reason and without penalty, by advising the researchers of this decision.

4. ***What will happen in the study?***

If you are happy to take part in the study, you will be asked questions concerning your role in the community and your knowledge of the local landscape. If you are a fluent native speaker, you will be also asked to fill in the following list of landscape terminology (attached) and help me with transcribing Ewenki recordings. Additionally, I may ask you to draw a map of the local landscape for me, or comment on the existing maps. The study will involve audio-taping and photography.

This should take approximately 1-1,5 hours

The study will take place at the local school, where I am currently living, or at your home, if the latter is more convenient for you

There will not be any follow-up visits.

5. ***Are there any potential risks in taking part?***

The following risks are involved in taking part in this research:

There are no any significant risks for you to participate in my research. However, language documentation (filling in the list of landscape terminology and transcription of linguistic material) can be a rather time-consuming process during which you may get tired or bored. Being well aware of this problem, I will try to arrange our session in the most convenient for way for you. You could take a rest whenever you need it. I will record our conversation using my digital recorder. If this fact causes some inconvenience for you, I will not use it. Besides, it is possible that you may get emotionally troubled by a topic which is not directly related to my project, for example, while talking about your personal experience and Ewenki culture. If it happens, I will try to comfort and support you, as well as interrupt our interview for a while.

There are no specific preparatory requirements.

In order to mitigate any potential risks, the researchers will use your personal data, including your name, anonymously.

6. ***Are there any benefits in taking part?***

The main benefit of taking part in this research is documentation of the local Ewenki knowledge, including the native language, which is deeply endangered. It will also help to understand the relationships between the language and the environment in terms of place names and landscape terminology. Some data may be given to the community and, thus, can be widely used. Additionally, if you are a native speaker who could help me to transcribe and translate linguistic material, you will be provided with compensation for your time and assistance.

7. Expenses and payments

Either: You will receive 15 pounds for transcribing Ewenki linguistic material (narratives and place names).

8. What happens to the data provided?

The **research data** will be stored confidentially using an external hard drive. The data will be placed in my own archives, an Archive at the University of Oxford and Moscow State University.

Your responses will be anonymised.

Personal / sensitive data will be stored confidentially using an external hard drive.

The researcher and her supervisor will have access to personal/sensitive data / research data.

All research data and records will be stored for a minimum retention period of 3 years after publication or public release of the work of the research.

9. Will the research be published?

The research will be published in research papers and abstracts.

The University of Oxford is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a University of Oxford postgraduate degree programme. Holding the archive online gives easy access for researchers to the full text of freely available theses, thereby increasing the likely impact and use of that research.

If you agree to participate in this study, the research will be written up as a thesis. On successful submission of the thesis, it will be deposited both in print and online in the University archives, to facilitate its use in future research. The thesis will be published open access.

10. Who has reviewed this study?

This study has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee (reference number: SOGE 17A-199).

11. ***Who do I contact if I have a concern about the study or I wish to complain?***

a) For studies reviewed by a University research ethics committee only:

If you have a concern about any aspect of this study, please speak to the relevant researcher [+44(0)7761 782739] or their supervisor [+44(0)1865 275877], who will do their best to answer your query. The researcher should acknowledge your concern within 10 working days and give you an indication of how they intend to deal with it. If you remain unhappy or wish to make a formal complaint, please contact the relevant chair of the Research Ethics Committee at the University of Oxford who will seek to resolve the matter in a reasonably expeditious manner:

Chair, **Medical Sciences Inter-Divisional Research Ethics Committee**; Email: ethics@medsci.ox.ac.uk; Address: Research Services, University of Oxford, Wellington Square, Oxford OX1 2JD

OR

Chair, **Social Sciences & Humanities Inter-Divisional Research Ethics Committee**; Email: ethics@socsci.ox.ac.uk; Address: Research Services, University of Oxford, Wellington Square, Oxford OX1 2JD

12. Further Information and Contact Details

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

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Appendix 8. Statement of authorship

I, Nadezhda Mamontova, certify that this thesis is substantionally my own work. I carried out two fieldwork research (20017 and 2018), collected and analysed data, including in the Ewenki language (place names), did archival research at the Museum of Anthropology and Ethnography, Russian Academy of Sciences, and wrote the entire manuscript. The contribution of Elena Klyachko, a research fellow of the Department of Typology and Areal Linguistics, Russian Academy of Sciences, was limited to the creation of GIS maps and the user interface of the Ewenki toponymical database. Dr. Thomas F. Thornton served as my supervisor.

3 June, 2020

Oxford

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Thomas F. Thornton, Ph.D., Associate Professor and Senior Research Fellow (Part-time)

8 January 2020

Dear Director of Graduate Studies, School of Geography and the Environment,

Regarding candidate Nadezhda Mamontova's papers submitted the DPhil thesis, for which I serve as supervisor, I certify that the majority of that work is her own.

Yours sincerely,

Thomas F. Thornton, Ph.D.

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION
INSTITUTE of LINGUISTICS
RUSSIAN ACADEMY OF SCIENCES
1950



Statement of the co-authorship of Nadezhda Mamontova's thesis (paper route)

I declare that the thesis entitled 'Spatial Knowledge, Language, and Cognitive Adaptation to Landscape among Siberian Ewenki' and field data are substantially the work of Nadezhda Mamontova and that my contribution as a co-author of two of three of her papers has been limited to the creation of GIS maps and the Ewenki digital toponymical database. Nadezhda Mamontova carried out field research, collected and analysed data, translated Ewenki place names, and was fully responsible for writing the manuscript itself.

19 January 2020

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