Borrowing of Place Names in the Uralian Languages

Edited by
RITVA LIISA PITKÄNEN
JANNE SAARIKIVI

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The fourth volume of the series "Onomastica Uralica" is dedicated to the borrowing of toponyms in the Uralic languages.

Our invitation for specialists in Finno-Ugrian onomastics to contribute to the present was warmly welcomed and the editors received more articles than anticipated. Therefore, we decided to publish two books instead of just one, as originally planned. These two books will eventually contain 17 articles, eight which of are included in this volume. The rest of the materials will be published in the volume Onomastica Uralica 6. The articles of the present volume concentrate on Finnic and Saami language contacts, whereas the articles in the forthcoming volume will deal with Permian and Ugric contacts with the neighbouring languages.

The editors have made an effort to find the leading specialists on Finno-Ugrian toponomastics as contributors to this volume. In the course of this work it has turned out that in many cases it has been difficult to find acknowledged scholars willing to contribute articles on several problems central to Finno-Ugrian toponomastics and prehistory.

As the Finno-Ugrian language family consists of several dozens of languages spoken in a vast area from Central Europe to Siberia, there must be numerous (probably a hundred or so) language contact zones in which at least one Uralic language is involved. For obvious reasons, it is thus not possible to write a book that would deal with the toponymic contacts of the Uralic languages in their entirety. It has been necessary to select specific themes for the present volume and, of course, this selection process has been guided by scholarly history and the availability of authors.

Thus, in the articles of the present volume, several regions traditionally considered interesting from the point of view of language contacts in the realm of Uralic languages are considered.

In her article, Ritva Liisa Pitkänen discusses the Finnish substratum toponymy in the Swedish-speaking areas of Finland. The area under study is especially interesting, for instance, in that the geographical characteristics of a part of her research area have changed since the creation of the toponymy under investigation. Nevertheless, the methods developed by Pitkänen demonstrate that, even in such a case, it may be possible to prove what the initial motivation behind the toponyms was.

In their article Ojārs Bušs and Laimute Balode present toponymic investigations into the nomenclature of another region with a substantial amount of Finnic toponyms, namely that of the republic of Latvia and, most notably, its northern parts. This article, which consists of name etymologies and discussion concerning scholarly history, provides a comprehensive overview of the present, somewhat underdeveloped state of research regarding the toponymy of this region which is of considerable importance for the study of Finnic and Finno-Ugrian linguistic prehistory.

The article by Janne Saarikivi, which is the longest in this collection, presents an overview on the Finno-Ugrian substratum toponymy in northern Russia, the territory with probably the longest research tradition among the previously Finnic-speaking territories with a present-day substratum toponymy layer. In this article the methods developed for the study of the toponymy of the region under investigation are critically analysed and the main results of this, mainly Russian, research paradigm are introduced and discussed from the point of view of western toponymistics.

Articles by Aleksandr Matveev and Olga Teush also consider the same region. In Matveev's article perhaps the most complex question which is related to the substratum toponymy of northern Russia, namely the question of the eventual Saami layer in the toponymy of this region, is treated. Unfortunately, as the publishing of this article was delayed, the same problematics have since been treated by other scholars (cf. article by Saarikivi). Matveev's article has, nevertheless, not lost its actuality. It contains some previously unpublished material relating to possible Saami languages in the region under investigation and well sums up the views presented by Matveev in various Russian publications. Olga Teush, in turn, treats the place names of Finnic origin from the point of view of geographical terminology of Finnic languages.

The article by Irma Mullonen also represents the best traditions of Russian onomastics. It focuses on the River Svir' macroregion where, together with a Slavic language, Russian, a several Finnic languages are spoken alongside each other. The article implements the same methodologies as those used by Saarikivi, Matveev and Teush, but goes further in developing them by giving an example of the utilisation of the distribution of toponymic types in distinguishing the toponymic heritage of several closely related languages.

The article by Ante Aikio discusses a region in which the existence of Saami substratum toponyms is evident, namely that of central and southern Finland. This study, together with several other publications by the same author can be considered a step forward in the research tradition concerning the Saami substratum in Finnish. It substantially updates the knowledge on this central issue of Finnish prehistory often mentioned but little treated. It is

also interesting to note that Aikio has solved several methodological issues related to the study of Saami substratum toponyms in a manner similar to that of the Russian scholars working in other contexts. Thus, this article well illustrates the need for and perspectives of an international approach to the problems related to the study of Finno-Ugrian toponymy.

The article by Olavi Korhonen deals with several Saami and Finnic place name elements in northernmost Sweden. This article, as several others published by the same author, offers a detailed view of the emergence of a particular toponymic landscape around the Swedish parish of Jokkmokk and the name of the parish itself. This article differs from the others published in this volume in that it does not aim to present an overview of the Finnic and Saami toponyms in northermost Sweden, but discusses more limited problems related to particular toponyms. Nevertheless, it does give the reader an impression of the rich and diversified information that can be gleaned from the study of the northern Scandinavian toponymy from the point of view of Finno-Ugrian studies. It is to be hoped that this field of research will be continued by younger scholars and that its results will be analysed in the wider Finno-Ugrian perspective.

Although the articles in this volume cover very diverse themes, there are many questions common to all of them. The problems related to verification of language contacts, substrate and borrowing, their possible differences and outcomes, methods of etymologisation of toponyms, etc., recur in several articles. Thus, similar kinds of theoretical problems have been addressed in these articles in different contexts and on the basis of different linguistic material. One fundamental observation that also emerges from the articles is that the onomastic evidence has not yet been used in the research on prehistory to the extent and in the manner it deserves. In this respect, we are living in an interesting period as far as Finno-Ugrian toponomastics are concerned, since modern methods are just beginning to be developed and utilised to their fullest extent.

The somewhat underdeveloped nature of Finno-Ugrian toponomastics is reflected, among other things, in that slightly different terminologies are used in several articles. This state of affairs demonstrates that toponymic studies, in contrast to many other branches of linguistics, are less established and less taught in universities. The editors have made every effort to unify the terminology used in the different articles and comment on the terminology in the footnotes, and it should now be possible to read the book without any danger of misunderstanding. Much of the original terminology used by the contributors has been left intact, however. It will be the task of the present generation of scholars to decide what kind of terminology will ultimately be used for such meanings as 'recurring word final element in a substrate

toponym' (here formant, formative, ending) or 'translated toponym formed according to the model of the substrate language' (here mirror translation, half-calque, partial translation, etc.). It should be noted here that the English language, unlike Russian, does not have such an established terminology for such notions.

As is apparent, the present volume appears several years behind the original schedule. The editors sincerely apologise for the delay in the appearance of the volume. Notwithstanding all difficulties, the present volume will be the first attempt of its kind, that is, the first comprehensive volume dedicated exclusively to the problems of Finno-Ugrian language contact as reflected in toponymy. The editors wish to express their gratitude to all those who have participated in this enterprise.

Helsinki, September 2007.

The editors

Finnish-Swedish Contacts in Finnish Nomenclature

t present, Finland has two linguistic contact areas: the area of Finnish and Swedish on the coast and in the archipelago on the one hand, and the area of Finnish and the Saami languages in the northernmost parts of the country on the other. However, the regions in which these languages are spoken have not remained unchanged throughout the ages. This becomes obvious as we look at place names, as ANTE AIKIO proves in his article on Saami-language substrate place names. In this article, I will explore those place names that have emerged from contacts between Finnish-speaking and Swedish-speaking Finns, presenting and commenting on the research into these names, together with its results.

1. Stages of the Swedish settlement

In the Early Middle Ages Sweden annexed Finland, gradually bringing the Finnish territory under its rule. In order to conquer the territory, the Swedish Crown sent Swedish citizens to settle the strategically important Finnish coast. It seems that the first Swedes came to settle in the Åland Islands in the 11th century. In the 12th century, the Swedish-speaking settlement expanded to the south-west archipelago, after which it continued to spread eastwards along the northern coast of the Gulf of Finland in the 13th and 14th centuries. The Swedish settlement of the coast of Ostrobothnia began at around the same time. (LENA HULDÉN 2002: 30–31, LINDKVIST 2002: 46, ORRMAN 2002: 52–60.)

In the south-western parts of the country, the Swedish settlement did not spread from the archipelago to the coast, probably because the coast was already inhabited. However, this does not mean that Swedes would have inhabited only settled areas that were completely unpopulated. Indeed, it is probable that no such areas were available. We can assume that the rest of the coastal area was inhabited by Finns at the time when the Swedish settlers arrived in the country. Our assumption is based on place names: the Swedish place names on the coast include numerous Finnish substrate names—incontrovertible proof of early Finnish settlement.

The Swedish settlement gradually expanded from the coast to inland. This is how the Swedish-speaking areas were formed, and their linguistic border with the Finnish-speaking interior was gradually determined. In most areas, the border is not so clear-cut that people on one side speak exclusively Finnish and those on the other exclusively Swedish. Between the two linguistic areas,

there are zones of varying width in which both languages are spoken. In certain areas, the Swedish-speaking settlement used to extend further inland than it presently does. Here, again, Swedish settlement can be seen in substrate names of Swedish origin, for example, in the island names in the eastern Gulf of Finland *Kukouri*, *Santio* and *Lanskeri*, which originally included the Swedish generics -ör, -ö 'island' and -skär 'islet' (ZILLIACUS 1989: 35, 40, 237).

The Swedish-speaking area in Finland has traditionally been divided into four provinces: Ostrobothnia (Österbotten in Swedish, Pohjanmaa in Finnish), Åland Islands (Fin. Ahvenanmaa), Turunmaa (Sw. Åboland) and Uusimaa (Sw. Nyland). While Åland remains strongly Swedish-speaking the linguistic situation in the other Swedish areas has not remained stable. The countryside is still mainly Swedish-speaking in all of these areas. In towns, however, the linguistic balance started to change in the 20th century. The most significant changes have taken place in the past few decades, when new native speakers of Finnish moved into the towns in large numbers. The capital region of Helsinki has been affected the most by this development. Gradually, what were formerly profoundly Swedish-speaking parishes in the countryside have become densely populated towns with a majority of Finnish-speaking inhabitants.

2. On research into Finnish-Swedish loan place names

Research into loan place names culminated in the 1970s and 1980s. An extensive research project entitled *Kieliraja-alueiden paikannimistöt* [Nomenclatures in the linguistic border regions] was accomplished through cooperation between Finnish- and Swedish-speaking researchers. It explored the different types of loan names in the bilingual nomenclatures of the linguistic border region between the Finnish- and Swedish-speaking settlements.

The etymological and historical background of the old Finnish substrate nomenclature was also studied. The most detailed studies concerned the old loan names of Finnish origin in the Turunmaa archipelago (PITKÄNEN 1985, 1990, 1993, ZILLIACUS 1989, 1994, NAERT 1995). So far, publications on Finnish loan nomenclature in Uusimaa have concerned the composition of the collected data and the distribution of name types (PITKÄNEN 2001, 2002). We do not have a general overview of the loan names in Ostrobothnia, so even their number is unknown. It seems that, with a few exceptions, there are no place names of Finnish origin in Åland (HULDÉN 1982: 95–102).

Many of the names of natural features borrowed from Finnish into Swedish have later become names of parishes and villages, that is, the most

prominent and central names of the areas. LARS HULDÉN analyses their etymology in his work *Finlandssvenska bebyggelsenamn* [Finland-Swedish settlement names] (2001).

3. On the borrowing of place names

Place names are culture-specific. They have emerged at a specific time within a specific culture, and they reflect both that time and that culture. In Finland, the cultural background of Finnish and Swedish place names in the linguistic contact areas is roughly the same, since they have been given by residents of the same villages with the same occupations, but with different mother tongues. We can presume that this is the case with the old Finnish substrate names as well. They have emerged in the communities of Finnish settlers that have earned their living through fishing, hunting and animal husbandry. The oldest names given by the Swedish settlers probably also have the same type of cultural background.

It is essential from the perspective of borrowing place names from one language to another that names are formed in the same way in Finnish and Swedish and that the name types are similar. The basic place name is a compound with a generic referring to the type of place and a specific referring to a specific feature of that place, for example, in the names of bays *Musta/lahti* (Fin. *musta* 'black', a specific + *lahti* 'bay', a generic) and *Svart/viken* (Sw. *svart* 'black', a specific + *vik* 'bay', a generic). As the names are formed in the same way in the source language and the target language, borrowing is a simpler process than, for example, between the Finno-Ugrian languages and Russian, where place names are formed according to different systems (for further details, see the articles by IRMA MULLONEN and JANNE SAARIKIVI in the present volume).

There are phonological differences between Finnish and Swedish, which have required phonetic substitution, as the names have been borrowed from one of the languages to another. For example, Swedish has word-initial consonant clusters, which do not exist in the old Finnish vocabulary. These consonant clusters have generally been substituted for single consonants in loan words and names, for instance, in the names $Broby\ (bru:by:)$ 'bridge' + 'village' > Ruupyy ja $Svartbäck\ (svartbeck)$ 'black' + 'brook' > Vartpekki. The situation in the linguistic border regions is different. The consonant clusters may have been preserved there (RAPOLA 1966: 20–24), for example, in the names $Brutasveden\ (brutasviden)$ > Brutasvida and $Brunalandet\ (brunala:ndi)$ 'brown' + 'island' > Brunalaandi. In Finnish, long vowels may also be found in unstressed syllables, whereas in Swedish the vowels in unstressed syllables are always short. For example, the generics referring to 'island' in the Finnish place names -maa 'large forested island (lit. earth;



soil)' and -saari have been substituted in Swedish for -mo and -sor, as in Kivimo (tjivmo) < *Kivi/maa lit. 'stone' + 'island' and Järvsor (järssor) < *Järvi/saari 'lake' + 'island'. Their present phonetic forms have also been affected by the changes in Old Swedish: long a has changed into a which has further shortened into a and the final vowel has disappeared (HULDÉN 2001: 456).

4. Types of loan names

The research project on nomenclatures in the linguistic border regions referred to above explored the nomenclatures used by the Finnish and Swedish-speaking Finns living in the same regions; their nature, how they have become borrowed from one language to the other, what are the factors that have affected the choice of loan type and the frequency of different loan types (KIVINIEMI & al. 1977, ZILLIACUS 1980). This research was conducted in eight regions situated on both sides of the linguistic border. Both the Finnish and Swedish place names were collected as comprehensively as possible by interviewing people from both language groups in each region. The analysis was based on material thus collected, with over 4,100 Finnish-Swedish name pairs.

A summary report on the project can be found presenting the various types of loan names and their backgrounds (ZILLIACUS 1980: 317-349). This research material displays considerable regional variation reflecting different periods of settlement history. In order to draw attention to the features of the individual regions, as well, I shall consider the research not only from the point of view of the material as a whole, but also from the perspective of the two largest regional material collections of the research with different backgrounds. One of these was collected from the easternmost bilingual region on the coast of the Gulf of Finland, the municipality of Pyhtää (Sw. Pyttis, PITKÄNEN 1975). This collection includes nearly 400 Finnish-Swedish place name pairs. Pyhtää has been a linguistic border region since the 17th and 18th centuries (HULTIN 1926: 80-81), and the use of place names in the two languages is an old, well-established tradition there. The other regional material collection is from the extensive area of Lockvattnet in the Turunmaa archipelago (ZILLIACUS 1994: 97-146). Lockvattnet is bilingual in a different sense to Pyhtää. The majority of the population is Swedish-speaking, with the exception of a few bilinguals who also speak Finnish. Yet, there is an extensive bilingual nomenclature in the area with 300 Finnish-Swedish pairs of place names. These Finnish place names have apparently originated on the Finnish-speaking side of the linguistic border, in connection with the joint fishing undertakings of the two language groups.

The Finnish-Swedish loan names, as is the case with loan names in general, can be divided into two major types: either the name has been borrowed as such or, if necessary, substituted to fit into the phonological structure of the target language or the name has been translated. For example, the Finnish name of an island, *Mustasaari* (*musta* 'black' + *saari* 'island') may have been borrowed into Swedish either as an adaptation *Mussor* or as a translation *Svartholmen*, and the Swedish name of a village *Broby* (*bro* 'bridge' + *by* 'village') has been borrowed into Finnish, adapted into *Ruupyy* or translated into *Siltakylä*. In the adaptations, it is the phonetic form of the name that has been adopted in the target language, whereas in translated loans, it is the meaning. In addition, there are a few occasional modifications to these two major types, the use of which is limited in various ways.

A significant factor in both the naming of places and the borrowing of place names is the type of place. It seems that there are language-specific differences in the choice of borrowing type. As we look at the research material in its entirety, the languages do not seem to differ from each other as regards the borrowing of the names. There is roughly the same number of borrowings from Finnish into Swedish as from Swedish into Finnish. We should remember that the borrowings have been affected not only by the linguistic balance of the time of the loan, but also by the earlier history of settlement of the region. For example, in the Lockvattnet region, which is nowadays strongly Swedish-speaking, the loans from Finnish into Swedish (58%) outnumber the loans from Swedish into Finnish (41%) by far, because the majority of the names in the region originate from old Finnish substrate names. In Pyhtää, however, the differences between the languages can be seen in the types of places whose names have been borrowed. The Swedish-speaking population has borrowed more names of natural features than other names from Finnish, whereas the Finnish-speaking population has mainly borrowed the main names of settlements and cultivated land from Swedish.

5. Adapted loans

The most common type of borrowing from both Finnish into Swedish and Swedish into Finnish is that of adaptation. These names, borrowed as phonetic substitutes, represent slightly under 60% of the names in the research material covering the entire research area. Yet there are clear differences between the regions. The share of adaptations ranges from 33% to 74% in the various regions. In the entire research material, direct loans seem more frequent from Finnish into Swedish (77%) than from Swedish into Finnish (58%).

The loan types have not been chosen individually case by case, but rather, the choices have been based on various general grounds. One of them is the



structure of the name in the source language. Names with a one name-forming element have nearly always been borrowed as adaptations, for example, the Swedish name of a rock *Stålhatten*, lit. 'steel hat' > Fin. *Toolhattu* and the Finnish village name *Kärvoinen* > Sw. *Kärvois*. In these examples, the choice has probably also been affected by extraordinary forms of the names that would have been difficult or impossible to translate. However, the majority of the ordinary basic names with translatable parts have also been borrowed as adaptations, for example, the Swedish name of a bay *Bredviken* (*breivi:ki*) 'broad' + 'bay' > Fin. *Breiviikki*.

Adaptations seem to be an old loan type. In fact, adaptations are more frequent in the old loan names than in all loan names in general. It would also seem that loan types vary according to language, which can be seen in comparing the map names of different periods in one of the villages of Pyhtää with those in use today. Most of the names on a map from the 1770s were adaptations from Swedish into Finnish of the names of old cultivated lands and central natural features, such as the field name *Pastaali < Bastdal* ('bast' + 'dale') and the name of a bay *Orholma < Orrholmen* ('black grouse *[tetrao tetrix]*' + 'islet'). However, a couple of decades later, in the maps of the 1830s, the names of the new fields were borrowed as translations, such as Fin. *Suurisuo* ~ Sw. *Stormossen* ('big' + 'marsh'). In the case of translated loans, it is often impossible to say which language the names originate from.

We can deepen our knowledge of the names by looking at their development in the 20th century. Adaptation loans from Finnish became more and more general in Pyhtää. A typical new loan from Finnish into Swedish is an adaptation where the phonetic differences between the present form and the source are minimal or non-existent, for example, the Finnish field name *Rainikko* > Sw. *Rainikko*. The adaptation loans from Finnish into Swedish increased in the late 20th century, as the Swedish-speaking inhabitants, who had become a minority in the area, started to prefer the Finnish forms of the names in order to facilitate communication within the community. For further details, see the section 10.

6. Epexegetic adaptations

The advantage of adapted loans in a bilingual community is that the forms used in either language are phonetically close to each other and thus easily recognised as the names of one and the same place. Their disadvantage is, however, that they lack the essential information, the generic that reveals the type of place. In some cases, this disadvantage has been eliminated by supplementing the adapted loan name with a new epexegetic generic, for instance, the Finnish adaptation of the originally Swedish village name (*Broby* 'bridge' + 'village' >) *Ruupyy* has been supplemented with the

generic *kylä*, referring to 'village', which has resulted in the form *Ruu-pyyn/kylä*. It is interesting to observe that even though there are a large number of adapted borrowings, the share of epexegetic adaptations is low, accounting for only 4% of the names.

How can we explain the small number of epexegetic adapted loans? One possible explanation has to do with the method of material collection. The epexegetic forms are bound to the conversational situation. They are formed and used when it is important to specify the type of place to the conversational partner, for example, someone from outside the community in which the name is used. However, when the names are collected by interviewing, the epexegetic forms are unnecessary, since the type of place is requested separately.

7. Partial adaptations

Another infrequent type of adapted loan (ca. 5% of the loan names) is that of names with an adapted first element and a translated final element, for example, the loan name is formed on the basis of the Finnish name of an island Musta/saari ('black' + 'island'), borrowed into Swedish as Muss/holmen (Sw. holmen 'island [definitive form]) and the Swedish village name Bro/by ('bridge' + 'village') borrowed into Finnish as Ruu/kylä (Fin. kylä 'village'). How this type of name emerged is a mystery, and our research material does not provide an unambiguous answer to it. It probably cannot be explained by so-called hybrid names, primarily formed by combining elements from two languages. The hybrid theory is based on the presumption that those people who borrowed the names in question were able to translate the high-frequency geographical terms that form the generics of the names, but that they had to borrow as adaptations such etymologically opaque specifics that they were not able to translate. Nor is there clear evidence that this name type would have emerged as a result of reduction, for example, the Swedish field name Diger/ängen ('thick' + 'meadow [definite]') > Fin. Tiiker/engin/niitty > Tiiker/niitty (Fin. niitty 'meadow'). The explanation based on reduction presupposes that the users of a name would have been able to analyse the adapted loan and recognise the element that is equivalent to the generic of the source-language name.

8. Translated loans

Translated loans are relatively rare compared to adapted loans in the linguistic border region research material Their share of the entire material is ca. 15 per cent, and their distribution varies greatly according to the region, from less than 6 per cent to over 20 per cent. The difference between the two language groups is that names have been translated from Swedish into Finnish more often (17%) than from Finnish into Swedish (6%). The



reason there are fewer translated loans than adaptations is clear: while any name can be borrowed as a phonetic adaptation, translations are limited by many factors. Firstly, a translation must consist of words that make sense and are thus translatable. Secondly, in the community in which the name is used, there must be people who know both languages and are capable of translating the name.

While we can always trace the source language of the adapted loans, some of the translated loans are difficult or impossible to trace back to one of the languages. This is the case with, for instance, an unofficial name of a part of village in Pyhtää, *Bastubyn* in Swedish and *Saunakylä* in Finnish ('sauna' + 'village').

Adapted loans are usual in the old loan nomenclature, whereas translated loans are frequent in areas where names were intensively borrowed in the past century. Again, Pyhtää is a good example of such an area. Here, the official Swedish-language village names have been borrowed as adaptations, whereas the unofficial names of parts of a village have been translated, for example, the afore-mentioned *Bastubyn* ~ *Saunakylä*. As the share of Finnish-speaking inhabitants has greatly increased, especially microtoponyms (the names of fields, small terrain areas, islands and coastland) with simple basic vocabulary have been translated. As the translated loans seem young, we may wonder why microtoponyms have been recently translated, even though many other equally transparent names were borrowed as adaptations earlier. Perhaps the reason for this is that the taste for names has changed; people may feel that adaptations with a dialectal flavour are too familiar and unofficial, and thus should be avoided in the context of the present official naming practices.

What can be said about the age of translated loans? The official Finnish forms of Swedish village names can be established with certainty as late translations. They were formed by the authorities in the early 20th century, for example Broby > Siltakylia and Stensnäs > Kiviniemi ('stone' + 'headland') in Pyhtää. We could suppose that the answer to the question of when the names were first translated could be found in the Finnish substrate nomenclature that was borrowed into Swedish in the early 11th century. However, we cannot find the answer there. Translated loans that might be found in the substrate nomenclature cannot be traced, since the translated names look like ordinary Swedish names. Nor have we been able to find name types indicating the translated loan origins in the Finnish substrate nomenclature; IRMA MULLONEN's article in this volume includes examples of such translated loan name types in the Karelian-Veps nomenclature. The question of how old the Finnish-Swedish translated names are thus remains open.

The toponyms which include another place name or a personal name as the specific are a special type of translated loan names. As these names have been borrowed, the generic referring to the type of place has always been translated. The place name of the specific is in the form in which it was originally borrowed into the target language. While the Finnish island name *Mustasaari* ('black' + 'island') has been borrowed into Swedish as an adaptation, *Mussor*, the Finnish road name, *Mustasaaren/tie* (*Mustasaari* + *tie* 'road') has been rendered in Swedish as *Mussor/vägen* (*väg* 'road'). Similarly, while the Swedish village name *Broby* has been borrowed into Finnish as a translation, *Siltakylä*, the road leading to that village is *Broby/vägen* > *Siltakylän/tie*. If the specific of the name is a personal name, it was not translated, but the source-language form has been retained, for example, the name of the field *Matin/suo* with the Finnish forename *Matti* has been rendered in Swedish as *Mattis/mossen* (Fin. *suo*, Sw. *mosse* 'marsh').

This also applies to those loan names with a place name as the generic and an appellative specific. The specific has always been translated in these cases, for example, the Swedish name of an island *Stora Majsor* > Fin. *Iso Maisaari* (Sw. *stor*, Fin. *iso* 'great').

9. Reverse loans

In regions where the linguistic balance has varied over time, names once borrowed may have been borrowed back into their original source language. In fact, they may have been borrowed several times back and forth between the languages. For example, the Finnish bay name Musta/lahti ('black' + 'bay') was first borrowed into Swedish as a translation, Svart/viken. As the region again became Finnish-speaking, it once more became necessary to identify the place with a Finnish name. The original Finnish name may thus have been borrowed into Finnish again either as an adaptation: Vartviikki or as a translation: Musta/lahti. There are a large number of cases such as this among the originally Finnish names of parishes and villages in the Swedishspeaking regions. The authorities have re-borrowed them into Finnish as reverse loans, as the regions have gradually become Finnish again and a Finnish form for the name has thus become necessary. For example, the Finnish bay name *Haapalaksi (haapa 'aspen' + laksi 'bay') was borrowed at an early date into Swedish as an adaptation, Hoplax (hu:plaks), on the basis of which the new Finnish form *Huopalahti* (literally 'felt' + 'bay') has been formed. It is difficult to trace reverse loans in he popular nomenclature. We can only suppose that they are found among etymologically obscure names in those regions in which the linguistic balance has varied over time.



10. Bilingual onomastic environment — place names in use

The members of those communities within the linguistic border research area with both Finnish and Swedish-speaking settlements knew the other language of the area at least to some extent, and the people from the different language groups were more or less in contact with each other. An interesting question is how the speakers of the different languages use place names in their mutual communication in such areas. The only region where this has been studied is Pyhtää (PITKÄNEN 1976).

As I have noted earlier, bilingualism in the coastal villages in Pyhtää dates from as early as the 17th and 18th centuries. The old estates in the village are Swedish-speaking, but the more recent settlement is Finnish. Initially, both language groups had their own nomenclature, mostly consisting of names borrowed from the other language. The connection between the two nomenclatures is so close that there are only a few instances in which the Swedish and Finnish forms of a place name have different stems, for example, Fin. *Pitkäkallio* (*pitkä* 'long' + *kallio* 'rock') ~ Sw. *Högberget* (*hög* 'high' + *berg* 'rock').

Whilst analysing the use of names in a bilingual community, we must revert to the borrowing of such names and consider the backgrounds of the various loan types. According to GUNNAR PELLIJEFF, a Swedish researcher (1966: 84-94), the way in which place names are borrowed depends on how well the borrowers know the other language. According to this theory, adapted loans are the oldest because they only require imitation of the phonetic form and do not presuppose knowledge of the source language. As for translated loans, they reflect a more recent loan type, since they require knowledge of the source language. However, we cannot explain the development as simply as that. Even though we might label adapted loans as "mechanical imitations of the phonetic form of the original names", as PELLIJEFF calls them, a community speaking only one language would not be able to borrow names even as adaptations. If the speakers of one of the languages did not know the other language at all, names would not be borrowed, but each language group would rather form their own nomenclatures. Borrowing always presupposes some knowledge of the source language; for a start, the borrower has to be able to tell which of the words in the source language place names are. As any name can be borrowed as a phonetic adaptation, translation is only possible if the contents of the name are understandable. Thus, old and opaque names must be always borrowed as adaptations, but newer names that are still transparent can also be translated.

The names of the most important places familiar to everyone and frequently in use in a bilingual community have turned into different loan variants over time. For example, the Swedish-language village name *Broby* ('bridge' +

'village') has been borrowed into Finnish as an adaptation, *Ruupyy*, as a partial adaptation, *Ruukylä* (*kylä* 'village') and as a translation, *Siltakylä*. The different forms date from different periods, but, instead of having been used in chronological order, they have been in simultaneous use. Even though the users of the names have had the option of choosing among several variants, the choice has not been free, but it has been governed by the naming conventions of the community. We all try to speak in such a way that our interlocutor understands what we are trying to say, and in doing so we thus also opt for names that we expect our partner to recognise.

Thus, the choice between different name variants is affected by the conversational situation. In order for the interlocutor to understand which place we are referring to, we often need to underline the type of place by supplementing the name with a new epexegetic generic. Among loan names, the problematic cases from the point of view of understanding are typically adapted loans, such as the Swedish-language name of a meadow *Breiviikki* (< *Bredviken* 'broad' + 'bay'), which Finnish speakers often refer to using the epexegetic form *Breiviikin/niitty* (niitty 'meadow'). There are not very many epexegetic adapted loans in the material collected through interviews in the linguistic border research, but we can assume that they are used more frequently in spontaneous conversational situations. As was expected, the epexegetic forms have been popular among people with limited knowledge of the source language.

The linguistic community has a significant effect on the choice of names. If the language groups are of roughly equal size and have approximately the same status, the use of names greatly depends on the conversational situation. If one of the language groups has a dominant position, so does its nomenclature. Even before the research was conducted, Finnish had become the language of the majority in Pyhtää, and there were signs of changing name practices. It was the Swedish-speaking youth of the area that initiated the change. They had given up the Swedish-language names in some cases and adopted the names used by speakers of Finnish. For example instead of using the Swedish-language name of the island Skutholmen ('sailing boat' + 'islet'), they used its Finnish version Kuuttoholma that had earlier been borrowed into Finnish as an adaptation. When asked why they had started using the Finnish forms, they said that it was an attempt to enhance communication. Since it was with speakers of Finnish that they most often spoke about these places, it was sensible to use the Finnish forms of the names. They felt that it would be more practical to use one form of a name within a community simply in order not to burden their memory. LARS HULDÉN (1962: 132-134) noticed the same phenomenon in Ostrobothnia a decade earlier. There, the Swedish-speaking fishermen had started to refer to



fishing sites with loan names borrowed from Swedish into Finnish. They, too, felt it would be more sensible to use just one name. Nor did they feel that the translated names were different in any way: they were "the same names" in both languages.

11. Substrate names of Finnish origin

As we noted previously, Swedish settlers first came to the Finnish coast and archipelago in the 12th century. The region had earlier been wilderness to which the people from the mainland had made fishing and seal-hunting trips from generation to generation. Those regions which had proved favourable as areas for permanent settlement had already been gradually inhabited. In other words, the Swedish settlers came to areas where there was already Finnish settlement. The contacts between the two language groups were close and peaceful, judging by the fact that rather than naming the places in their new area of settlement themselves, the Swedes borrowed the Finnish names. It is impossible to say how many and what types of place names were borrowed in the early stages of Swedish settlement. However, we must assume that the substrate nomenclatures which have been preserved to date represent only a fraction of the nomenclature that was initially borrowed. It seems that names of islands and bays were borrowed in large numbers, because their share of the present loan nomenclature remains considerable.

All of the names of Finnish origin were borrowed as adaptations. As we noted above, the question of early loan names remains open, since we have not been able to establish loan names in the substrate nomenclature. It is often difficult to establish which substrate names are loans, since they may not include any elements that would suggest a loan origin. The clearest and most reliable examples of loan names are those that have a final element which can be traced back to the generic of the original name. One of the largest groups that can be traced like this is that of the names of islands. Their final elements -sal(a) and -mo originate from the Finnish words salo and maa in those source names referring to a 'large island', for example, in the island and village names Mossala (mossäL) < *Musta/salo ('black' + '[large and forested] island') and Jermo (järrmo) < *Järvi/maa (järvi 'lake'). The final elements -sor and -lot in names referring to smaller islands originate from words in the generic saari and luoto 'island; islet', for example, in the island names Pensor (pe:nsor) < *Pärnä/saari (pärnä 'linden tree') and Kvelot (kväilot) < *Kuiva/luoto (kuiva 'dry'). Other recognisable and frequent translated loans are names with the element -lax, whose final element is based on the Finnish word *laksi* 'bay', for example, in the village name Roslax (ru:slakks) < *Ruotsin/laksi (ruotsi 'Swedish').

Names with only one name-forming element, and names with a Swedish generic combined with a specific which does not occur in the Swedish nomenclature, are problematic. We have been able to trace the Finnish origins of such names in cases that diverge from Swedish phonology, for example, the name of the estate *Rahas* (*rahas*), with the inter-vowel -*h*-. We can also assume that names with parallels in Finnish nomenclature are of Finnish origin, such as the village name *Lem/näs* (*lemmnes*), which may belong to the Finnish **Lempi*-names (lit. 'love; delight'). The names with a unique specific are by no means always loan names. They can equally well be Swedish names with a specific whose origins have become unrecognisable.

12. Place names as historical documents

The substrate names of Finnish origin in the Swedish-speaking areas offer us valuable documentary material concerning settlement history. What makes the nomenclature especially valuable is that its age can be established on the basis of settlement history data. The Swedish settlers came to Finland between the 12th and the 14th centuries, and we can assume that the settlers started borrowing Finnish place names soon after their arrival in these areas. The oldest layers of the original Finnish names date from before the Swedish settlement; in other words, the names may date from as early as prehistoric times, whereas the youngest names were given in the Middle Ages at the latest.

The substrate names of Finnish origin are relatively numerous everywhere in the Swedish-speaking areas along the Finnish coast. I shall look at the substrate names in the area that has been studied most, that is, the Turunmaa archipelago, where ca. 1,000 place names in the Swedish-language nomenclature have been found to be of Finnish origin. However, compared to the Swedish-language nomenclature, the share of substrate names is minimal. Even in those municipalities which have the most names of Finnish origin, their share of the entire nomenclature is less than 3%. Yet, the Finnish-language names are prominent and striking in the onomastic landscape of the archipelago. The reason for this is that they belong to the major names in the area: the names of parishes, villages, and important natural features, such as islands and bays (PITKÄNEN 1985, 1990).

What can we conclude concerning the origin and background on the basis of such, verifiably old nomenclature? Firstly, we have to remember that we can only draw conclusions on the basis of those names whose original Finnish forms can be reliably reconstructed. Nevertheless, many of the reconstructed names do not lead into any conclusions, since they tell us hardly anything about their background other than the fact that they have been given by native Finnish speakers. Ordinary names that describe places belong to this



group, for example, the island names *Tammis*, with the name of the tree *tammi* 'oak', *Koi/sar* (< *koivu* 'birch'), *Kvivas* (*kvi:vas*) (< *kuiva* 'dry') and *Mos/sala* (*mossäL*) (< *musta* 'black').

Some names also offer us information about the name-givers and their culture. In many cases, the original settlers have been traced by comparing place names. The idea of the comparison is that people who have moved elsewhere have often named places in the new regions after places in their old home areas. This also applies to the Turunmaa region, where we can determine the origins of the Finnish-language name-givers on the basis of the toponymy. Our initial hypothesis is that they would have come from the nearest coastal area, the south-western coast of Finland. Indeed, there are names in the archipelago that seem to include place names from the southwestern Finnish mainland, for example, the names of the neighbouring villages Jälist (jeList), Kivis (kivis) and Poutuis (pu:rtus) that have been proven to originate from the names of the neighbouring villages on the mainland, Järäinen, Kiveinen and Puotuinen. Since the source names on the mainland mostly refer to parishes, villages and estates, it has been suggested that places in the archipelago named after them would have been in the possession of these parishes, villages and estates earlier, first as a wilderness and later as places of settlement. However, we can for good reason criticise such comparisons and the conclusions drawn on their basis, especially if there are only a few names that can be connected in this manner. In the Turunmaa archipelago the comparisons are based on stronger evidence, since the name parallels are relatively numerous and the source names can be traced back to specific areas.

We can also draw conclusions as to the culture, and above all the livelihood, of the name-givers on the basis of the names. It is evident that fishing was important on the coast and in the archipelago. All of the names of the fishing areas among the Finnish-language names refer to old fishing traditions, for example, those that include *hauta*- ('[underwater] depression or pit'), *apaja*-('fishing spot') or *luoma*- (id.) names referring to fishing areas, such as the village names *Houtsala* (*hoffsäL*) from the island name **Hautasalo* (*salo* 'big island'), *Sexnappa* (*seksnap*), from the fishing site **Sääksynapaja*, as well as the name of the island and the village *Lom* (*lu:m*) from the fishing site **Luoma*.

The names referring to, for example, animal husbandry, are interesting from the point of view of cultural history, such as the meadow names *Lecknit* (*lekknit*), *Vånittan* (*vå:nitton*) and the name of a peninsula *Nicklot* (*nikklu:t*) with the word *niittu* 'meadow', and names with words referring to cattle, for instance, the island names *Härklot* (*härrklot*) (< *härkä* 'ox'), *Volot* (*vu:lu:t*) (< *vuohi* 'goat') and *Karislot* (*karislu:t*) (< *karitsa* 'lamb'), islands that used

to be used for grazing cattle. The substrate nomenclature also includes names referring to husbandry, such as the island name *Hucklot* (*hukklu:t*), with the word *huhta*, 'burned clearing', the field names *Kyttåkern* (*kytt-*) (< *kytö* 'moorland burnt-over for cultivation') and *Hampel* (*hamppäL*) < **Hamppupelto* ('hemp' + 'field'). There are also names referring to settlements and the partitioning of land, such as the name of the region of *Kilamo* < **Kylänmaa* (*kylä* 'village' + *maa* 'island') and the village name *Samslax* (*sammplas*) < **Sampaslaksi* (*sampas* 'boundary stone' + *laksi* 'bay').

Finnish-language names referring to cattle, husbandry and permanent settlement can be found in those areas with more names of Finnish origin on average than in the research area in general. Some of the names clearly do not belong to the old layer of Finnish names. They have emerged only during the period of Swedish settlement. Another indication of older Finnish settlement is evidenced by the fact that native speakers of Finnish named so many different types of places in the area that the substrate nomenclature seems to consist of names referring to village settlement rather than to names of natural features. These names have largely retained their Finnish phonetic forms, while substrate names usually show a large variety of phonetic and structural changes. Old maps also include names whose form is exactly equivalent to the Finnish source names. This seems to support our conception that there was a large population of native speakers of Finnish in the archipelago and that it remained Finnish-speaking for a longer period than was previously believed. This also explains why places were still named in Finnish later in the Middle Ages. Our conclusions are also supported by certain documents that show that there were still a few native speakers of Finnish in the archipelago in the Early Modern Age. There are documents from the 16th and 17th centuries that mention a few individual people with the epithet Finne. They also mention people with Finnish epithets, such as Thomas Thomasson, also known as Hyfwämies (lit. 'good man').

The nomenclature of the Turunmaa archipelago shows that we can explore the emergence of settlement and the early cultural features by looking at the substrate names. We can often supplement our knowledge of the nomenclature with archaeological and folkloristic data and thus make even clearer reconstructions of the cultural background.

13. Loan names of Swedish origin

I discussed above the nomenclature dating from the former Finnish-speaking settlement that has subsequently disappeared. However, it is not the only Finnish-Swedish substrate nomenclature: there are old Swedish names in



those Finnish-speaking areas close to the linguistic border, which have so far been left outside of the scope of research.

The largest area with old Swedish substrate names extends from the Finnish south-western coast towards Ostrobothnia. Swedish loan names are most frequent in the island parish of Kustavi adjacentto the Swedish-speaking part of the Turunmaa archipelago. There, the nomenclature clearly reflects the settlement history of the area. The oldest names in the area are Finnish. The largest islands, which are the most important natural features of the land-scape, have Finnish names, for example, *Kauriressalo* and *Vartsala* (cf. *salo* 'large island'). Swedish settlement is concentrated in the outer archipelago, where more or less all island names are of Swedish origin, for example, *Hurusei* < *Furuskär ('pine' + 'island'), *Pukkeenluoto* < *Bockö ('goat' + 'large island') + Fin. -luoto 'island'. Place names on the large islands nearby are old Swedish loan names or more recent names given by Finns.

References

HULDÉN, LARS (1962) Finsk-svenska blandnamn i Österbotten. In: Namn och Bygd 50, p. 113–134.

HULDÉN, LARS (1982) Finska inslag i Ålandsområdets ortnamnskick. In: Studier i nordisk filologi 63, p. 95–102.

HULDÉN, LARS (2001) Finlandssvenska bebyggelsenamn. Namn på landskap, kommuner, byar i Finland av svenskt ursprung eller med särskilt svenskt form. Overview by LARS HULDÉN on the basis of the material compiled by NINA MARTOLA, KURT ZILLIACUS, RITVA LIISA PITKÄNEN & al., assisted by ÅKE GRANLUND and CARL-ERIC THORS. The Society of Swedish Literature in Finland. Helsinki.

HULDÉN, LENA (2002) När kommo svenskarna till Finland? Trender i en tvärvetenskaplig debatt från slutet av 1800-talet till 1950-talet. In: När kom svenskarna till Finland? Ed. by ANN-MARIE IVARS—LENA HULDÉN. The Society of Swedish Literature in Finland. Helsinki, p. 3–38.

HULTIN, HERMAN (1926) Pyttis socken: en skildring. Helsinki.

KIVINIEMI, EERO—GUNILLA HARLING-KRANCK—PETER SLOTTE—RITVA LIISA PITKÄNEN (1977) Der Namenbestand an der finnisch-schwedischen Sprachgrenze. In: Onoma 21, p. 426–439.

LINDKVIST, THOMAS (2002) Sverige och Finland under tidig medeltid. In: När kom svenskarna till Finland? Ed. By ANN-MARIE IVARS—LENA HULDÉN. The Society of Swedish Literature in Finland. Helsinki, p. 39–50.

NAERT, AINO (1995) Ortnamn i språkkontakt. Metoddiskussion med utgångspunkt i ortnamnsskicket i ett finskt-svenskt kontaktområde. Acta

- Universitatis Upsaliensis. Nomina Germanica. Arkiv för germansk namnforskning. Uppsala.
- ORRMAN, ELJAS (2002) Kontinuitet eller diskontinuitet konkurrerande teorier om den svenska bosättningens ålder i Finland. In: När kom svenskarna till Finland? Ed. by ANN-MARIE IVARS—LENA HULDÉN. The Society of Swedish Literature in Finland. Helsinki, p. 51–61.
- PELLIJEFF, GUNNAR (1966) *Ortnamnslån. Några synpunkter.* In: *Namn och Bygd.* Tidskrift för nordisk ortnamnsforskning. Uppsala, p. 84–94.
- PITKÄNEN, RITVA LIISA (1975) *Pyhtää Pyttis*. In the research project "Kieliraja-alueiden paikannimistöt". Manuscript. 74 p.
- PITKÄNEN, RITVA LIISA (1976) *Tvåspråkighet och namnbruk*. In: *Ortnamn och samhälle: aspekter, begrepp, metoder*. Ed. by VIBEKE DALBERG—BOTOLV HELLELAND—ALLAN ROSTVIK—KURT ZILLIACUS. NORNArapporter 10. Uppsala, p. 155–163.
- PITKÄNEN, RITVA LIISA (1985) *Turunmaan saariston suomalainen lainanimistö*. Publications of the Finnish Literature Society 418. Helsinki.
- PITKÄNEN, RITVA LIISA (1990) Ortnamn av finskt ursprung. In: "Finska skären". Studier i åboländsk kulturhistoria utgivna av Konstsamfundet 1990. Konstsamfundets publikationsserie VII. Helsinki, p. 135–193.
- PITKÄNEN, RITVA LIISA (1990) Uplift as a method of dating the names of natural places. In: Finnish Onomastics Namenkunde in Finnland. Studia Fennica 34, p. 47–60.
- PITKÄNEN, RITVA LIISA (1993) *Turunmaan saariston suomalais-virolainen asutus*. In: *Suomen varhaishistoria*. Studia historica septentrionalia 21. Oulu, p. 397–403.
- PITKÄNEN, RITVA LIISA (2001) The oldest toponyms and the origins of the population of the Finnish south coast. In: Congressus Internationalis Fenno-Ugristarum IX. Pars IV. Tartu, p. 53–58.
- PITKÄNEN, RITVA LIISA (2002) Onko Uudellamaalla virolaisia lainanimiä? In: Nime murre. Pühendusteos Valdek Palli 75. sünnipäevaks 30. juunil 2002. Eesti Keele Instituudi toimetised 11. Ed. by MARJA KALLASMAA. Tallinn, p. 189–198.
- RAPOLA, MARTTI (1966) Suomen kielen äännehistorian luennot. Publications of the Finnish Literature Society 283. Helsinki.
- ZILLIACUS, KURT (1980) Ortnamnsförråden vid språkgränsen i Finland. Presentation av ett forskningsprojekt. In: Ortnamn och språkkontakt. Handlingar från NORNA:s sjätte symposium i Uppsala 5–7 maj 1978. NORNA-rapporter 17. Ed. by THORSTEN ANDERSSON—EVA BRYLLA—ALLAN ROSTVIK. Uppsala, p. 317–349.
- ZILLIACUS, KURT (1989) *Skärgårdsnamn*. The Society of Swedish Literature in Finland. Helsinki.

ZILLIACUS, KURT (1994) *Orter och namn i "Finska skären"*. In: "*Finska skären"*. Studier i åboländsk kulturhistoria utgivna av Konstsamfundet 1990. Föreningen Konstsamfundets publikationsserie XV. Konstsamfundet. Helsinki, p. 283–372.



Laimute Balode—Ojārs Bušs (Riga, Latvia)

On Latvian Toponyms of Finno-Ugrian Origin

1. Introduction

The Finnic-speakers of the Baltic Sea region, a part of to the Finno-Ugrian linguistic community, have dwelled alongside the speakers of Indo-European, namely, the Baltic languages, in the territory of the present Latvia for several hundred years. As we know from historical sources, and especially from archaeological findings, once (i.e. at the end of the first millennium C.E.) the Finno-Ugrian tribes occupied almost half of the Latvian territory. The present meridian of Riga could be defined as the border between the Finno-Ugrian and Baltic tribes, although this is a very rough estimate (see maps "Balti un to kaimiņi 1.g.t.p.m.ē. 2. pusē" and "Etniskais sastāvs Latvijas teritorijā 9.–10. gs. sākumā"—LaVē, insert maps). During the following centuries the area occupied by the Finno-Ugrian peoples shrank and nowadays exists only symbolically but place names of Finno-Ugrian origin still constitute a significant part of the Latvian toponymic system and thereby testify to the language and culture of their creators.

The first important linguistic study of place names of Finno-Ugrian origin in Latvia was the monograph by AUGUST BIELENSTEIN (1892). In this work the place names of Latvia found in historical documents of the 13th century are analysed from the point of view of identification and origin. BIELENSTEIN also suggests a considerable number of Finno-Ugrian etymologies, mentioning nearly 400 Finno-Ugrian (in his terminology "livo-finnische") lexemes for purposes of comparison. The second significant work, of monographic size, in which quite a large proportion of the place names of Finno-Ugrian origin were analysed was written by VALENTIN KIPARSKY (1939). This work is devoted to the Curonian language and therefore also in part to the place names of Kurzeme. In writing about the features of one particular region of Latvia (Veclaicene resp. Lejasciems) KĀRLIS PLUKŠS and DAINA ZEMZARE etymologised several place names of Finno-Ugrian, mainly Estonian, origin (PLUKŠS 1936, ZEMZARE 1940). Very valuable material for the study of contacts between Baltic and Finno-Ugrican toponymic systems can be found in the monograph on the place names of Kauguri parish (RŪĶE-DRAVINA 1971). Among relatively old publications several works by the founder of modern Lithuanian linguistics KAZIMIERAS BŪGA (1922, 1923a, 1923b, 1924a, 1924b) may be mentioned. These were primarily devoted to the history of the Baltic languages, and included toponymic evidence regarding pre-historical contacts with Finno-Ugrian.



Among publications from the second half of the 20th century, the two volumes of the Dictionary of Latvian Place Names, compiled by Jānis Endzelīns (= Lvv. I, Lvv. II) should be mentioned. This is the largest collection of Latvian toponyms published so far. However, being compiled in alphabetical order, it covers only those place names up to the letter O. The numerous etymologies proposed by J. Endzelīns apparently include place names of Finno-Ugrian origin, also. A kind of sequel to this dictionary has recently been published (= Lvv. 2003). This covers the place names Paaglis-Piķu.

There are some noteworthy articles devoted exclusively to those Latvian place names that are of Finno-Ugrian origin. MARTA RUDZĪTE compiled and commented on views held earlier about the hydronyms of Finno-Ugrian origin in Latvia in her oldest article mentioned in the bibliography of this article. In the list of river and lake names considered, she included both plausible and even more convincing Finno-Ugrisms (RUDZĪTE 1968). ANTONS BREIDAKS has systematically studied the hydronyms of Finno-Ugrian origin in Latgale, that is, the eastern part of Latvia (BREIDAKS 1970, 1972, 1973, 1977, 1981, 1983, 1989, 2000) and VALDIS J. ZEPS has also written about them (ZEPS 1977). KERSTI BOIKO has studied micro-toponyms of Finno-Ugrian origin (BOIKO 1992, 1994a, 2001) and names of Livonian villages, as well as place names found in the areas surrounding these villages (BOIKO 1989, 1990, 1994b). DZINTRA HIRŠA and TÕNU KARMA have also dealt with hydronyms of Finno-Ugrian origin (HIRŠA 1987, 1994, KARMA 1990).

In recent decades several Latvian toponymists have drawn attention to certain toponymic Finno-Ugrisms (Bušs 1989, 1996, 1998a, 1998b, Bušs—BEITIŅA 1999, DRAVIŅŠ 1965, 1966, KARMA 1996, RAĢE 1970, RUDZĪTE 1966) or to problems which are at least in part related to research into this layer of Latvian toponymy (BALODE 1991, 1994, 1996, 1998, 1999, BALODE 1994, BOIKO 2002, Bušs 1994, DAMBE 1985, 1986, 1987, LAUMANE 1987, 1996, POIŠA 1999, RAĢE 1986, ZEPS 1962). Of great value from the point of view of the study of Finno-Ugrisms are some exhaustive gazetteers¹ edited by geographical specialists and devoted to those regions of Latvia, especially northern parts, in which comparatively large number of toponyms of Finno-Ugrian origin are to be found (KAVACS 1993, AVOTIŅA 1999).

Finno-Ugrisms can be found among place names which denote different types of geographical objects—rivers and lakes, as well as settlements, meadows, pastures, woods, swamps, and hills. In other words, names of Finno-Ugrian origin are represented both among hydronyms and oikonyms, as well as among microtoponyms. As is well known, hydronyms constitute the most stable part of the place name system. Microtoponyms vary most,



¹ i.e., geographical dictionaries (editor).

whereas oikonyms can be placed somewhere between these two types of toponyms from the point of view of stability. The most ancient place names of Finno-Ugrian origin in Latvia are to be found among hydronyms. This article is therefore primarily devoted to them. Moreover, not all of the obvious or possible Finno-Ugrisms that have been noted in the linguistic literature will be treated here. Since linguistics, like any field of research, proceeds on the basis of argumentation, the most interesting cases are often those which cannot be viewed as obvious. Also, in this article the most convincing examples seem to be the most significant from the point of view of research. Therefore, the following examples of Latvian hydronyms include only those which etymological connection with Finno-Ugrian languages appears maximally or almost maximally credible. In order to condense the explanatory place name material, examples are given only from the first part of the alphabet (*A*–*Ko*).

2. Hydronyms

The River Aga in Alsunga, Agas valks rivulet in Pope, $\bar{a}gs$ -up (= Agas upe; Latv. upe 'river') in Sarkanmuiža: Liv. agùD 'needle', Est. hagu 'brushwood', Haga farmhouse and Aga-silla village (Lvv. I, 5). Compare also Estonian Lake Agusalu järv (RUDZĪTE 1968: 178). Based on a document from 1476, the denomination of the river in Sarkanmuiža has been indicated as Ayga which V. KIPARSKY links with Liv. aigà 'shore, edge, territory, side' (KIPARSKY 1939: 204). The Indo-European root *ag-2 can also be considered a possible etymon (RUDZĪTE 1968: 178 with reference to KRAHE 1964: 54, VANAGAS 1981: 35). DZINTRA HIRŠA has analysed this hydronym especially from the point of view of its origin. She concluded that a Finno-Ugrian origin is most likely, taking into consideration the river's location in the area of a Livonian substratum (for lexical connections cf. J. ENDZELĪNS and V. KI-PARSKY; HIRŠA 1987: 83-86). From the viewpoint of the toponymic semantic universals, the aforementioned connection with Liv. agùD 'needle', Est. hagu 'brushwood' seems more credible, compare Šaka-many denominations of rivers in Lithuania (and Saka in Latvia) < Lith. šaka 'confluence' (VANAGAS 1981: 324) < šaka 'branch, bough'. It is possible that these appellatives from the Finno-Ugrian languages, together with the Finnish hako 'brushwood; fallen trees', could be considered as Baltisms and therefore related to Lithunian Šaka (SKES I, 50, SSA I, 131). From the standpoint of semantic motivation these hydronyms could be compared to denominations of rivers in Latvia: Skuja, Skujaine, Skujas strauts, Skujasupe, Skujatne, Skujene, Skujupe, Skujupīte (AVOTIŅA—GOBA 1986, IV, 15–16) < Latv. skuja



² No meaning for this root is given by the author (editor).

'needle'; this comparison allows us to regard as credible a connection between the denomination of the River Aga and the Liv. aguD, singular a'G 'needle'. However, the hydronym Age (see below) which has sometimes been linked to Aga (see, for example, KIPARSKY 1939: 204), probably has a separate origin.

The River *Age* (Germ. *Adja*) from Ledurga to the Baltic Sea, *Ages ezers* (Latv. *ezers* 'lake') lake in Lēdurga, River *Age* in Ozoli, *Aģes strauts* in the Limbaži region ~ possibly Livonian *ad* 'a 'coast' (BIELENSTEIN 1892: 62, Lvv. I, 6, RUDZĪTE 1968: 178). K. BŪGA has also drawn attention to the Finno-Ugrian origin of this hydronym (BŪGA 1924a: LX).

The River Ainass river (the left tributary of the River Malta) ~ Estonian hain 'hay' (southern Estonian form, lit. hein, cf. BREIDAKS 1989: 327, 2000: 371). From the phonetic point of view, compare also the name of a settlement on the Estonian border Latv. Ainaži, Est. Heinaste.

The River $\tilde{A}ng$ -valks in Sarkanmuiža ~ Livonian anG 'fork' (Lvv. I, 30, RUDZĪTE 1968: 178).

The River *Anique* in Vidzeme ~ Estonian *hani* 'goose' (Lvv. I, 30); likewise the River *Aque* in Dundaga (RUDZĪTE 1968: 178). Note, however, that K. BŪGA considered *Anique* a Baltism (RR III, 463).

Astervs the former name of Lake Burtnieks in Liezere: ~ aśti-järw³ (RUDZĪTE 1968: 179).

The River *Auneja* in Vidzeme and *Aunejas ezers* in the district of Ludza; A. BREIDAKS assumes these hydronyms to be of Finno-Ugrian origin and connects them to the Finnish toponyms *Ounasjoki, Ounasjärvi* (see BREIDAKS 1989: 327, 2000: 371).

The $\tilde{A}pes$ upe tributary of Lake Usma (the main denomination $K\bar{a}nupe$, this river flows into Lake Usma to the south of the village $\bar{A}pu$ ciems, GOBA 1994: 39), Lake $\tilde{A}pezers$ ($\bar{A}pu$ ezers) in Planīca (the river $\bar{A}pup\bar{t}te \sim Sprincupe$ flows from this lake, GOBA 1994: 58) \sim (?) Estonian toponyms Haapsalu and Haapsilla (Lvv. I, 66, RUDZĪTE 1968: 179).

Emeru valks brooks in Dundaga ~ Livonian ämàr 'dark; twilight' (cf. Fin. hämärä id.), compare also Estonian village-name Ämari (Lvv. I, 272, RUDZĪTE 1968: 180—in this source, however, the location of this brook is indicated incorrectly in Grobiņa). V. KIPARSKY has noted that literary attested forms of this toponym Embare, Embere, Emmere, Emmerbeke have been recorded in documents of the 13th–16th centuries. Calling into question

³ Estonian literary form would be *Astijärv*. Moreover, no lexical explanation is given to this toponym by the author (editor).

ERNESTS BLESE's opinion concerning a Curonian origin for this toponym, he has drawn attention to a surprising phonetic resemblance—especially occurring in some of the oldest records—to some also early attested Estonian toponyms, for instance, *Embere* (1253), *Emmern* (1467). He further links these Estonian toponyms with the Estonian *ema* 'mother' or *ämm(a)* 'mother-in-law, grandmother, etc.' + *pära, perä* 'back, rear' (KIPARSKY 1939: 209–210). From the standpoint of the semantic motivation of hydronyms, J. ENDZELINS' proposed explanation of the origin seems more credible. Also compare Finnish place names with the specific *hämärä* 'dark; twilight', for example, *Hämäräkolu* ('ojan syvä notko metsässä' = 'deep bed of a ditch in a forest'), *Hämärämäki, Hämärämetsä, Hämäräniemi, Hämäräsuo* (KKTK). It is also possible that the denomination of the brook could be secondary, because there are other place names with this lexical root in Dundaga, for example, homesteads *Emari* ~ *Emmeri, Emarkalni* (see Lvv. I, 272).

The River *Ērģeme* in Ērģeme: The name is of Estonian origin, compare *Härgmäe: härg*, gen. *härja* 'ox, bull' + *mägi* (gen. *mäe*) 'hill' (Lvv. I, 283, RUDZĪTE 1968: 180).

The River *Iča* (the right tributary of the River Aiviekste) in Tilža. A. BREI-DAKS accepts this hydronym as a Finno-Ugrism and compares it with the Vote oikonym *Itšä-päivä* and the analogous Finnish personal name *Ikäpäivä* (BREIDAKS 1989: 327, 2000: 371). J. ENDZELĪNS, has, in turn, noted a possible parallel in the village name *Iciūnai* in Lithuania (Lvv. I, 356). It could be added that there may be an etymon in Finnish, the appellative *ies* (Gen. *ikeen*) ~ Estonian *ike* 'yoke'. From the standpoint of semantics compare Latvian potamonyms *Jūga*, *Jūgupe* (see Lvv. I, 409, AvotīŅA—Goba 1986 II, 8–9, for a few Finnish examples see s.v. *Ikuldas ezers*).

The Lake *Ikuldas ezers* in Lielstraupe; in documents of the 13th century this lake is called *Ykewalde*. This name is mentioned in the Chronicle of Henry of Livonia as a village-name corresponding with *Ykwalde* recorded in 1529 (BIELENSTEIN 1892: 69). K. BŪGA supposes this hydronym—and a few other toponyms with the final component *-ulda*, for example, *Sigulda*, *Sumulda*—to be Finno-Ugrian (BŪGA 1923a: 382, Lvv. I, 357 with reference to K. BŪGA, RUDZĪTE 1968: 180). A. BIELENSTEIN mentions the name of the lake in the German form *Ik-kul-See*, explaining *Ik-kule* to be like "*Ik-Dorf*" (BIELENSTEIN 1892: 69). The aforementioned form corresponds to the Latvian *Ikuļu ezers*, which is the parallel nomination of *Pūricu ezers* (AVOTIŅA 1984 IV, 40). The form mentioned, *Ikuldas ezers*, was even attested in 1972 (LaVal.). The first component of the place name, *Ik-*, could be connected with the ancient Finnish personal name *Iko* (see PITKÄNEN 1985: 282) repeatedly attested in the Finnish toponymy, and the second part should



probably be identified as *-vald, compare Estonian vald 'municipality; some administrative unit' ~ Finnish valta 'power'. This leads one to assume that the name originally denoted an inhabited place, which also fits the reconstruction offered by A. BIELENSTEIN. In this case, the hydronym is a secondary derivative, that is, it has a deoikonymic origin. The ancient form *Ikewalde* can also be compared with the Finnish *Ikeheinänsuo*, *Ikeensuo*, *Ikeenmäki* (KKTK), but in the case of *Ikuldas ezers* a connection with the personal name *Iko* is somewhat questionable.

Iliŋ-ezers in Stende; compare Estonian hiline 'late (Wiedemann:) slow; backward' (Lvv. I, 359, RUDZĪTE 1968: 180). At the same place, the homestead name Iliŋi is attested. An identical oikonym is also found in Ezere, and the microtoponym, the name of a meadow Ilinu plava in Džūkste (Lvv. I, 359). It is thus impossible to argue that the limnonym is definitely a primary name. All these place names are situated in Kurzeme (western part of Latvia) and Zemgale (southern part of Latvia), that is, far from Estonia. There are some traces of the Estonian language in Kurzeme that seem to testify to an earlier presence of immigrants from Saaremaa island. However, place names with Iliṇ- could better be compared with Livonian il'im 'the highest' (where -m corresponds to Finnish -n, cf. Fin. ylin id.). Also, the possibility of an anthroponymic origin cannot be excluded. Such an explanation based on *Iliŋš < Ilja has been given, for instance, for the Estonian homestead name Ilise (PALL 1969: 35).

The River *Illu upe* in Stende, River *Ills-upe* in Pastende, *Illaišu upe* in Ezere; compare Estonian *Illu* a village, *Illi* a settlement (?) (Lvv. I, 359, RUDZĪTE 1968: 180). The areal distribution of Latvian place names with *Ill-, Ill-* is very similar to the *Ilin-*names mentioned above (see Lvv. I, 359), which leads one to assume a possible common origin or at least some connection. A. BIELENSTEIN has linked the homestead name *Ille* in Mērsrags with the Estonian *illus* 'nice, beautiful' (BIELENSTEIN 1892: 263), although actually the correct form of this Estonian adjective is *ilus* (cf. also a Latvian microtoponym of Estonian origin, *Ileduse*). Concerning this potamonym, see also (DRAVIŅŠ 1965: 57).

The River *Ilmade* in Vērgaļi (= *Ilmede* in Dunalka), the *Ilmatu strauts* rivulet in Matkule; compare the Lithuanian Lake *Ilmėdas* or Estonian *Ilmasoo* village, *Ilmsoo* farm, *Ilmatsalu* settlement (Lvv. I, 359, RUDZĪTE 1968: 180). The afore-mentioned Lithuanian limnonym *Ilmėdas* could itself be a Finno-Ugrism (VANAGAS 1975: 405, 1981: 129). K. BŪGA (BŪGA 1923b: 382) has also mentioned the homestead names *Ilmete* in Ģeri and *Ilmēns* in Rencēni, which J. ENDZELĪNS has included as possible Finno-Ugrisms in the same entry with the afore-mentioned hydronyms in his toponymic dictionary (Lvv. I, 359). A. BIELENSTEIN has also written about the estate name *Ilmaje*, com-

pare *Ilmāja* estate in Vecpils and *Ilmājas-upe* in Krote which sounds phonologically Finnish ("scheinen nicht lettischen, sondern finnischen Lautcharakter an sich zu tragen", Lvv. I, 359; BIELENSTEIN 1892: 269). The most detailed analysis of these toponyms—*Ilmāja* and *Ilmede*—has been made by V. KIPARSKY. He accepted these as Finno-Ugrisms based on the common specific *ilma*- frequently occuring in Finnish and Estonian toponyms (cf. Fin. *ilma* 'weather; world', Est. *ilm* 'world; weather', Liv. *īlma* id. and toponyms Est. *Ilmjärv*, Fin. *Ilmajoki*, etc., KIPARSKY 1939: 210–211).

Iviks ~ \bar{I} viks former (overgrown) lake in Lejasciems; also Ivika $p\bar{u}rs$ ~ \bar{I} vika $p\bar{u}rs$ marsh in the same place; D. ZEMZARE connected these toponyms with the dialectal \bar{i} viks 'kind of a grass (cotton-grass)', which, in turn, has most likely been borrowed from the Estonian ivikas 'granulated', (Wiedemann: iwwike 'grain, corn, granule', ZEMZARE 1940: 42–43). This is the only record of the dialectal lexeme iviks (ZEPS 1962: 111), so it is not clear on what basis V. ZEPS proposes another meaning 'sedge' for this word (ibid.). Also, J. ENDZELĪNS and M. RUDZĪTE wrote only about the Estonian iwwike (ivike) 'little grain, corn, granule' as a possible etymon of this lake name (Lvv. I, 369, RUDZĪTE 1968: 180). Nevertheless, from the semantic point of view it is more likely that this limnonym was derived from the Latvian dialectal name of marsh grass \bar{i} viks (cf. two Latvian limnonyms with Spilv- < Latv. Spilve 'cotton-grass', AVOTIŅA 1984 V, 28). In this case the connection with Finno-Ugrian languages is indirect, that is, the toponym is related to the Latvian appellative of Finno-Ugrian origin.

Lake *Jērkules ezers* in Bīriņi ~ Estonian *järv* 'lake' and *küla* 'village' (Lvv. I, 399, RUDZĪTE 1968: 181). If this quite credible explanation is correct, the settlement name *Jērkule* ~ *Jērķile* (with the German form *Jerküll*, in a 13th century document *Gerwi-kule*) obviously has to be primary. Even A. BIEL-ENSTEIN linked this oikonym with the afore-mentioned Estonian *järv* 'lake' and Livonian *jora*, *jara*, *järu* id. (BIELENSTEIN 1892: 53).

The River *Jogla* in Rozēni is, according to BŪGA, "perhaps (the same as *Jugla*), a Finnish name" (Lvv. I, 400). He compares *Jogla* and *Jugla* with the Livonian *jog* 'river' and presents a Finnic reconstruction **Jogla* (BŪGA 1923b: 377, RUDZĪTE 1968: 181).

Jugla river (tributary of the river Brasla), Lielā Jugla and Mazā Jugla—tributaries of Lake Jugla, the River Jugla in Auri, the Jugla tributary of Iecava, the Jugla tributary of Misa, Lake Juglas ezers in the vicinity of Riga (Lvv. I, 402); the origin of all these hydronyms could be the same as that of

⁴ A common denomination for Cyperaceae taxon grasses (editor).

⁵ Modern literary form (editor).

the potamonym Jogla. This point of view is held by V. DAMBE (1987: 35– 36), at least regarding the hydronyms in the region of Riga, and also by T. KARMA (1990: 36). The connection between the potamonym Jugla with the Livonian jog, joig, jok 'brook, rivulet' has been mentioned earlier by A. BIELENSTEIN. Further, such a connection is even more credible because of the literary attested form of the toponym Yogele recorded in the documents of the 13th century (BIELENSTEIN 1892: 45). Obviously the ancient form is reflected in the German nomination of this river, the Jägel, which corresponds to a very similar place name in Estonia attested in 1684, German Jägelshoff, while the Estonian name of the same place is Jõemõisa 'estate of the river' (KARMA 1990: 36, see PALL 1969: 42). Such a similarity confirms the credibility of the afore-mentioned explanations of origin. In addition to this explanation, J. ENDZELĪNS proposes as a possible etymon the Latvian appellative juglina 'small fish' (Lvv. I, 402, RUDZĪTE 1968: 181). This appellative is considered by J. ENDZELĪNS to be of Baltic origin ("Mit gl aus dl, zu judēt?", 6 ME II, 115 s.v. jugliņš), although according to B. LAUMANE it is more likely that this fish name (in ichthyological literature known as 'Alburnus alburnus', is of Estonian and Livonian origin, compare Estonian jugaline 'something with dark stripes or streaks' attested in the Pärnu region (see WIEDEMANN 1869: 181, LAUMANE 1973: 246). From the standpoint of phonetics and semantics both of the afore-mentioned hydronyms are comparable also with Estonian appellative juga 'rapids; waterfall' (see SSA I, 245 s.v. juka). The occurrence of those potamonyms in Zemgale (southern part of Latvia—Auri, near the rivers Iecava and Misa) is somewhat surprising. Perhaps some of them are originating in the Riga district, where hydronyms with the root of Jugl- are widely known. It is worth mentioning that a wellknown German linguist, WOLFGANG P. SCHMID, in a discussion at the Congress of Baltists in Riga (1980) supported a Indo-European (i.e. Baltic) origin for the hydronym Jugla and treated it as a structural analogue (cf. the Latvian appellative deglis 'burner, fuse, primer, match, wick'). Nevertheless, it would seem more difficult to substantiate this hypothesis than to accept the afore-mentioned Finno-Ugrian etymology.

The River Juldurga ~ Jūldruga (Juldruga ~ Juldurga river in Naukšēni)—tributary of Rūja (Lvv. I, 403). K. BūGA writes about this name as well as about other place names in Latvia with the component -urga (cf. Liv. and Est. urg, Fin. orko 'low-lying land') and considers them to be of Finno-Ugrian origin (BūGA 1923b: 383). Even V. THOMSEN suggested a Finno-Ugrian origin for the Latvian appellative urga 'small brook' (in dialects also 'cave' along with many other topographic meanings, THOMSEN 1890: 283,

⁶ With gl from dl, connected with judet 'move'? (translation by editor).

⁷ Bleak (editor).

cf. ME IV, 304). The Latvian etymologist K. KARULIS acknowledges only a dialectal form with the meaning 'cave' as a Finno-Ugrism, whereas he derives *urga* 'brook' from the Latvian verb *urgt* 'gurgle, stream', iterative *urdzēt* (KARULIS 1992 II, 456–457). While J. ENDZELĪNS, supporting the opinion of V. THOMSEN, considered the lexeme *urga* a loanword, he also accepted the possibility that Latvian *urdzēt* could have influenced the meaning 'brook' (ME IV, 304). The first component of the hydronym under consideration is *Juld-*, compare with Estonian *Üldna järv* lake (see KASK 1964: 221) and Salaca Livonian *juldias, juldies, juldijas* from **uldi-* 'same; similar; all the same' LivW 94 (see KETTUNEN 1938: 94; RUDZĪTE 1968: 181). From the standpoint of etymological semantics *Juldurga* could perhaps be compared to two Latvian potamonyms located in Kurzeme—*Līgupe* (AVOTIŅA—GOBA 1986 II, 43) and several Lithuanian river names *Lygė* (see VANAGAS 1981: 191, cf. Latv. *līdzens* 'even, flat', *līdzīgs* 'alike', Lith. *lygus* 'even, flat; alike').

Lake Jumala in Vecpiebalga (Lvv. I, 403), Bricu ezers ~ Cibulu ezers ~ Jumalas ezers in Jaunpiebalga (AVOTIŅA 1984 I, 45) could only be connected to the appellative jumala,8 which in ME II is unaccompanied by an etymological explanation. However, in an earlier publication J. ENDZELĪNS compared this limnonym with the potamonym *Jumara*, which he believes is possibly of Livonian origin, though he does not suggest a concrete etymon (ENDZELĪNS 1934: 134). K. KARULIS is in no doubt that the dialectal jumala, together with the much more commonly used (also in Latv. literary language) jumis 1. 'double spike', 2. 'fertility deity of the fields' (LLVV 4: 56) is inherited, that is, it is a word of Indo-European origin. He considers it possible that the basis of the hydronym Jumara is the inherited word stem jum- (KARULIS 1992 I, 361). V. ZEPS has adopted a more cautious position, concluding that the relationship of the afore-mentioned words (i.e. Latv. jumis, jumala and other derivations of this root) to Estonian jumal, Liv. jumāl, etc. 'god' is obscure' (ZEPS 1962: 114). While accepting the statement by V. ZEPS regarding the Latvian appellative jumala (the Indo-European origin of Latv. jumis seems to be too problematic for consideration in the present article), the origin of the limnonym Jumala could be related to Finno-Ugrian languages, that is, to the afore-mentioned Estonian and Livonian words. This explanation for the origin of the name is based, among other arguments, upon corresponding semantic motivation found in Latvian hydronyms (cf. Dievinezers in Lubezere, Diemestezers in Griķi, Die(v)mests ezers in Kabile, Dieva mests ezers in Abava, also Dieva dīķis in Nīca, Dieva atvariņš in Skaistkalne and many other place names with Diev-: Latv. dievs 'god', dimin. dieviņš, see Lvv. I, 220–221). Special attention should be paid



⁸ Meaning of this word is discussed below (editor).

to the afore-mentioned limnonyms in Griķi, Kabile and Abava (even if it is not impossible for the names in Kabile and Griķi to refer to the same lake). This is supported by stories referring to the origin of the lake. As can be concluded from the names, these tales tell of lakes thrown down to earth by God; the existence of similar accounts in the Finno-Ugrian languages would be consistent with the semantic motivation for the limnonym *Jumala*. It is interesting, though, that no limnonym **Jumalanjärvi* is attested in Finland, although the hydronyms *Jumalanjoki* and *Jumalanpuro* are known (KKTK). It must be added that A. BIELENSTEIN only notes the oikonym *Jumala* in Zemgale, and that he is completely sure of its Finnic origin (BIELENSTEIN 1892: 370).

The River Jumalda in Alūksne (and Jumuldas purvs swamp in Alsviķis) has also been characterised as "probably a Finnish word" (Lvv. I, 403, with a reference to BŪGA 1923b: 377, where this potamonym is also compared to the Finnish appellative jumala). Another possibility is to regard the Finnish jumista 'thud, smash, crash, crack' and corresponding words mentioned in the Lvv entry Jumara as possible etymons, compare the ending (especially that of the swamp name) with Ikuldas ezers. Our attention is attracted to a complete phonetic correspondence with the Livonian (Western Liv.) jumalD 'swear, curse', jumaldimi 'swear word' (see KETTUNEN 1938: 94); from the semantic point of view these words are unlikely to be motivators for the potamonym, but they may have been influenced by the phonetic form of the place name under consideration through folk etymology.

The River *Jumara* in Kocēni, "probably a Finnish word" (Lvv. I, 403 with a reference to BūGA 1923b: 377, 1913: 32). Only in the latter, that is chronologically the first publication, is there a concrete comparison with the Finnish *jumista* 'thud, smash, crash, crack' (cf. also Karelian *jumata* id., see SSA I, 247), *jumu* 'crack; clash' (?) (such a lexeme cannot be found in either SSA, or SKES, or in contemporary Finnish dictionaries). However, it seems that more attention should be paid to looking for the potential etymon from the Salaca Livonian *jumar*, *jumer*, *jümer* 'um, herum' (see KETTUNEN 1938: 95) (cf. Fin. *ympäri*); that a word with such a meaning can motivate the name of a river can be seen from the Latvian potamonym *Apkārtupe* (< Latv. *apkārt* 'around', see AVOTIŅA—GOBA 1986 I, 15) in the Gulbene region (also in northern Latvia; could this Latvian place name be a calque from a hypothetical more ancient river name of Finno-Ugrian origin analogous or similar to the Finnish potamonym found at Kocēni?).

Lake *Jumurdas ezers* (and *Jumurdas muiža* estate); the origin could be the same as that of the afore-mentioned *Jumara* (Lvv. I, 404). The potamonym, as well as the name of the estate are located in the parish of Jumurda; it seems that in this case the oikonym could be primary. K. BŪGA has no doubt

about a Finnic origin for this oikonym, that is, the name of the estate *Jumurda*: "lett. *Jumurda* kann, da es finnisch ist (vgl. oben *Jumara*), mit kelt. **Jubar-dūnum* [...] nicht zusammenhängen" (BŪGA 1913: 32).

Lake *Juveris* in Dzērbene (Lvv. I, 408). K. BŪGA considers this name of probable Finno-Ugrian origin, placing it among the Latvian place names (mainly the names of lakes) with the ending *-eris*, *-ere*, which could have originated from the Finnic *-järvi* 'lake' (BŪGA 1923b: 383). Although a Finnish origin might be doubtful for several of those place names suggested by K. BŪGA, this cannot be said of *Juveris*: the first component of this limnonym could be related to the Estonian dialectal form *jyvä* 'corn; grain' (cf. Latv. *Graudupe* river in the Kuldīgas region [see AVOTIŅA—GOBA 1986 I, 64] < Latv. *grauds* 'corn'?) or Liv. *juva* 'good'.

Lake *Jūdažu ezers* and the River *Jūdažu upe* in Sigulda; K. BŪGA derives them (or more precisely the oikonym *Jūdaži*, which is apparently primary in this nest of toponyms) from the Estonian *jūdas* 'devil' (BŪGA 1923b: 380) (Lvv. I, 409, RUDZĪTE 1968: 181).

The River *Kaibaliņa* in Jumprava and Lielvārde, the River *Kaibara*, tributary of the Abuls; possibly of Finno-Ugrian (Livonian, RUDZĪTE 1968: 181) origin (thus comparable with Liv. *kaib*, Fin. *kaipaan* '(I) long', BŪGA 1923b: 377–378), compare Estonian *Kaibaldi* homestead (Lvv. II, 4), *Kaibiste* homestead (RUDZĪTE 1968: 181), compare also Estonian *kaebama* (*kaibama*) 'complain' (see WIEDEMANN 1869: 178; BALODE 1991: 48).

Kaiva ezereņč (dial. [Latgalian] ezereņč 'a little lake' = standard Latvian ezeriņš) lake in Asūne, compare Estonian kaev 'well; fountain' (BREIDAKS 1989: 327; earlier noted by BŪGA 1923b: 378, who mentions the Finnish form kaivo, and also Lvv. II, 6 in which this name is compared with the Estonian settlement name Kaeva and refers to the Latvian dialectal appellatives kaiva and kaija 'gull' [ME II, 136, these appellatives are probably of Finno-Ugrian origin: ibid., 132] and kaive 'horse' [EH I, 575], as alternative etymons for all Latvian place names in the entry kaiva). V. ZEPS doubts the genuineness of the form of this limnonym, suggesting that it should be changed to Kaļva azars (ZEPS 1977: 428), but A. BREIDAKS flatly refutes these reservations affirming that it is precisely Kaiva ezereņč that is in Asūne (BREIDAKS 1989: 331–332). The lake name Kaives ezers in the Cēsis region may also be worth mentioning (RUDZĪTE 1968: 181, see AVOTIŅA 1984 II, 43).

Kalekaura ezers in Jaunroze: Estonian dialectal kala-kaur 'black-throated diver; gavia arctica' (Lvv. II, 11, RUDZĪTE 1968: 181); a parallel variant Kalakaura ezers (AVOTIŅA 1984 II, 44) has also been attested.



Lake *Kangarezers* in Suntaži: Latvian *kangars* 'knoll', which comes from the Livonian *kāngar* id. (ME II, 154; RUDZĪTE 1968: 182). In this case the connection between the hydronym and the Finno-Ugrian languages is indirect; besides, the direct motivator of the lake name is not the aforementioned appellative of Livonian origin, but the name of an elevation of the same origin, *Kangari* ~ *Kangaru kalni*, which is very well known in Latvia and is located in the parish of Suntaži (see Lvv. II, 37–38).

Kanieres upele rivulet in Nīca, (the basis of this potamonym appears to be the limnonym mentioned below), Lake Kaniera ezers in Nīca, Kanieris in Sloka (in documents from the 13th century [1253] Canygerwe, Canygerwe, 14th century [1330] Caneierve (see BIELENSTEIN 1892, from which it would seem that the second component of this limnonym has been compared for the first time to the Liv. järu 'lake', while K. BŪGA compares the name in question with the Finnish järvi (BŪGA 1923b: 383), although J. ENDZELĪNS prefers the Liv. järu, Est. järv 'lake' [Lvv. II, 42]). E. HAUZENBERGA names the afore-mentioned limnonym in Sloka and some other similar place names, for example, the Kaņieris meadow in Brocēni (here also Kaņiera dīķis, see PLĀĶIS 1936: 112) among examples illustrating the loss of -v- between a liquid consonant and the following vowel (HAUZENBERGA 1932: 134). V. KIPARSKY analyses the etymology of this limnonym in a somewhat more detailed way, accepting the point of view of A. HERMANN expressed as early as 1896 and linking the first part of this word with the Livonian kanà 'hen; rooster'. He compares this hydronym to the lake name Kanajärvi in Finland (KIPARSKY 1939: 213–214); one could also mention Gailezers in Riga and Gailu ezers in the Daugavpils region (AVOTINA 1984 II, 10 ~ Latv. gailis 'cock'), as well as Vistu ezers in the Cesu region (ibid. VI, 30 ~ Latv. vista 'hen') as examples of analogous semantic motivation.

Lake *Kodaja* (with -o-?) ezers in Rozēni (better known as *Soka ezers*) is located in the *Kodaja purvs* marsh, not far from the Estonian border (KRISTAPSONE 1997), compare Estonian *kodu*-, derivation of *koda*- 'hut'. This word is used together with *mets*- 'forest' to build contrastive word pairs, for example, *kodupart* 'duck', *metspart* 'wild duck' (see WIEDEMANN 1869: 316, 772), Liv. *k*^u*odānūrga* = *mājurga* in Dundaga (< Latv. *māja* 'home' + *urga* 'brook'), compare also the Estonian *Kodijärv* lake (see KASK 1964: 207) (RUDZĪTE 1968: 183). This explanation is somewhat dubious from the standpoint of semantic motivation; however, a connection between the origin of the lake or the marsh name (it is difficult to say which was the primary) with a quite polysemic Estonian *koda* (see WIEDEMANN 1869: 315) seems most plausible.

Only some Latvian hydronyms of Finno-Ugrian origin have been analysed above; the actual number of such names is at least 3–4 times larger. Fur-

thermore, as mentioned earlier, there are quite a lot of toponyms of similar origin among the Latvian oikonyms and microtoponyms, too. Many of these have been identified in specific publications; however, a comprehensive survey of that linguistic material is not offered here. An inventory and the verification of the etymologies of (all or almost all) Latvian toponyms of Finno-Ugrian origin should be one of the most urgent tasks of Latvian toponomists.

References

- AUNS, M. (2002) Latvijas vietvārdi viduslaikos. Manuscript.
- AVOTIŅA, R. (1984) Latvijas PSR ūdenstilpju nosaukumi. Īsa izziņa I–VI. Sastādītāja R. AVOTIŅA. Rīga.
- AVOTIŅA, R. (1999) Madonas rajons. Kalni. Upes. Ezeri. Purvi. Meži. Ģeogrāfiska vietvārdu vārdnīca. Rīga.
- AVOTIŅA, R.—GOBA, Z. (1986) Latvijas PSR ūdensteču nosaukumi. Īsa izziņa I–IV. Sastādītājas R. AVOTIŅA—Z. GOBA. Rīga.
- BALODE, L. (1991) Daugavas pietekas. In: Daugavas raksti (No Aizkraukles līdz Rīgai). Rīga, p. 44–60.
- BALODE, L. (1994) Dauguvos intakų hidroniminė analizė potamonimų stratifikacijos aspektu. In: Baltistica 29/2, p. 207–214.
- BALODE, L. (1996) Par dažiem neskaidras cilmes Latvijas hidronīmiem. In: Baltistica 31/2, p. 231–234.
- BALODE, L. (1998) *Hidronīmi 16.–17.gs. kartēs*. In: *Baltistica* 5. priedas, p. 47–52.
- BALODE, L. (1999) Hüdronüümid XVI–XVII sajandi läti kaartidel. In: Keel ja Kirjandus 8, 568–571.
- BIELENSTEIN, A. (1892) Die Grenzen des lettischen Volksstammes und der lettischen Sprache in der Gegenwart und im 13. Jahrhundert. St. Petersburg.
- BOIKO, K. (1989) Par Ziemeļkurzemes lībiešu zvejniekciemu vietvārdiem. In: Par lībiešiem: Par lībiešu vēsturi, kultūru un situāciju mūsdienās. Rīga, p. 36–47.
- BOIKO, K. (1990) Fizioģeogrāfiskie apelatīvi Ziemeļkurzemes lībiešu zvejniekciemu vietvārdos. In: Onomastica Lettica. Rīga, p. 52–85.
- BOIKO, K. (1992) Baltijas jūras somu ģeogrāfiskie apelatīvi un to relikti Latvi-jas vietvārdos. In: Latvijas Zinātņu akadēmijas vēstis A daļa 8, p. 24–33.
- BOIKO, K. (1994a) *Latvian Place-names with* korb-, lān-, lagast- *and* pad. In: *Linguistica Uralica* 30, p. 81–90.

- BOIKO, K. (1994b) Ziemeļkurzemes piekrastes lībiešu ciemu vietvārdi. In: Lībieši. Rīga, p. 216–226.
- BOIKO, K. (2001) Par atsevišķiem igauņu un lībiešu valodas aizguvumiem latviešu valodā. In: Baltu filoloģija 10, p. 21–32.
- BOIKO, K. (2002) Čakāt, čollāties, čompāties, čorka *Baltijas somu aizguvumi latviešu valodā?* In: *Linguistica Lettica* 10, p. 40–54.
- ВREIDAKS, А. (1970) Брейдак, А. Влияние прибалтийскофинских языков на латгальские говоры Лудзенского района Латвийской ССР. In: Взаимосвязи балтов и прибалтийских финнов. Рига, р. 157–164.
- BREIDAKS, A. (1972) Upju nosaukumu liecības par Latgales etnisko vēsturi. In: Zinātniskās atskaites sesijas materiāli par arheologu, antropologu un etnogrāfu pētījumu rezultātiem 1971. gadā. Rīga, p. 17–20.
- BREIDAKS, A. (1973) Брейдак, А. Прибалтийско-финские названия рек в Латгалии. In: Latvijas PSR Zinātņu Akadēmijas Vēstis 2, p. 97–102.
- BREIDAKS, A. (1977) Брейдак, А. *О влиянии прибалтийско-финских языков на латгальские и селонские идиомы*. In: *Baltistica* 2. priedas, p. 26–35.
- BREIDAKS, A. (1981) Baltijas somu un latgaļu-sēļu etnolingvistisko sakaru jautājumi. In: Latvijas PSR Zinātņu Akadēmijas Vēstis 8, p. 85–97.
- Breidaks, A. (1983) Smulkmena. Ezera nosaukuma S'iv'ers' etimoloģija. In: Baltistica 19 (2), p. 196.
- BREIDAKS, A. (1989) Baltijas somu izcelsmes hidronīmi Latgalē. In: Valodas aktualitātes 1988. Rīga, p. 326–335.
- BREIDAKS, A. (2000) Брейдак, А. Прибалтийско-финские гидронимы в Латгалии. In: Congressus internationalis fenno-ugristarum IX. Pars II. Summaria acroasium in sectionibus et symposiis factarum. Linguistica. Tartu, p. 371.
- BŪGA, K. (1913) Kann man Keltenspuren auf baltischem Gebiet nachweisen? In: Rocznik slawistyczny 6. Kraków, p. 1–38.
- BŪGA, K. (1922) Kalba ir senovė. Kaunas.
- BŪGA, K. (1923a) *Upių vardų studijos ir aišsčių bei slavėnų senovė*. In: *Tauta ir žodis* 1. Kaunas, p. 1–44.
- BŪGA, K. (1923b) (Rev. about) *Latvijas vietu vārdi*. *I daļa*. Vidzemes vārdi. Piedaloties A. Ābelei, J. Kauliņam un P. Šmitam savācis un rediģējis J. ENDZELĪNS (1922). In: *Tauta ir žodis* 1. Kaunas, p. 376–397, 441–444.
- BŪGA, K. (1924a) *Lietuvių kalbos žodynas*. I sąsiuvinis. Kaunas.
- BŪGA, K. (1924b) *Lietuvių įsikūrimas šių dienų Lietuvoje*. In: *Tauta ir žodis* 2. Kaunas, p. 1–27.
- Bušs, O. (1989) *Dažu Latvijas vietvārdu cilmes īpatnības* (Pasiene, Pauna, Pazlauka, Pepītis). In: *Valodas aktualitātes 1988*. Rīga, p. 268–274.
- Bušs, O. (1994) Latvijas potamonīmi ar tautosillabiskajiem savienojumiem. Somugrismu problēma. In: Baltistica 4. priedas, p. 22–28.

- Bušs, O. (1996) *Hidronīma* Venta *toponīmiskais fons Somijā*. In: *Baltu filoloģija* 6, p. 40–42.
- Bušs, O. (1998a) Eine Streitfrage der lettischen Namenkunde (Ortsnamen mit Paun-). In: Baltistik: Aufgaben und Methoden. Ed. by A. BAMMES-BERGER. Heidelberg, p. 371–376.
- Bušs, O. (1998b) Ein unbemerkter Finnougrismus in der Toponymik Lettlands. In: Oekeeta asijoo. Comentationes Fenno-Ugricae in honorem Seppo Suhonen sexagenarii. Helsinki, p. 72–75.
- BUŠS, O.—BEITIŅA, L. (1999) Turaida un daži citi seni Turaidas novada vietvārdi. In: Vārds un tā pētīšanas aspekti. Rakstu krājums 3. Liepāja, p. 48–53.
- DAMBE, V. (1985) Valodu kontakti Latvijas PSR toponīmijā. In: Baltu valodas senāk un tagad. Rīga, p. 85–99.
- DAMBE, V. (1986) Valodu saskare Ziemeļkurzemes vietvārdos. In: Dialektālās leksikas jautājumi 2, p. 97–136.
- DAMBE, V. (1987) Ieskats Latvijas PSR hidronīmu semantikā. In: Onomastikas apcerējumi. Rīga, p. 32–45.
- DRAVIŅŠ, K. (1965) *Trīs somugru cilmes ūdeņu vārdi Ziemeļkursā*. In: *Ceļi* 12, p. 54–61.
- DRAVIŅŠ, K. (1966) Eine Anmerkung über der alte Grenze der livischen Dialekte in Kurland. In: Språkliga bidrag 23, p. 206.
- EH = ENDZELĪNS, J.—HAUZENBERGA, E. *Papildinājumi un labojumi K. Mīlenbaha Latviešu valodas vārdnīcai I–II.* Rīga, 1934–1946.
- ENDZELĪNS, J. (1934) *Die lettländischen Gewässernamen*. In: *Zeitschrift für slavische Philologie* 11, p. 112–150. (see also ENDZELĪNS, J. *Darbu izlase* III². Rīga, 1980, p. 162–194.)
- GOBA, Z. (1994) Kuldīgas rajons. Dabas objektu nosaukumu vārdnīca. Rīga.
- HAUZENBERGA, E. (1932) Ko vietu vārdi dod latviešu valodas fōnētikai? In: Filologu biedrības raksti 12, p. 115–148.
- HIRŠA, Dz. (1987) Ieskats bij. Sarkanmuižas (resp. Ventas) pagasta toponīmijā. In: Onomastikas apcerējumi. Rīga, p. 48–124.
- HIRŠA, Dz. (1994) *Lībieši un lībiešu izcelsmes vietvārdi Latvijā*. In: *Lībieši*. Rīga, p. 201–215.
- KAGAINE, E. (2002) Baltijas jūras somu valodu lokālie aizguvumi Ziemeļrietumvidzemes izloksnēs. Manuscript of monography.
- KARMA, T. (1990) Par lībiešu pēdām Rīgas toponīmijā. In: Onomastica Lettica. Rīga, p. 33–40.
- KARMA, T. (1996) Leģenda par Dieva dārzu. In: Baltu filoloģija 6, p. 37–39.
- KARULIS, K. (1992) Latviešu etimoloģijas vārdnīca I–II. Rīga.
- KASK, I. (1964) Eesti NSV järvede nimestik. Tallinn.

KAVACS, J. (1993) Valkas rajons. Dabas objektu nosaukumu vārdnīca. Rīga.

KETTUNEN, L. (1938) Livisches Wörterbuch mit grammatischer Einleitung. Helsinki.

KIPARSKY, V. (1939) *Die Kurenfrage*. Annales Academicae Scientiarum Fennicae, Ser. B, Bd. 42. Helsinki.

KRAHE, H. (1964) Unsere ältesten Flussnamen. Wiesbaden.

KRISTAPSONE, E. (1997) Rozēnu pagasta vietvārdi. Manuscript.

KKTK = Toponymic card-index of the Research Institute for the Languages of Finland (Helsinki).

LAUMANE, B. (1973) Zivju nosaukumi latviešu valodā. Rīga.

LAUMANE, B. (1987) Zvejvietu nosaukumi Latvijas PSR piekrastē. Rīga.

LAUMANE, B. (1996) Zeme, jūra, zvejvietas. Rīga.

LaVal. = Toponymic card-index of the Latvian Language Institute (Riga).

LaVē. = Latvijas PSR vēsture. No vissenākajiem laikiem līdz mūsu dienām. 1. sēj. 3. izdevums. Rīga, 1986.

LLVV = Latviešu literārās valodas vārdnīca 1-8. Rīga, 1972-1996.

Lvv. I = ENDZELĪNS, J. Latvijas PSR vietvārdi. I d. 1. sēj. A-J. Rīga, 1956.

Lvv. II = ENDZELĪNS, J. Latvijas PSR vietvārdi. I d. 2. sēj. K-Ō. Rīga, 1961.

Lvv. 2003 = *Latvijas vietvārdu vārdnīca*. *Paaglis–Piķu-*. Sastādījusi V. Dambe, iekļaujot arī materiālus no J. Endzelīna manuskripta. Rīga.

ME = MÜHLENBACHS, K. *Lettisch-deutsches Wörterbuch*. Redigiert, ergänzt und fortgesetzt von J. ENDZELIN. I–IV. Riga, 1923–1932.

OJANSUU, H. (1920) Suomalaista paikannimitutkimusta I. Tähänastisen tutkimuksen arvostelua. Turku.

PALL, V. (1969) Põhja-Tartumaa kohanimed I. Tallinn.

PITKÄNEN, R. L. (1985) Turunmaan saariston suomalainen lainanimistö. Helsinki.

PLĀĶIS, J. (1936) *Latvijas vietu vārdi un latviešu pavārdi*. Profesora J. Plāķa sakrāti un sakārtoti. 1. daļa. Kurzemes vārdi. Rīga.

PLUKŠS, K. (1936) *Igauniskie vietu vārdi Veclaicenē*. In: *Ceļi*. Rakstu krājums 6. Rīga, p. 69–74.

POIŠA, M. (1999) Dažu sēlisko izlokšņu fonētisko īpatnību atspoguļojums vietvārdos. In: Vārds un tā pētīšanas aspekti. Rakstu krājums 3. Liepāja, p. 150–153.

RAGE, S. (1970) Lompis. Manuscript.

RAĢE, S. (1986) Baltijas somu valodu aizguvumi latviešu valodā, ko pirmais etimoloģizējis J. ENDZELĪNS. In: Dialektālās leksikas jautājumi 1. d. Rīga, p. 18–126.

RR III = BŪGA, K. *Rinktiniai raštai*. III tomas. Vilnius, 1961.

RUDZĪTE, M. (1966) *Daži Salacas baseina hidronīmi*. In: *Baltistica* 2/2, p. 199–202.

- RUDZĪTE, M. (1968) *Somugriskie hidronīmi Latvijas PSR teritorijā*. In: *Latviešu leksikas attīstība*. P. Stučkas LVU zin. raksti. 86. sēj., Rīga, p. 175–197.
- RŪĶE-DRAVIŅA, V. (1971) Place Names in Kauguri County, Latvia. A Synchronic-Structural Analysis of Toponyms in an Ancient Indo-European and Finno-Ugric Contact Area. Stockholm.
- SKES = TOIVONEN, Y. H. (ed.) Suomen kielen etymologinen sanakirja. Helsinki, 1955.
- SSA = Suomen sanojen alkuperä. Etymologinen sanakirja. Helsinki, 1992.
- THOMSEN, V. (1890) Beröringer mellem de finske og de baltiske (litauisklettiske) Sprog. København.
- VABA, L. (1997) *Uurimusi läti-eesti keelesuhetest*. Tallinn–Tampere.
- VANAGAS, A. (1975) Ванагас, А. П. К проблеме финно-угорского субстрата в литовской топонимии. In: Congressus internationalis fennougristarum III. Pars I. Tallinn, p. 404–405.
- VANAGAS, A. (1981) Lietuvių hidronimų etimologinis žodynas. Vilnius.
- WIEDEMANN, F. J. (1869) *Estnisch-deutsches Wörterbuch*. 2. Auflage. Redigiert von J. Hurt. St. Petersburg, 1893 (1869¹).
- ZEMZARE, D. (1940) Valodas liecības par Lejasciema novadu. Rīga.
- ZEPS, V. J. (1962) *Latvian and Finnic Linguistic Convergences*. Bloomington–The Hague.
- ZEPS, V. J. (1977) Critique of Proposed Finnic Hydronyms in Latgola. In: Studies of Finno-Ugric Linguistics. In Honor of Alo Raun. Ed. by DENIS SINOR. Bloomington, p. 427–440.

Janne Saarikivi (Helsinki, Finland)

On the Uralic Substrate Toponymy of Arkhangelsk Region: Problems of Research Methodology and Ethnohistorical Interpretation

1. General

1.1. The geographical characteristics of the research area

European North Russia is probably one of the most thoroughly studied areas with a substrate toponymy in the world. Quite naturally, most of the studies concerning it have been published in Russia and in Russian. Therefore, they may have been left unnoticed by many western scholars. Nevertheless, the study of northern Russian substrate nomenclature is of importance for both the history of Uralic languages and the spread of various groups of Uralic peoples, as well as for the mechanisms and chronologies of the Slavicisation of the northern Russia.

This article provides an overview of the Uralic (Finno-Ugrian)¹ substrate toponymy of the Arkhangelsk Region (Ru. *Αρχαηεεπьсκαя οδηαςmь*). It serves as an introduction to this research field both for Uralicists and Slavists. It also offers a methodological discussion of the possibilities and limitations of the study of substrate toponyms as well as the problems connected with an ethnic interpretation of northern Russian place names. In this connection some new views which deviate from main-stream Russian research are put forward. Throughout the article, special reference is made to the toponymy of the Pinega basin (a tributary of the Northern Dvina), both because fieldwork has been carried out in this area by the author and because the toponymy of the area well characterises several general features and interpretation problems of northern Russian substrate toponymy.²

The Arkhangelsk Region (320.000 km², 1.336.000 inhabitants) is nowadays an overwhelmingly Russian-speaking region. There are various areas with a Uralic speaking population in its vicinity, however: in the west there is the

² A monograph by the author of this article on the toponymy of the Pinega District will hopefully be published in the near future. This will provide a larger material basis for the methodological discussions presented in this article.



¹ In this article, Finno-Ugrian and Uralic are used as synonyms. Traditionally, the notion Uralic is used of seven Finno-Ugrian branches and the Samoyed languages. In this article, only toponymy from Finno-Ugrian branches will be taken into consideration.

Republic of Karelia and the Leningrad Region with an indigenous Finnic (Karelian and Veps) population, in the east the Republic of Komi with a Permian (Komi) population and in the northeast the Nenets Autonomic District with Samoyed (Nenets) population. Administratively, the Nenets autonomic district is part of the Arkhangelsk Region, but it stands apart from it in geographical, historical and linguistic respects alike. At its southern edge the territory borders on the overwhelmingly Russian-speaking Vologda and Kirov Regions. To the north the area borders on the White Sea and the Arctic Ocean, but the Kola Peninsula with Sámi (and as a result of 19th century migrations e Nenets and Komi) population is only 60 km away by water.

Most of the Arkhangelsk Region belongs to the Northern Dvina drainage area. To the west, part of the area belongs to the basins of the River Onega and to the north-east to the basins of the Kuloj and Mezen'. All these rivers flow to the Arctic Ocean and the old dwellings in the area are typically situated along them. The landscape is relatively flat. The climate is mostly cold and dry and most of the area is taiga with coniferous forest and marshland. In the extreme north-east the dominant vegetation type is that of the tundra.

At the beginning of the 20th century, the Russian peasant population practiced cattle breeding based on the exploitation of flood meadows and agriculture based on the slash-and-burn method. In addition, hunting, gathering of berries and mushrooms, and, in the north, peasant reindeer herding were practiced. During the 20th century the population has grown rapidly due to industrialisation, the establishment of military bases and, during the Stalin era, due to numerous GULAG prison camps. Simultaneously, forestry has become an important means of livelihood.

In the 1970s it became Soviet policy to abolish the small collective farms. Thousands of villages were declared "pespectiveless" and their inhabitants moved to bigger settlements. This meant considerable changes in the use of the land and in the cultural landscape. After the collapse of the Soviet Uion, most of the collective farms have ceased functioning and the concentration of people into larger settlements has been accelerated. These changes threaten to destroy the remnants of the North Russian peasant way of life, which until now has preserved substrate toponyms from the period preceding the Slavic era.

1.2. The present language forms of the region

The Russian dialects of the area have a twofold historical background. The dialects of the northern part of the region derive from the Old Novgorod vernacular (древненовгородское наречие, древненовгородский диалект) represented in the Novgorod birch bark letters (cf. ZALIZNYAK 2004), whereas



the dialects of the region's southern border are descendants of the central Russian dialects spoken in the upper course of the Volga (cf. KOMYAGINA 1994: 228–232). This state of affairs reflects the twofold origin of the Slavic settlement in northern Russia. The northern and western parts of the Arkhangelsk Region were until 1471 a part of the Principality of Novgorod with the southern and eastern parts being subject to colonisation from the principalities of the Russian central plain—Rostov, Suz'dal, Jaroslavl, Vladimir and—in the later period—Moscow (cf. NASONOV 1951).

The division of North Russian into dialects is quite controversial and is not discussed here. It is enough to note that from the point of view of Russian dialectology, the Arkhangelsk dialects are quite conservative. Most of them share full okanje (non-reduced pronunciation of non-stressed vowels) and cokanje (the merging of two east Slavic affricates into one). They have also preserved g between vowels, in a position in which the Russian literary language has γ or ν . Some North Russian dialects also have a glide ν before a rounded vowel in the word beginning (cf. вострый < острый 'sharp') and they represent the development l > w in a postvocalic position in a closed syllable (cf. доугий < долгий 'long'). Uralic, mostly Finnic and, to a lesser extent, Permian substrate interference is discernable in the vocabulary and in some features of prosody and morphosyntax. The scope and amount of these substrate interferences has been subject to debate for decades and there is no unanimity as to what extent certain North Russian dialectal features, such as the nominative object, the postponed article, changes in accentuation, dialectal merger of voiced and voiceless stops, comparative forms of nouns, etc. have come about due to Finno-Ugrian influence.³

As noted above, all the other languages in north-eastern Europe are Uralic. Karelian and Vepsian belong to the Finnic branch of the Uralic languages. These are offsprings of an intermediate protolanguage of the Uralic family, Proto-Finnic. This protolanguage was probably spoken approximately 500 BC–500 AD in the vicinity of the Finnish Gulf (newest dating, KALLIO 2006⁴). The present Finnic settlement of most of inland Finland and Karelia emerged not earlier than the Middle Ages.

The Sámi languages spoken in the Kola Peninsula and northern Fennoscandia (together 25.000–30.000 speakers) are daughter languages of another intermediate Uralic protolanguage, Proto-Sámi. Proto-Sámi has usually been located somewhere in the Onega Region and was probably spoken simulta-

⁴ See p. 2 of the cited article for datings by earlier scholars and also discussion in section 6.5.



³ Information on proposed phonetic, phonological and morphosyntactic substrate features with references can be found in VEENKER (1967), VOSTRIKOV (1990), SARHIMAA (1995) and SAARIKIVI (2000, 2006).

neously with Proto-Finnic. Prior to Finnic, the Sámi languages were spoken in most of Finland and Karelia (cf. T. ITKONEN 1948: 88–107; cf. also article by ANTE AIKIO in this volume). Finnic and Sámi have had considerable mutual contact. According to a traditional view (E. ITKONEN 1966; KORHONEN 1981), these language groups also share a common protolanguage within Uralic. Today, this hypothesis finds less support (ITKONEN 1998; KOIVULEHTO 1999a; SAARIKIVI—GRÜNTHAL 2005).

Tundra Nenets, spoken in the Nenets Autonomic District, belongs to the Samoyedic branch of Uralic. The languages of this branch are offsprings of Proto-Samoyed, which likely was an earlier protolanguage than Proto-Finnic. As the proto-Samoyed vocabulary reconstruction of Janhunen (1977) includes approximately half as much vocabulary as the reconstruction of Proto-Sámi by Lehtiranta (1989) and Proto-Finnic has an even greater common vocabulary (cf. Häkkinen 1985). The area in which Proto-Samoyed was spoken is in western Siberia, whereas the Nenets of the Arkhangelsk Region are medieval newcomers.

Komi, spoken in the Komi Republic and in the area of the former Komi-Permyak Autonomic District, belongs to the Permian branch of Uralic languages. Further, the spread of Komi to the north and east is a relatively recent phenomenon which took place not prior to the 13th century. The original homeland of the Komi was in the Vychegda river basin in the south of the Komi Republic, and the Proto-Permian homeland was probably even further to the south, in the Kama Region (LASHUK 1970; BELYKH 1999). The dispersal of Proto-Permian is probably a somewhat later phenomenon than the dispersal of Proto-Finnic, dated approximately 700–800 AD (see BARTENS 2001: 10–13). There are Finnic loanwords in the Permian languages and it is therefore obvious that there have been contacts between these two groups of Finno-Ugrian languages (LYTKIN 1967, HAUSENBERG 1983, SAARIKIVI 2005, see also section 6.5.).

In addition to aforementioned languages, extinct Uralic languages may have been spoken in northern Russia. There are historical sources which mention pre-Slavic tribes without parallels among the present-day Uralic peoples (see below 1.3). This issue is discussed in detail in section 6.5.

It is also plausible that prior to or even simultaneously with the Uralic languages, extinct Palaeo-European languages were spoken in northeastern Europe. There is historical (in medieval Russian sources) and archaeological evidence of a tribe called the *nevepa*, ⁵ who seem to have stood culturally

⁵ The name of this ethnic group is connected with the name of the River Pechora and is derived form the Russian dialectal variant of *newepa* 'cave'. According to historical sources, the *newepa* lived in the caves at the mouth of the river *Pechora*.

apart from the present northern European populations. These people, who lived in northernmost Europe, may have been referred to as the *sihirtja* in Nenets folklore (cf. LASHUK 1958). In the light of multiple substrate borrowings in Nenets, these people were in all probability linguistically non-Uralic. Moreover, there is vocabulary which is probably of substrate origin in Finnic and especially in the Sámi branches of the Uralic languages (SAARIKIVI 2004a; AIKIO 2004) which suggests contact between these language groups and extinct languages (see section 6.5.).

1.3. Historical and archaeological sources on Finno-Ugrian populations

There are both Scandinavian (Old Norse) and Slavic literary sources on the Pre-Slavic populations of northern Russia. Certain 11–13th century Scandinavian sources call northern Russia *Bjarmaland* and its inhabitants the *bjarmar*. Some facts on the northern Russian Pre-Slavic population mediated by Scandinavian sources indicate that the people of northern Russia were of europoid appearance, spoke a language close to Sámi and practiced agriculture and cattle breeding. Sagas also contain information showing that the *bjarmar* had constant contact with the Slavic principalities in the 13th century (HAAVIO 1965; JACKSON 1993, MEĽNIKOVA 1986).

Russian chronicles and hagiographies mention several pre-Slavic populations in the present-day Arkhangelsk Region. The tribe name заволоцкая чудь which figures in the Russian Primary Chronicle has traditionally been considered the earliest Russian ethnonym of the Finnic population of the Dvina basin (cf. CASTRÉN 1844; HAAVIO 1965). This name is derived from the word *βολοκ* which has been used as a designation for those places where boats were carried over land from one water system to another. In later centuries, the notion Заволочье was used of that part of the Principality of Novgorod which was situated in the Dvina basin, outside the basic administrative units, the *пятины* (the 'fifths'). The other component of the ethnonym, *yydb* has been used of several Finnic tribes in the vicinity of the Gulf of Finland (on the use of the ethnonym see GRÜNTHAL 1997; on the origins and use GRÜNTHAL ibid. and KOIVULEHTO 1997). Besides заволоцкая чудь Middle Age Russian sources repeatedly mention the "common" 4vdb in northern Russia. As noted above, there are also historical sources which mention pre-Slavic tribes with no parallels among present northern European populations: сура поганая, тоймичи погане, пинежане, важане, белозериии, etc. Most of these ethnonyms derive from river names and it has been proposed that at least some of them refer to mixed Slavic-Uralic

⁶ In Sámi, the Palaeo-European substrate is, in any case, stronger and newer than in Finnic, where the existence of such a substrate layer may well be questioned.



populations (BERNSHTAM 1973). Some have been clearly hostile to the Slavs, however, as the Chronicles report armed conflicts of Novgorodians with *cypa поганая* and *тоймичи погане* during the Middle Ages.

According to the *ycmaвная грамота князя Святослава Олговича*, a historical document written at the time Novgorod emerged as a sovereign principality, northern parts of the Dvina basin were under Novgorod rule even in 1137 (cf. NASONOV 1951; MAKAROV 1997: 18–20). By that time, the population was certainly overwhelmingly non-Slavic. This is also reflected in 11–14th century archaelogical findings which point to various local groups of Finno-Ugrians. Material culture among some of them (Vaga basin, individual findings in the Pinega basin) shows similarities with the area populated by the Finnic tribes while some (Kokshen'ga and Sukhona basin) had intensive contacts with the Upper Volga region and its pre-Slavic settlers (OVSYANNIKOV 1978; RYABININ 1997; KOLPAKOV—RYABTSEVA 1994). Western influences from the Ladoga region are noticeable even in medieval archaeological findings in the west of the Komi Republic (SAVELJEVA 1992), whereas those findings related to Permian tribes in the Arkhangelsk Region are clearly less important.

During the Middle Ages, Novgorod and the central Russian principalities rivaled over the control of the northern peripheries and their resources. The first Slavs in this region were likely tax collectors and fur traders, who were followed by peasant migrants, probably from the beginning of the 14th century. The Slavicisation of the area was accompanied by an influx of new people from areas where Finnic languages were spoken, localities that were already subject to Novgorod rule. Thus, the migration waves to this area cannot easily be divided into Slavic and non-Slavic. This is emphasised by MAKAROV (1997), who has investigated the development of the trade and communication routes connecting the Dvina basin to Slavic centres by analysing archaeological findings from the major watersheds of the Russian European north. In the 12th century, most of these had both Finno-Ugrian and Slavic components. In subsequent centuries, findings connected with the Slavs increased, which seems to point to cultural assimilation of the local Finno-Ugrian populations with the Slavs.

The Slavicisation of the Arkhangelsk Region seems thus to have occurred both by Slavic migration and by a language shift of the Finno-Ugrian population. The latter has consisted of several groups, some of which participated in the same population waves as the Slavs within the Russian principalities which colonised the northern European peripheries. The final linguistic assimilation seems to have taken place in the Late Middle Ages, in some places probably as late as the 16th or even 17th century. The population sta-

tistics continued to have separate entries for Russians and $yy\partial b^7$ up to the 19th century, however, and even up to the present day there are some barefoot Russians that consider themselves either as Chudes or as the offsprings of the Chudes.

2. Toponym systems in northern Russia

2.1 History of the study of northern Russian toponyms⁸

Even prior to the first toponymic studies, Finnish and Swedish scholars such as von Becker, Arwidsson and Porthan were aware of the fact that people linguistically close to Finns had previously lived in a an area that subsequently became Slavic. This conclusion was inevitable on the basis of Scandinavian sagas and medieval Russian literature. Many historicians also demonstrated that there is a rich northern Russian oral tradition concerning the pre-Slavic people of the region (see below 2.2.).

Probably the first linguist to treat the problem of northern Russian toponymy was A. H. VOSTOKOV (1812) who focused on the recurring final components of many northern and central Russian river names. He concluded that these had originated in extinct languages and were remnants of geographical terms. After him, the fennougrist A. J. SJÖGREN (1832a, 1832b) dealt with northern Russian toponymy in several articles dedicated to determining the origin of the Finnic tribes and describing the Uralic peoples. Also, the founder of modern Finno-Ugrian studies M. A. CASTRÉN wrote a small article on northern Russian toponymy (CASTRÉN 1844). He was the first one to point out that, in addition to the Finnish, some toponyms were etymologisable on the basis of the Sámi vocabulary. Some of CASTRÉN's Sámi toponymic etymologies were later mentioned by K. B. WIKLUND (1911) in his treatise on the history of Sámi settlement. Minor treatises on Finnic toponymy in northern Russia were also written in the 19th century by AUGUST AHLQVIST (1887) and MIHKEL VESKE (1890).

The first scholar to systematically collect toponymic material from various sources and interpret the distribution of toponymic types as proof of the prehistoric spreading of languages in northern Europe was D. E. D. EURO-PAEUS (1868–70). Quite erroneously, however, he assumed that many central hydronyms of northern Russia and Finland were of Khanty origin. The later work of Europaeus on Ob-Ugrian toponymy was continued by ART-

⁸ The history of the study of northern Russian toponyms is most thoroughly treated by MATVEEV (2001: 13–47). The sketch presented here relies heavily on this source.



⁷ This is the most common ethnonym of the pre-Slavic populations of North Russia (see below 2.2.).

TURI KANNISTO (1927) who asserted that the western boundary of Ob-Ugrian toponyms was much farther east, in the Dvina basin. Even KAN-NISTO's views were later rejected by MATVEEV (2001) who concluded that there is no convincing evidence of Ob-Ugrian toponyms in the Russian north.

During the first half of the 20th century, eminent slavist MAX VASMER (1934–36, 1941) made an attempt to draw the approximate ethnic boundaries of pre-Slavic Russia on the basis of place names. He used only macrotoponymy and, being ignorant of Uralic historical phonology, made haphazard comparisons based on first-view impressions of the similarity of Russian toponyms and words of Uralic languages. Although he also implemented modern methods, such as a search for parallels of substrate place names in living languages, his results were no more reliable than those of his predecessors. Another eminent slavist JALO KALIMA made interesting remarks on the structure and adaptation of place names such as the observation that the Finnic s is substituted both with Russian s (s) and s (s) in northern Russian substrate toponyms (cf. KALIMA 1944a, see also KALIMA 1944b, 1946). Regrettably, he did not continue his studies on this topic.

In the Soviet Union of the 1950s and 1960s the Leningrad scholar A. I. POPOV published several articles on the toponymy of Finno-Ugrian origin. He implemented modern methods such as semantic argumentation that referred to those geographical characteristics of the object denoted by the name and took into consideration the role of personal names in toponym formation (for example, POPOV 1965). From the beginning of the 1960s the Sverdlovsk (later Yekaterinburg) scholar A. K. MATVEEV began collecting northern Russian microtoponyms by engaging in fieldwork. MATVEEV and his pupils (most notably M. L. GUSEENIKOVA, N. V. KABININA, V. O. VOSTRIKOV, L. A. SUBBOTINA and O. A. TEUSH) have treated the Finno-Ugrian substrate toponyms of the Arkhangelsk Region in numerous dissertations and articles. As a result, the most common types of northern Russian substrate toponymy have by today been described and provisionally analysed.

According to MATVEEV (1980, 2001, 2004), the main pre-Slavic toponymic layers of the Dvina basin are of Finnic and Sámi origin. It has also been clarified that Permian traces in the toponymy are not numerous and that they are concentrated in the eastern periphery of the region (MATVEEV ibid.; 1999). Substantial parallels between the toponyms of southern parts of the Dvina basin and the area historically inhabited by the Merya (Ru. *мерья*), a Central Russian tribe mentioned several times in Chronicles, have also been demonstrated (MATVEEV 1996, 1998). Many interpretation problems con-

⁹ The views by MATVEEV concerning the toponyms of this territory have been criticised by AHLQVIST (1997, 2000).

cerning the non-Finnic and non-Permian layers of substrate toponymy remain, however. In addition to Sámi, these layers are referred to as Meryan and *ceвephoфuncκas* ('North Finnic') by MATVEEV (see discussion in section 6.).

An important contribution to the study of northern Russian toponyms has been made by the Petrozavodsk scholar IRMA MULLONEN. She has studied Finnic and Sámi substrate toponyms along the Finnic-Slavic language boundary in Karelia and adjacent territories (MULLONEN 1988, 1994, 2002). Her studies are based on the simultaneous investigation of living Finnic and substrate toponyms and have yielded reliable results revealing a detailed picture of ancient language contact situations. One should also mention G. Y. SIMINA (1980) and A. L. SHILOV (cf. SHILOV 1999), who have made many interesting remarks concerning substrate toponyms in North Russia.

2.2. Russian ethnotoponyms

In addition to the substrate toponyms, some toponymic models of Slavic origin include information on the pre-Slavic settlers of North Russia. These are mainly ethnotoponyms, which point to contacts between Slavs and other ethnic groups in the area. ¹⁰

The most common ethnonym in the place names of the Arkhangelsk Region is $yy\partial_b$. The wide distribution of this ethonym in place names does not necessarily mean that the Russian European north was ethnically homogenous by the time of the arrival of the Slavs. Most likely, 4ydb was used as a designation for various Finnic tribes. As noted above, a rich tradition of oral history is connected with the Chudes. According to this, the Chudes were white-haired and white-eyed people, who practised cattle breeding and agriculture. When the Novgorodians arrived, the Chudes refused to convert to Christianity. According to legends, the Chudes either buried themselves under the hummocks or moved to "other rivers". These legends also contain information showing that some of the Chudes assimilated to become Russians (PIMENOV 1965; BULATOV 1993). In addition to Russians, the Komis also have similar legends about the Chudes. In the oral tradition of the Sámi, a legendary tribe whose name is etymologically connected to the Russian *чyдь*, the *čuhti* (:*čuđi-*) are characterised differently to the Russian and Komi traditions concerning the $yy\partial b$, as a hostile and violent tribe (cf. T. I. ITKO-NEN 1948: 537-545).

The Sámi, Komi and Russian traditions concerning the Chudes and *čuhti* have likely arisen independently. The fact is that some northern Russians

¹⁰ A survey of the distribution of ethnotoponyms in the research area was documented has been by POPOVA (1999). The following rests mainly on this source.



have until these days considered themselves offspring of the Chudes¹¹, and that the same ethnonym has been used as a self-designation by a group of Finnic people, the Veps. This suggests that $yy\partial_b$ was probably an endonym of some northern Russian substrate populations.

Other Uralic ethnonyms have a more restricted distribution in toponyms. Toponyms derived from the ethonym *Kopena* (former *Koptna*) 'Karelian' form a couple of clusters in the lower reaches of the Dvina, Pinega and Onega. Toponyms derived from the Nenets ethnonym *camoed* form clusters in the lower reaches of the Mezen', Pinega, Dvina, Onega and even in the extreme southwest of the Dvina basin. There is also a historical record and oral tradition on Nenets in some present-day Russian parts of the Arkhangelsk Region, such as the mouth of the Dvina (cf. KABININA 1997). The origin of the *camoed*-ethnotoponyms in the south of Arkhangelsk Region remains an enigma. They may be connected with individual settlers, or have a motivation not connected to the Nenets.

The ethnonym of the Sámi, *ποπαρь*, is present in a few toponyms of the Arkhangelsk Region (see MATVEEV 2004: 192). Even their interpretation is not unambiguous, because the Russians have also referred to the Nenets as the *ποπαρь*. ¹² In addition, there are several dozens of substrate toponyms derived from the stem *παn*-, that is probably related to Finnic ethnonym for the Sámi (Fi. *lappi*). In Finland, ethnotoponyms derived from this stem are commonplace (T. I. ITKONEN 1948: 103). The interpretation of northern Russian *παn*-names is not altogether clear, however. One should note that the ethnonym *lappi* has been also used to refer to Ludes and Karelians (see SAARIKIVI 2004b: 180–181 for discussion).

Ethnotoponyms connected with the Permian people, $3\omega p(b)$ and nepmb are found in some eastern areas of the region and, quite surprisingly, also in the basin of the River Ust'ja at the southern edge of the territory. In this area, $3\omega p(b)$ has also been used as an invective (STE).

2.3. Amount, use and systems of substrate toponymy in the Pinega region

Substrate toponyms are common everywhere in the Arkhangelsk Region. Altogether, there must be tens of thousands of primary substrate toponyms in this area (see MATVEEV 2001: 51). Quite naturally, however, the amount and density of substrate toponyms varies according to district. In the Pinega

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¹¹ The author of this article has encountered one man in the village Chakola village of the Pinega District who insisted that he is not Russian but a Chud. This was also confirmed by his neighbours.

¹² In the dialect of Pinega this is the normal meaning of the word. This state of affairs is a further argument for the late appearance of the Nenets in Europe.

District (Πυμεσκεκυῦ ραῦοη, 41.000 km², 31.000 inhabitants) there are approx. 1200 primary and at least as many secondary substrate toponyms, which is probably around 4–5% of all toponyms (cf. statistics by SIMINA 1980). In hydronyms, substrate toponyms are more common than Slavic names. The flood meadows situated at the bends in the rivers often have names of substrate origin as well. In cultivation names the substrate toponyms are much less commonplace and many of the existing substrate toponyms were probably connected to geographical rather than agricultural objects in the substrate languages. Also, surprisingly many microtoponyms, such as names of meadows, fields and parts of villages are of substrate origin. In addition, there are surnames, nicknames and invectives of likely Finno-Ugrian origin.

As the oldest layer of toponymy, most of the substrate toponyms are macrotoponyms. From these a substantial amount of Russian microtoponyms has been derived. Thus, the river name *Шарда* denotes a tributary of Pinega (in middle course). The name of the river has apparently served as a base for a group of names even in the substrate language, since there is a village *Шардомень* (variants: *Шардонемь*, *Шардоменя*, etc.) at the mouth of the river. This originated from a name connected with the bend of the river (< Finnic *neemi, see below section 5.1.). Several Russian microtoponyms have been derived from these two macrotoponyms: *Верхняя Шарда* and *Нижняя Шарда* (Upper and Lower *Шарда* river names), *Шардоменский ручей* (brook), ¹³ etc.

Substrate and Russian toponyms often have the same motivations. In some cases, toponymic pairs of substrate and Slavic names may be interpreted as Russian translations of a substrate toponym (see section 3.2. below). In other cases it seems that Russian and substrate toponyms have been based on the same naming motivation because it has been a natural choice in the context where the names appear. Thus, two brooks named Huжный ('lower') and Bepxный ('upper') $\Pi empyueŭ$ presumably derive from the Finnic *petäjä 'pine'. These brooks flow into Lake Connbckoe through pine woods named the Eop, a standard North Russian toponym based on an appellative meaning 'pine woods'. This Russian name is probably not connected to substrate names etymologically, but the connected motivations of the names nevertheless support the proposed toponymic etymology for $\Pi empyueŭ$.

In the Pinega region, settlement names of substrate origin are also commonplace. The northern Russian village typically consists of a lenghty chain of small settlements by a river. Typically, the whole chain and its oldest parts

¹³ Ручей means 'brook'.

have substrate names, while most of the parts have Slavic names. Thus, the oldest part of the village $\mathcal{N}oxhobo$ is called $Xu\partial copa$, a name connected with the Finnic word stem (Finnish form given) hiisi (:hiite-) (in modern language) 'troll; evil spirit', (originally:) 'a sanctuary, centre of a settlement' (cf. section 5.2.). The second component of the name, -copa, is a Russian word meaning 'hill', but it has developed to become a sort of settlement suffix in the Pinega dialect. The conclusion that $Xu\partial copa$ is an old centre of a village can be further supported by the fact that the neighbouring part of the village is called Ycuzopka (< Finnic *uusi 'new'). Other parts of the village have Russian names.

Many settlement names include elements which, even originally, have been connected to permanent settlements. Thus, the suffix -na typically attached to settlement names in the Finnic languages $(-la, -l\ddot{a})$ or the word final name component -nana (<?*palva 'village' see section 5.1.) are commonplace in Pinega settlement names. The fact that many hydronyms are derived from the names of dwelling places (Boenana village > Boenanka river, etc.) and that many of the settlement names are etymologisable on the basis of Finnic personal names also points to a surprisingly old age for many settlements.

Quite naturally, there are substantial differences in the distribution of substrate toponyms between villages. These differences can sometimes be interpreted as the result of dissimilar Slavicisation processes. Thus, in the group of villages situated by the River Sura there are especially many (approx. 80) substrate toponyms. Also, a remarkable percentage of the microtoponyms is of substrate origin. It is thus astonishing that over by the River Pinega only a few kilometres away, in the villages of Gorodetsk and Ostrov, just a couple of isolated substrate toponyms are attested. However, a considerable amount of oral tradition on the Chudes has been recorded in these two villages while, in turn, legends of this kind are less characteristic in the villages beside the river. The oral tradition related to the Chudes in Gorodetsk and Ostrov differs from that of many other villages in that it contains legends about warfare between the Chudes and the Novgorodians. There are also historical accounts of the conflicts between the Russians and the "heathens of Sura" (Сура поганая) in the 14th and 15th centuries. In connection with this correlation a question arises: could the small number of

¹⁴ According to an old literary source (MIKHP, p. 93) this part of the village has also been called *Новинка* (< Russian *новый* 'new'). This name can be considered a loan translation of the substrate name. The same source also mentions a parallel name *Чюдикса*, which is connected with the ethnonym *чудь* and serves as a further argument for the pre-Slavic origin of this settlement (DENIS KUZ'MIN, personal communication).



substrate toponyms in Gorodetsk and Ostrov and the simultaneous abundance of oral tradition on the $uy\partial b$ be interpreted to mean that these villages were originally founded by Russian newcomers who created their own toponyms and encountered a pre-Slavic population mainly in conflict situations? The villages by the River Sura could then be interpreted as settlements of Uralic language shifters, who preserved their old place names through a language shift. This line of reasoning is further supported by the fact that Gorodetsk and Ostrov are Slavic oikonyms, whereas many old dwelling-place names in the vicinity are of substrate origin.

The above examples demonstrate how the substrate toponyms function together with the Russian toponyms in a network comprising much information about the pre-Slavic settlers in the Russian European north. In most cases, this kind of information can only be obtained through fieldwork.

3. Some methodological questions concerning the study of substrate toponymy¹⁵

3.1. The semantics of a toponym as an object for etymological study

From the point of view of historical phonology, the methods applied to the etymological study of toponyms are mainly similar to the standard methods of historical-comparative linguistics and, therefore, they are not presented here.

One should note, however, that there are some minor peculiarities in the phonological development of substrate toponyms. For example, phonological reduction and dissimilations are more common in toponyms than in the appellative vocabulary and there is more phonological and morphological variation in substrate toponyms than in appellatives. Moreover, unintelligible toponyms maybe subject to folk etymological interpretation. Toponyms with the same lexical content borrowed from a substrate language thus often occur in numerous, slightly different phonological forms in different areas (cf. the Finnish *Kukasjärvi, Kuukasjärvi, Kuukka*, etc., which all originate

As is apparent from the aforementioned, at the present there is an established scholarly tradition in the etymological research of the Uralic substrate toponyms of northern and central Russia. The main references for the methods of such studies are MATVEEV (1986, 2001), GLINSKIKH (1983) and MULLONEN (2002). What follows rests mainly on these sources. Such standard methods as the checking of the old forms of the toponym in the written sources available are left aside here. This method, though useful and important, has severe limitations in northern Russia where the majority of substrate toponyms does not figure in with any early documents.



from the Sámi, cf. North Sámi *Guhkesjávri* 'long lake' [see ANTE AIKIO's article in this volume, cf. also AGEEVA 1989: 94]). ¹⁶

All these pecularities of phonological development are related to the fact that toponyms may loose their connection with the lexemes they are derived from. This is because the main meaning of the toponym is its denotation (in other words: a place) and not its lexical content (see in detail AINIALA 1997: 15–22). Thus, one of the basic criteria for etymological research, looking for related meanings in the source and target language of the language contact, is not applicable to the study of toponyms.

Though secondary from the point of view of their primary function, all toponyms have a lexical content when they emerge. The formation of toponyms is connected to naming models, which in turn are based on syntactic construction types and lexical conventions (for further references see KIVINIEMI 1977). This means that the same structure, the same lexemes and the same naming motivations recur in thousands of toponyms. This considerably simplifies the identification of lexemes in the case of unintelligible toponyms.

The main methods of the study of the semantics of substrate toponyms are the following:

- 1) Comparative study of the structural and semantic typology of toponyms in substrate languages or languages related to them, the aim of which is to determine common naming models and motivations.
- 2) Study of the geographical characteristics of the objects denoted by substrate toponyms, and checking to confirm that they correspond to the naming models and motivations in the assumed substrate languages.

The successful comparative study of toponyms usually requires place name material not only from the area under investigation, but also from the assumed substrate languages. In many cases we are not able to tell exactly which language this was and, therefore, are forced to use material from related languages.

The perspectives for comparative toponymic studies of Uralic substrate toponymy are relatively good, as many of the Uralic languages have been studied from the point of view of place name typology. In the Uralic languages toponyms are typically compounds consisting of two parts, a specific and a generic. The latter expresses the type of object denoteed, whereas the former specifies or qualifies the object by describing those characteristics

¹⁶ Some of the toponyms which derive from the Sámi *guhkes* have folk etymologically been connected with the Finnic *kukka* 'flower'.

which differentiate it from other objects of the same kind (e.g. Finnish Kivi/niemi 'rock/cape', literally 'cape by a rock or with rocky terrain', Suo/järvi 'marsh/lake', Uusi/pelto 'new/field', etc.). The generic is typically a geographical term whereas the specific can be a noun, an adjective or a semantically opaque element. There are also other structural types of toponymy in the Uralic languages such as toponyms derived from participles of verbal stems in Finnic, toponyms formed from action forms of the verbs in Sámi and toponyms formed with a derivational suffix in several Uralic languages. It seems that in language communities with a greater need for toponyms such as the Sámi and Ob-Ugrian communities, which practise a nomadic way of life and occupy large areas of land, deverbal structure types semantically connected with events tend to be more common than in those communities which use only an average number of toponyms. These in turn, use predominantly denominal toponyms connected with the characteristics of the object. In communities with a greater need for toponyms there also seems to be a tendency to create toponyms which consist of more than two lexemes and toponymic clusters consisting of a large number of toponyms. 17 Deverbal substrate toponyms or substrate toponyms consisting of more than two lexemes are not common in northern Russia, however, and this suggests that the Uralic substrate populaton lived in permanent settlements.

In the course of typological studies of the toponymy of the Uralic languages, the most typical generics and specifics of Finnish (KIVINIEMI 1990), Veps (MULLONEN 1994), Estonian (Saaremaa and Läänemaa dialects, KALLASMAA 2000, 2003), South Estonian (FASTER—SAAR 2001) and Inari Sámi (S. AIKIO 2003) toponymy have already been clarified and similar information is readily available also on Udmurt (ATAMANOV 1988), Komi (TURKIN 1989), Mari (GALKIN—VORONTSOVA 2002) and Khanty (DMITRIEVA 2006) toponymy. This information can be used in identifying the recurring elements of northern Russian toponyms.

Thus, for example, the hundreds of toponyms in northern Russia with the seemingly arbitrary final components -немь, -мень, -мень, -мена, -мена, -мена, -мена, еtc. refer to capes, riversides, and coastal objects. In view of the toponym formation of the Uralic languages, it is obvious that these phonemic chains have originated from a geographical term, more precisely, one that was related to the Finnish *niemi* 'promontory' (< Proto-Finnic *neemi).

¹⁷ The observations concerning interdependency between toponymic types and the size of the toponymic system were made by the author when comparing the remarkably different toponym systems of the reindeer Sámi and the Sea Sámi. It seems to find support in the toponymic system of other Finno-Ugrians practisising nomadism such as the Khantys (DMITRIEVA 2006). It is the aim of the author to consider this subject in a future publication.



This word is among the most common generics in most of the Finnic languages (KIVINIEMI, MULLONEN, KALLASMAA, FASTER op.cit.). The metathetic forms (-мень, etc.) are explicable in the light of the tendency of Russian to avoid words with a final -m while final -n is commonplace (MATVEEV 2004: 205).

In a similar manner, hundreds of substrate toponyms in a wide area with the final components -oŭ, -aŭ, -oя, -aя, etc. denote brooks. Most of these, quite certainly, originated in Finnic or related Uralic toponyms with the generic *woja 'brook' (> Finnish oja). This word also belongs to the most common generics in all of the Finnic languages. A related generic is also to be found in Sámi (saN oadji 'brook' SaK vuäjj 'brook' 18). In addition, toponyms suggest that a related word has existed even in Udmurtian (ATAMANOV 1988: 61–62).

In addition to generics, the commonly recurring specifics of the substrate toponyms can also be identified on the basis of the living Finno-Ugrian languages. Thus, for example, the Russian toponyms Кузонемь, Явронемь, and Котонемь can be compared with the Finnic (only Finnish forms given) toponyms *Kuusiniemi, *Järviniemi and *Kotaniemi (from the appellatives kuusi 'spruce', järvi 'lake', kota 'hut; tent'). The specifics of these names belong to those most common in Finnic toponyms. The proposed etymologies are further supported by the fact that these specifics recur in a number of other substrate toponyms as well, although with different endings (e.g. Кузоя brook, Явроньга river, Котой brook).

The recurring word final elements, which typically originate in the generics of substrate languages are referred to as (topo)formants (monoформант) in Russian toponymic literature. The word initial elements of substrate toponyms, in turn, are referred to as bases (Ru. основа). Both terms are adopted below. This is because the terms specific and generic do not adequately refer to name elements which have lost their lexical and/or morphological nature.

Despite the fact that formants historically often originate in generics and bases in specifics, formant and base are to be understood as primarily synchronic notions. In substrate toponymy, several assimilative changes may namely affect the shape of the individual toponyms and many formants thus occur in positions in which the corresponding generics are not reconstructable in the substrate language. Moreover, many formants are of multiple origins, though from the point of view of the Russian place name system,

¹⁸ On the basis of its restricted distribution in North Sámi dialects, the former word is presumably a borrowing from Finnic (ANTE AIKIO: personal communication).

they all include phonotactic elements which make it possible to understand them as names. Thus, in the terminology of this study, base and formant may be defined as phonotactic types of one-morpheme opaque toponyms. A characteristic feature of the formant is that it often makes it possible to understand the word as a place name, or sometimes as a name denoting a specific kind of place. The bases do not have this characteristic.

3.2. Probability and verifiability of toponymic etymologies

Toponymic etymologies can (and should always, if possible) be supported semantically, also. If a place name that presumably includes a substrate language term for 'lake' indeed denotes a lake, or an object close to a lake, this substantially adds to the credibility of the etymology. This is the case with most of the toponyms with the ending -немь, -мень, -минь, etc. which denote promontories and river bends, or toponyms with the ending -ой, -ай, etc. which typically refer to brooks.

Some toponymic etymologies are not verifiable on the basis of language-external facts, however. As for *Komohemb* it is impossible to prove whether the promontory denoted by this name has sometimes been used as a temporary settlement without archaelogical investigation. As for *Ky3ohemb*, these kinds of names denote various promontories and bends in the rivers, along-side some of which spruce grow while beside others they do not. The proposed etymology may still be correct. It may be that the characteristics of the place have changed during the centuries.

It is also possible that the proposed etymology does not indicate the existence of any features in the denoted object which could verify or falsify the etymology. For example, *Cemana*, the name of a part of a village *Bando-курье* may be connected with Finnic *setä 'uncle' as proposed by MATVEEV (2004: 67). However, there is nothing in the object itself that could verify or falsify this etymology. We have to look at different kinds of sources (historical documents, other toponyms, etc.) in order to find support for the etymology and even if this kind of search fails, the etymology could still be correct, though somewhat less probable than many other toponymic etymologies. ¹⁹

¹⁹ In case of *Cemana*, MATVEEV (ibidem) has proposed that the nearby toponym *Чучебала*, presumably derived from the Sámi *ćeacē 'uncle' and *palva 'settlement' (see below 5.1.) would support this etymology. The toponyms *Cemana* and *Чучебала*, are also used as synonyms in a 16th century document (MATVEEV 2004: 105–106). The hypothesis concerning of Sámi origins for of this toponym is still incorrect because of the formant which clearly is not Sámi and because of the



Another factor that affects the reliability of toponymic etymology is the frequency of toponymic models in languages used as material for comparisons. The toponymic etymologies referred to above are based on the assumption that common toponymic models of present-day languages were also common in the substrate languages to which they are related. While this certainly is likely, it means also that toponyms based on unusual naming motivations cannot be etymologised with the same degree of certainty as those based on frequent motivations.

The probability scale for toponymic etymologies that follows is based on material from the Pinega District and is, quite probably, not generalisable in all contexts. Furthermore, it focuses only on probability problems related to the semantics of the toponyms as the phonogical problems regarding toponymic etymologies can, in the most cases, be accounted for in a similar manner to other etymologies. The toponymic etymologies which fulfill the characteristics for group 1 are, in the opinion of the author, most probable, with the probability diminishing down the scale.

- 1) Toponyms which belong to toponymic types present in living languages with an etymology that can be verified by language-external facts, cf. $\[Immosepo$ a lake, $\[Immosepo$ a village < Finnic *leettek (> Finnish liete 'sludge', Karelian liete 'fine sand on a shore', those places denoted as indeed having a sandy bottom and shores), $\[Conosepo$ a lake < Finnic *salo or < Sámi *suol $\[o]$ < *salo($\[i]$) < ?*salaw 'island' (there is an island in the centre of the lake). *lima, *leettek and *salo($\[i]$) are all terms widely used in toponym formation in Finnic. *salo($\[i]$) is also frequent in Sámi toponyms.
- 2) Toponyms with semantically well-founded etymologies that can be verified by language-external facts when there is no corresponding toponymic model in living languages, cf. *Kычас* a river, *Kыча* a lake *Kычверетия* a passway through a marsh²¹ < Finnic *kiccas (> Finnish kitsas) 'narrow' All these names denote objects characterised by their narrowness. However, toponyms with a corresponding appellative are rare in Finnic. The same concept is expressed with several other words (Finnish kapea, kaita, soukka and their counterparts in other Finnic languages).
- 3) Toponyms which belong to toponymic types present in living languages when the places they denote are neutral regarding the proposed etymology,

²⁰ *lima* is a Germanic borrowing and etymologically connected with English *slime*. ²¹ *Bepemus* is a dialect word that means 'a narrow dry passway through a marsh'.



phonological phonetic shape of the base (this is also admitted by MATVEEV himself, ibid.). The assumption by MATVEEV, that the toponym *Чучебала*, derives from the same semantics as *Сетала* may still be correct in principle.

cf. *Ристимень* bend in a river < Finnic *risti 'cross', *neemi 'promontory' (toponyms formed from the appellative risti 'cross' are common in Finnic languages, but there is no evidence that there was any kind of a cross in that place, or that the place would have been situated at some kind of crossroads), Ламбас two brooks, one lake < Finnic *lampas 'sheep' (toponyms formed from the appellative *lampas are common in Finnic languages and the objects denoted are relatively close to old dwellings and could thus have been connected to sheep herding. However, this would seem impossible to demonstrate), ²² Cepzosepo < *särki 'roach' (roach is a common fish in luxuriant lakes of northern Europe and it could be a possible naming motivation for a large number of lakes in any district).

4) Names connected to appellatives not used (or very rarely used) in toponym formation in living languages while the object is neutral in regard to a proposed etymology, cf. *Рачмина, Рачканда* < Finnic *raccu 'mount; riding horse' (MATVEEV 2001: 63). Etymologies of this kind are extremely uncertain and in many cases probably false.

A fifth group of toponymic etymologies which does not need to be placed in the probability scale is the toponymic etymologies proper, that is, toponyms which may be connected with each other while no appropriate etymological explanation for them can be given. Thus in the Pinega basin there are two rivers called *Kupac*. On phonological criteria, they may be connected with Finnic hydronyms derived from specific *kyrö(s)*-. In Finland, similar names are connected to several rapids and stony places by rivers, or to fast flowing rivers. The element *kyrö(s)* itself, however, is without an etymological explanation. Another example is the river and village name *Typus* that may be connected to several Finnic toponyms with the specific *turja*-. No credible etymological explanations for this have been given. Nevertheless, such correspondencies can point to links between the toponymy of certain regions and thus help to clarify problems related to settlement history.

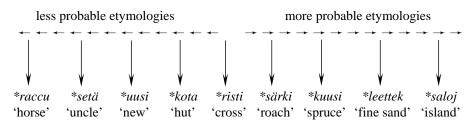
²³ There is also a homonymic western Finnish toponymic type $*kyr\ddot{o}(s)$ which is derived from $*ky\delta\ddot{o}$ 'moorland burnt-over for cultivation' (> Fi. $kyt\ddot{o}$ id.). The hydronyms derived from the stem $*kyr\ddot{o}s$ have a wider distribution and are not connected with these.



²² MATVEEV (2004: 45–47) has proposed a connection of this toponymic model and the Russian dialectal παμόας 'bay of a river', which is, in turn, almost certainly is a borrowing from a Finnic word related to Finnish *lampi* 'small lake'. In the Pinega district, those toponyms derived from **lampas* are not connected to river bays or small lakes, however, and this makes the etymology proposed above more probable in the given context. Similar toponyms connected with the Finnic *lampi* and the Russian παμόσας exist in other districts.

The probability scale presented above is not an absolute one. Above all, the difference between toponyms which can (groups 1, 2) and which cannot be (3, 4) verified on the basis of language-external facts is not a stable one. There are some toponyms which point to the discernable and stable characteristics of a place (*salo(i) 'island', *leettek 'fine sand'). Some point to discernable but unstable characteristics which may change over time (*kuusi 'fir', *särki 'roach'). Moreover, some toponyms can be found to be motivated in their geographical context although they do not point to any of the discernable characteristics of an object (cf. the etymology for *Ycuzopka* above in 2.2.). Thus, from the point of view of their semantic probability, toponymic etymologies form a continuum that can be illustrated by the following scheme:

Table 1.



There are still other factors which may enhance the probability of a toponymic etymology, but which do not figure in the scale above. One of them is the length of the etymon. The more there are regular sound correspondences in the toponym and its assumed etymon, the less likely it is that the toponym would be similar to an existing Uralic toponymic type by chance. Another factor is the amount of phonologically possible and semantically credible etymologies for any particular substrate toponym. If several plausible etymologies can be found for an individual toponym, the less likely it is that one of them is correct. The third factor is the "critical mass". The more there are etymologies from a single source, the more they include cases with individual sound correspondences and the more they are connected with the same kind of objects in the same territory, the more likely will be that most of them are correct.

4. Adaptation of substrate toponyms to Russian

4.1. Phonological adaptation

As in most of the Uralic languages, the accent in substrate names is on the first syllable in the absolute majority of the toponyms. There are also few examples of word initial voiced phonemes. This points to the fact that the substrate languages of this area have been dissimilar to Permian, Mari or

Mordvinian branches of Uralic which all have voiced consonants or Udmurtian which follows word final stress pattern and, in these respects, been similar to most of the Uralic language forms, both modern and reconstructed.

The phonemes of substrate languages are most easily reconstructed in the first syllable and in the consonant cluster between the first and second syllable. The second syllable of the substrate name typically has reduced vowels, and if this syllable is word final, it also includes the Russian gender ending, which is typically determined by the gender of the geographical appellative that characterises the object. Thus, village and river names are typically feminine (and end with an *a*), because the words *depebba* 'village' and *peka* 'river' are feminine, while brook names tend to be masculine (< *pyueŭ* 'brook') and lake names neutre (< *osepo* 'lake'). This substantially diminishes the possibility of some vowels occurring in word final position. Thus, the reconstruction of substrate language phonemes in the second syllable can usually be made only at the lexical level when the word the toponym is derived from has been identified with the aid of the first syllable.

The central sound correspondences of Finnic loanwords in Russian were clarified at the beginning of the 20th century (MIKKOLA 1894; KALIMA 1919; see also MYZNIKOV 2004: 345–371). The sound correspondences found in northern Russian substrate toponyms are mainly close to these. They are not completely uniform in the entire Dvina basin, however (see MATVEEV 2001: 123–151).

The following table includes the most typical sound correspondences of the toponyms in the Pinega district. Some correspondences in other northern Russian areas are discussed in the footnotes. Most of the correspondences included in the table can be supported by several etymologies from groups 1, 2 or 3 in the reliability scale presented above.

Table 2.

A) CONSONANTS

```
t. d
             Topoc- < Pre-Sámi *toras- 'crosswise',
             Xum-/Xud-< Finnic *hiisi (Sg. Gen. hiite-, Pl. Gen. hiitte-)
             'sanctuary; centre of a settlement'
k
             Kacκ- < Finnic *kaski 'burnt-over clearing',
      k, g
             Co2- < Finnic *soka 'dirt; litter'
      p, b
             \Piалт- < palttV- 'slope',
p
             Ламбас- < *lampas 'sheep'
             Xamap- < *hattara 'bush'
tt
      t
kk
             Азик- < *Asikka personal name
```

```
??/Jyn- < Karelian luppo 'water lily; Nymphae or Calla palus-
pp
     p
ć
     č
            Чолм- < Proto-Sámi *ćoalmē or Pre-Finnic *ćolma
     č
            Печ- < Proto-Sámi *peaccē or Pre-Finnic *pecä 'pine'
c
            m, n
m
            Вонга < *voŋka 'deep place in riverrun'
     n
ŋ
            Шул- < sula 'unfrozen', Cyл- < *sula id.
S
     s, š,
            \Pi ep3-<*perse 'back' (in modern language: 'rump')<sup>26</sup>
     z, ž
            Xum- < *hiisi 'sanctuary' (cf. above, see also section 5.)
h
     h, g
            Kapz- < karhi 'harrow' (in toponyms also 'rough')
            \Pi uxm - < *pihka 'resin'^{27}
     ht
hk
Vu
     Vv
            \pi Лавд- < lauta 'board' (in toponyms 'trap')
```

The following substrate language consonants always correspond to parallel consonants in Russian: l, r, v, n. The phoneme j also corresponds to the vowel prothesis or to *j*.

Russian p, t and k are regular correspondents of the substrate language p, tand *k in word initial position and next to an unvoiced consonant. Russian b, d and g are regular correspondents of the substrate language *p, *t and *k between vowels and next to a voiced consonant. In some cases however, unvoiced t, p and k also seem to occur in these positions. It is possible that toponyms of this kind originate from derivations. Thus, it seems likely that the brook name *Pemoвa* (var. *Pёmoвa*) is related to the Finnic *retu 'dirt' as this word commonly occurs in Finnic toponyms. The Russian voiceless -thints that it goes back to the substrate language plural stem derivation *retto(i)—this kind of derivation also appears in Finnish and Karelian toponyms (Rettoinsuo, Rettuisuo, Retteinnotko, etc. [NA]). The alternation xum ~ xud 'sanctuary; centre of settlement' may also have arisen because toponyms with the base xum- originated in plural forms (cf. Finnish Hittensuo, etc.), whereas toponyms with the base xud- suggest a singular (cf. Finnish Hiidenvuori, etc.).

²⁴ This etymology is very insecure in that the base $\mathcal{I}yn$ - only occurs in the toponym Луптега. It is not clear what the -pt- stands for. However, according to informants, *Jynmera* is a river covered by water lilies.

²⁵ The correspondence $*m \sim n$ is a rare one and clearly is a result of sporadic dissimilation.

²⁶ It is not clear, how many sibilants there were in substrate languages (see discussion in section 6.3.).

²⁷ This somewhat surprising correspondence also occurs in some other districts. In most of the dialects, however, -hk- has also been substituted as -hk- and -vk-.

Some occurrences of the phoneme *t in Finnic originate from the phoneme $*\delta$, cf. name of the river $Com\kappa a$ < Proto-Finnic *sotka < Pre-Finnic *sotka < wild duck'. It is not clear whether this phoneme was preserved in some substrate languages. In any case, its reflexes are the same as those of *t.

As the northern Russian dialects are characterised by *cokanje* (i.e. they have only one affricate) it is impossible to trace back the possible different reflexes of two Finno-Ugrian affricates. Although both affricates occur in the etymons of the substrate toponyms, they represent only one phoneme and it is impossible to know whether the two Finno-Ugrian affricates were present in the substrate language (see section 6.4. for further discussion).

The occurrence of h and g as reflexes of the substrate language *h depends on the phonological environment. g is a regular correspondent of the substrate language h next to a back vowel, h next to a front vowel.

Table 3.

B) VOWELS

a	a,o	Baprac < *varkas 'thief' Полта < paltte 'slope'
e	e, ë, a	Кёлд- < *kelta 'yellow', Падр- < *petra 'wild reindeer'
*ee	e	$ \Pi em - < *leettek 'fine sand' $
i	i, ï	Π им- < *pime($\delta\ddot{a}$) 'dark', K ыч- < *kicca(s) 'narrow'
0, 00	0	Вонга $< *voŋka$ 'adeep place in the river' $Лo\partial - <$
		*looδeh 'west or south'
и	и	Pycκ- < *ruske 'red or brown'
y	u, ï	K ыл $(ь)$ м- $< *k \ddot{u}lm \ddot{a}$ 'cold', HO ром $a < *jyr(h) \ddot{a}m \ddot{a}$ 'a
		river that runs through a lake'
ä	ä, e, a	Хярг- < *härkä 'bull', Cepг- < *särki 'roach',
		Сейвас < *seiväs '(hay) 'pole' ²⁸
\ddot{o}	?ï	Выр(ь)- < ??*vöörü 'slope' ²⁹
*aj > ej	?aj	Хайн- < ??*haina 'hay' (> Fi. heinä)

²⁸ In the Pinega district, the correspondence substrate language $\ddot{a} \sim \text{Russian } a$ is limited to the second syllable. It is also attested also in first syllable in some other northern Russian territories.

²⁹ Because the ö is an infrequent vowel in Finnic, this correspondence is quite insecure. In Finnic, there are two close words with the meaning 'slope' *veere (> Finnish vieri-) and *vöörü (> Finnish vyöry-). The latter, which only occurs in toponyms, clearly is a labialised variant of the former, but the fact that it is present in both the northern and southern groups of Finnic languages points to its high age. Thus it is well quite possible that the Pinega toponym Вырполье which indicates a field situated on a slope in the village of Krylovo may be connected with this Finnic word.

According to the standard interpretation (MATVEEV 2001: 133–136), the correspondence $a \sim o$ is older than $a \sim a$. The Russian short a developed into o, but this development may be more recent than generally assumed (JUHANI NUORLUOTO: personal communication based on a new interpretation of the occurrence of vowel graphemes in the Novgorod birch bark letters). The toponymy of the Pinega district supports this hypothesis in that here the correspondences $a \sim o$ and $a \sim a$ occur in the same area.

The correspondents of i and e are determined by the vowel in following syllable. If the second syllable has a back vowel the regular correspondents are \ddot{i} (ortographic ω) and a. If the second syllable has a front vowel, the correspondents are e and \dot{i} (see also MATVEEV 2001: 137–138; MATVEEV 2004: 205–210). In southern Finnic, a mid-central vowel (in Estonian ortography \tilde{o}) has emerged in the first syllable of the words which have the combination $e \sim a$ (HOLST 2001). It is not impossible that a similar process might have also occurred in the Finnic substrate languages of the Dvina basin.

4.2. Morphological adaptation

Several morphological adaptation techniques are applied in the integration of substrate toponyms into Russian. At least the following morphological integration types can be distinguished.

1) The full adaptations (Finnic *Kuusineemi 'fir/promontory' > Кузомень, *Наагапіеті 'branch(ing)/promontory' > Харомень, *Киизіоја 'fir/brook > Кузоя).

In these cases the Uralic substrate name typically consisting of a generic and a specific has been borrowed into Russian as a single-morpheme name. Thus, Finnic *Kuusineemi is a syntactic construction that consists of two intelligible appellatives, but the Russian *Ky30мень* is an arbitrary one-morpheme name which cannot be segmented in the language in which it functions. Thus, although the formants are word final, from the point of view of morphology, they are more like stem types than suffixes.

As the same formants recur in thousands of toponyms, the relationship between them and the types of objects they denote is often more or less obvious. This may have resulted in a limited consciousness by Russian speakers that, for example, the phoneme chain -мень usually denotes a promontory or a bend in a river. This may lead to a kind of "remorphemisation" of the substrate name what can be observed from the fact that sometimes formants develop analogically in Russian from other word-final elements in order to keep the name in shape with language-external facts (cf. Торома > Торомень > Торонемь, as the object denoted is situated on a promontory).

2) Partial translations (*Limajärvi > Лимозеро 'slim/lake', *Petä(jä)oja > Петручей 'pine/brook').

In these cases the generic of the name is translated into Russian while the specific remains untranslated. As a result, the substrate toponym consist of two morphemes, the latter of which is a Russian geographical appellative functioning as a classifier and the former a lexically arbitrary element that carries the denoting function of the name.

The number and types of partly translated names vary according to the type of object and the area. The names of the lakes and marshes tend to be partly translated, whereas the names of rivers hardly ever are, while again, names of brooks are translated in some areas and in some areas they are not (GU-SEĽNIKOVA 1994). In some cases the phonological similarity between the substrate language word and its Russian counterpart may have favoured partial adaptation (?cf. *vaara 'hill').

As mentioned in section 3.1., some topoformants, especially those connected to river names (-2a, -H(b)2a, -Ma), can to some extent fulfill the function of a generic also in Russian. This is probably the reason why river names are rarely partial translations.

3) Elliptical toponyms (*Kylmäjoki 'cold/river' > Kыл(ь)мa, *Lampasjärvi 'sheep/lake' > Ламбас).

With this kind of toponym the generic of the substrate language has disappeared and only the original specific of the name functions as a one-morpheme substrate name. In Finnish onomastics, such names have been referred as elliptical.

In some languages (including Finnish), etymologically opaque toponyms have a tendency to shorten by abolishing the generic (cf. Finnish Kymijoki > Kymi). In the Pinega district the borrowing of a substrate name as an elliptical toponym always occurs when the last syllable of the original specific would have yielded, as a result of phonological adaptation, a syllable identical to the common topoformant. Thus, the river name Kbinma has a final syllable similar to place names with the formant -ma (see below section 5.1.) and this seems to be the reason why the second component of the river name has disappeared. Sometimes, however, the disappearance of the generic is not connected to the phonological form of the name in any way.

Elliptical shortenings seem to be especially common in river names, probably because these are the most important names in the toponym systems of northern Russia and often serve as bases for other names.

4) Suffixations (*Vihto(j) personal name > Buxmoвo, *Kylmäoja cold/brook > Kылмовка).



In these cases, the substrate name has been adopted with the aid of a Russian suffix. In some cases, the suffix has probably replaced a generic or a derivational suffix of a substrate language.

Many settlement names of substrate origin have been formed with the aid of the suffix -(o/e)vo which is typically attached to personal names or to toponyms derived from personal names (*Aino(i) personal name > Айново village [cf. section 5.3.], Toivottu personal name [< toivottu past passive participle from toivo- 'hope (v)'] > *Toivottula > Toйвотолово village, cf. SAARIKIVI 2003: 140, note 93). In some cases, these kinds of suffixes may have replaced a substrate language derivational suffix *-la/-lä (cf. below section 5.1.), other names for this type (probably a majority of them) may be genuine Russian names derived from Finnic personal names.

In addition, many brook names have been adapted to Russian by attaching a deminutive suffix to the name stem. In other names, suffixation rarely occurs. This is apparently due to the fact that topoformants function in northern Russian dialects in a somewhat similar way to suffixes. As to the latter, they also carry the information that the word belongs to the class of names.

5) Translations (calques) (*Seiväsjoki 'pole/river'> Сейвас > Жердь 'pole', ?*Rautaveräjät > Железные ворота).

In these cases the whole name has been translated into Russian. Translations can be identified if the substrate language toponym has been preserved in a literary source, or (and what is more common in northern Russian circumstances) if a substrate toponym with similar lexical content has been preserved in the immediate proximity of the Russian toponym. Thus, the Pinega District river name $\mathcal{K}ep\partial b$ formed from an appellative with the meaning 'balk; pole' and the river Ceŭeac (< Finnic $seiv\ddot{a}s$ 'pole', probably an elliptical toponym from * $Seiv\ddot{a}sjoki$) are situated only one kilometre away from each other. Therefore, it seems quite probable that the Russian name is a translation of the latter. This is further supported by the facts that the Russian name represents a structural type not common in Russian toponymy (the name is composed of a substantive only) and that river names of Slavic origin are otherwise rare in the Pinega district.

Most likely, many translated toponyms will not be identifiable because of a lack of literary documentation and substrate names with a similar lexical content.

6) Full or partial folk etymology (Лодозеро river < *looδehsara 'west/brook', Рандростров < *Rantasara 'shore/brook').

In these cases the substrate name has been adapted to Russian by mixing it (or a part of it) with a Russian appellative that resembles its phonological shape. The result is an (at least partially) intelligible Russian name that lacks semantic motivation. Thus, $\mathcal{I}odosepo$ is seemingly a lake name. The object

it denotes is not a lake, however, and there is no lake in its vicinity. The name denotes a river that forms the upper end of a water system in the basin of the River Pokshen'ga. A characteristic feature of the River $Ildet{Jodosepo}$ is that it flows into the Pokshen'ga straight from the west. This would make it possible, although with reservations, to connect the name etymologically with the Finnic $*loo\delta e(h)$ 'west' (in modern Finnish: 'southwest'—this etymology by DENIS KUZ'MIN, personal communication). The Russian second component $oldet{oldet}$ would, in this case, have originated from *sara 'a river at the top of the water system' (see section 5.1.).

In a similar manner, *Рандростров* is apparently an island name. The object it denotes is a brook, however. As all the island names in the Pinega district are partial translations one could, although with reservations, connect this name etymologically with the appellative *sara 'brook' (see below 5.1). In this case, the phonological similarity of *sara and *saari 'island' would have produced an erroneous translation (GUSEĽNIKOVA 1994). It is even possible that the folk etymological mixing of *sara and *saari has happened in the substrate language and reflects the fact that there were two closely related Finnic substrate languages in the area (see below section 6.3. for discussion).

5. Most frequent elements in Russian substrate names

5.1. Most common formants and their origin³⁰

In what follows some representative toponymic models of north Russian substrate toponymy are presented.

The first list includes the most common formants of the substrate toponymy of the Arkhangelsk Region. As noted above, most of the formants originate from geographic appellatives. Some formants, especially those denoting rivers, seem to be of multiple origins. Thus, those names, which at present include same formants, have not necessarily been of same structure in the substrate languages. This is because in those circumstances in which large amounts of substrate toponymy are borrowed, unintelligible toponyms easily affect the phonological shape of one another. When enough substrate toponyms with similar endings are borrowed, they may turn into a structural toponymic model which, in turn, begins to affect the adaptation of new

³⁰ The most common formants of northern Russian substratum toponymy are presented and etymologically analysed in several articles, manucripts and a recent monograph by A. K. MATVEEV (MATVEEV 1980; 2001; 2004). The following discussion rests heavily on these sources. In certain cases, however, the views presented below will differ from those of Matveev.



toponyms. There are cases where substrate names analogically adopt new formants in Russian. This kind of reorganization of the toponymic system is a continual process and sometimes there are concurring forms of many toponyms with different formants used simultaneously (*Торома* ~ *Торомень* ~ *Торонемь*, cf. above section 4.2.).

For all the formants below, the following information is given: 1) the most common form of the formant and its main variants in brackets, 2) some examples of toponyms which include the formant, 3) a relative number of toponyms which include the formant in the Arkhangelsk Region (mainly according to MATVEEV 2004), 4) the classes of objects the formant is connected to and 5) the proposed etymology.

-Vn(b)га | Шиленьга, Покшеньга, Явроньга | rivers | several hundreds | The formant is of multiple origin. Some names originate in a combination of Uralic genitive *-n and PU *juka 'river' or one its successors (as already pointed out by SJÖGREN). Some are analogical formations and have originated in Russian from toponyms with different word final elements. Some names are possibly connected to Finnish toponyms with the suffixes -nki, -nkO, -nkA. Also, this Finnic group is of multiple origin (see RÄISÄNEN 2003), but some of the toponyms in this group are probably of considerable age. Furthermore, the somewhat fantastic etymological suggestion by A. L. SHILOV that toponyms with this formant could include a Uralic word connected to Khanty (Proto-Khanty form given) *jeŋk 'water' (< *jeŋi) could also find some support, in that two other common toponymic types (yxm-, -nana) are also connected to Uralic words surviving only in the Ugric languages. 32

-мень (-немь, -нема, -мина) | Кузонемь, Шуламень, Каскомень, Чухченема | several hundreds | villages, capes, river bends, flood meadows, coastal objects | < Finnic *neemi 'promontory' (the form -мень has come about through metathesis caused by the unusual word final -мь). The word *neemi is without cognates outside Finnic and without a generally accepted etymology.

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³¹ Although RÄISÄNEN has presented etymologies for most of the Finnish toponyms with these endings, some of them are quite dubious (they would belong to groups 3 and 4 on the reliability scale presented in section 4 above). Those Russian toponyms with the formant *-*H*(*b*)*Pa* are equally enigmatic. It is possible that among the both groups of names there are pre-Uralic toponyms. This seems likely in that many names of this kind refer to objects of considerable size and even their bases are difficult to etymologise.

³² A. L. Shilov further suggests that the Mari *eyer* 'river' with its cognates in especially Central Russian substrate toponymy (MATVEEV 1998) would also belong to this connection as derivations. However, the Mari word derives from Proto-Uralic **eyi*- while the Khanty word points to Proto-Uralic **jäŋi* (> Fi. *jää* 'ice'). Therefore, this explanation cannot be correct.

-га (-юга, -юг, -уг) | Немнюга, Ежуга, Пинега | rivers | approx. 200 | The formant is of multiple origin. Most of the names with this ending, quite certainly, originate from PU *juka 'river' and the words related to it (> fi. joki, SaN johka, Komi ju, etc.). Some of the names with this ending originate in words with a derivational suffix $(*-k, *-kkV)^{33}$ and some are the result of analogical name formation or adaptation in Russian.

-(в)ой (-бой, -буй, -ой, -уй, -оя, -уя) | Каргоя, Кукобой, Мурдой | brooks | < 200 | < PU *woja 'brook' (> Fi. oja, SaKi vuäjj, saN oadji). Northern Russian substrate languages clearly had two lexemes related to the Uralic word meaning 'brook', *oja and *woja. The latter of these has been characterised as Sámi by MATVEEV (2001) but this is not inevitable because both the Finnic oja and the related Sámi words derive from *woja. Therefore, those names which go back to the substrate language *woja can ultimately also derive from another kind of Uralic language than Sámi.

-ма | Торома, Мадома, Полтома | rivers, meadows, coastal objects | < 200 | Most of the names with this formant originate from various suffixes of Uralic languages (see discussion by MULLONEN 2002: 222–228). These include deverbal suffixes (most notably -mA, deverbal nominal suddix and the suffix *-mV often attached to geographical appellatives (cf. Finnish oja 'brook', virta 'stream', reuna 'rim' > ojama ~ ojamo [< oja 'brook'], virtama ~ virtamo [< virta 'stream'], reunama [< reuna 'rim'], etc.). The suggestion that toponyms with this ending could have originated from the Uralic *mixi (> Finnic maa) 'earth' (MATVEEV 2001: 200–202) is, in most of the cases, probably false. 35

-cap(a) (-*capa*, -*copa*, -*3opa*, -*3op*, -*3yp*, etc.) | *Copocapa*, *Лавзора*, *Явзора* | rivers, brooks, especially the uppermost brooks of the water systems | < 100 | ? < Finnic *sa(a)ra 'brook, branch of river'. The meaning attested in substrate toponyms is close to another Finnic appellative *haara* (< *hara < *sara) 'branch', but the two Finnic words referred to are not etymologically connected (the former is probably a Sámi borrowing (AIKIO 2001), the latter a Baltic loan (cf. Lithuanian zara 'branch', JORMA KOIVULEHTO, personal communication with ANTE AIKIO). One should also note that there is no liv-

³³ These kinds of suffixes are common everywhere in Uralic and reconstructable in Proto-Uralic. -*k* is deverbal (cf. Finnish *lähte*- (< **läkte*-) 'to commence; to leave' > *lähde* (< **läktek*) 'source; spring'. -*kkV* forms collective denominal derivations (Finnish *kuusi* 'fir' > *kuusikko* 'woods that grow fir').

 $^{^{34}}$ In Finnic and Sámi, word initial *wo developed into o (cf. PU wolka 'elbow' > Fi. olka SaN oalgi). East Sámi and also Livonian have a secondary vowel prothesis.

³⁵ In Finnic, *maa* is used in toponym formations mainly as a part of compounds (*sydänmaa* 'heartlands', *palomaa* 'burnt land', etc.). There are also some other naming models with the generic *-maa* ('large island', etc.).

ing Finnic language with a high frequency of the word sa(a)ra in toponyms. It has a limited area of distribution in southeastern Finnish dialects, Veps and Ludian. However, even bases of northern Russian toponyms with the formant *-capa* are often etymologisable on the basis of Finnic languages. This suggests that the language in which the *-sar(a)-names originate was likely different from living Finnic languages.

-u | $Ba\partial aceu$, Koκau, Komuu | brooks, small lakes | approx. 100 | < Karelian *- $\check{c}\check{c}U$ (a deminutive suffix). Also Sámi has a \check{c} -deminutive although this is of another origin (< *- $\acute{n}\acute{c}e$ -) and some names of this kind may be connected with it.

-naπ(a) (-noπ(a), -6aπ(a), -6oπ(a)) | \mathcal{I} memonaπa, \mathcal{K} yukkonaπa, \mathcal{B} oenaπa | villages, settlements, coastal objects | over 50 | < ?*palwa 'settlement' (> Khanty V puγal, etc., Mansi TJ pawal, etc., Hungarian falu 'village; settlement'). In the present Finnic languages, the word *palva is not used as an appellative, but it has probably been preserved in Estonian toponymy as the component -palu in some settlement names. ³⁶ It seems clear that, at least in northern and central Russia, toponyms with this formant denoted settlements even in the substrate language. The comparison with PU *palwa presupposes a somewhat unexpectable phonological development in the second syllable, where *w should have disappeared. This development could well have been caused by the adaptation of toponyms into Russian in some dialect, from which the formant would have spread further by analogy. Another possibility is that the second syllable development va > u took place in the substrate language. ³⁷

Some, but likely few names with this formant may have originated from the Finnic *palo 'burnt land' and *pooli 'half; side', in toponyms also: 'region'.

-важ (-ваш, -маж, -маш, etc.) | *Роваж*, *Игловаж*, *Косваж* | brooks, rivers | over 50 | < Proto-Permian *vož (> Komi vož Udmurt vuž) 'branch, brook'. The variants of the formant are explainable on the basis of the phonological environment of the formant. In addition to Permian, there is a word vož 'branch of a river' with a toponymic use also in Mari, where the word can be considered a borrowing from Permian. The Permian etymology of the formant is verified by the fact that even the bases occurring with this formant are etymologisable on the basis of Permian.



³⁶ Most of the Estonian toponyms with the with final component *-palu* are, without doubt, connected to the appellative *palu* 'burnt land' but in some cases the origin of the names is not altogether clear.

³⁷ Cf. Estonian *palve* 'request' but *palu-da* 'to request' (<*palvu), where the derivational suffix u has triggered the assimilation vu > u.

-вей | Вырвей, Ельвей, Тылвей | brooks | under 50 | < Proto-Permian *vVj 'brook' (Komi -vej in place names; ud. vaj 'branch; brook' [latter meaning in place names]). As noted by MATVEEV (2001), the Permian character of the names with the formant -вей is obvious both on the basis of their distribution and the fact that the bases of the names are usually etymologisable from the Permian languages. One should note, however, that there is a similar word in the Sámi languages as well: saN veadji 'brook' (< *vejä). The Sámi and Permian words cannot be cognates, but the Permian word could be a western Uralic borrowing (see discussion in section 6.4.).

-ла | Веркола, Чакола, Кеврола | settlements | over 50 | < Finnic -lA, a locative suffix added to place names. This suffix has developed into a suffix of settlement names exclusively in Finnic, but it has etymological cognates in other Uralic languages.

-*sepa* (-*6epa*) | *Mamsepa*, Πυμδερα, *Pyckobepa* | settlements, hills, slopes | ?30 | < *veeri 'hill; slope' > Finnic *vieru*, *vieri*, *vieremä* 'slope', Proto-Sámi **vēre* (> saN *vierra* 'hill on which trees grow'). Also, mdE *ver* mdM *vär* 'upwards' belong here. The semantics of the places denoted by this formant in the Pinega district are similar to that of the Finnic words. Surprisingly, many of these denote settlements, but as the settlements in the Pinega district are typically situated on high places beside rivers, it is not possible to decide which meaning was the original one. Note that in Estonian, a common settlement name model with the ending *-vere*, has most likely developed from **veeri* 'slope' (KETTUNEN 1955: 272–324).

-вара (*-вора*) | *Koчевар*, *Падчевары* | hills | approx. 20 | < SaN *várri* 'hill' < PS **vārē* or Fi. **vaara* 'hill'. The Finnish and Karelian *vaara* is, most likely, a borrowing from Sámi. The background of the Sámi word is not clear. ³⁸ The North Russian toponyms with this formant only occur in the western periphery of the Dvina basin and in the Beloozero region (MATVEEV 2001: 188).

-сарь | *Кивсарь*, *Лапсарь*, *Пиксарь* | meadows, islands | < 20 | < Finnic *saari* 'island'. The meadows denoted to by this formant are situated on the islands or by the low shores of the river which form islands during the spring floods. The Finnic *saari* is without a generally accepted etymology.

-конда (-канда) | fields, pastures | approx. 20 | < Fi. kontu 'house and lands surrounding it'. This word is probably a derivation of the Uralic *konta or *kunta (both forms attested) 'group of people; administrative territory'. 39

³⁹ This is a new etymological version which is not to be found in standard references.



³⁸ It has been suggested that this word could be connected with an Ob-Ugrian word with a similar meaning (SAMMALLAHTI 1988: 551). This postulation is based on the assumption that in this word the first syllable *a is sporadically not labialised in Sámi.

-ванга | Кортеванга, Русованга, Мареванга | approx. 10 | < Karelian vanka 'meadow (on a shore of a lake or a river)'. The word is a Germanic borrowing (cf. Old Norse vangr 'meadow' < *wanga 'curve', cf. SSA III: 406; the meadows in the river valleys are typically situated at the bends of rivers).

-ранда | Вочаранда, Кавкаранда, Кукранда | approx. $10 \mid <$ Finnic ranta 'shore', a word of Germanic origin (< Proto-Germanic * $strand\bar{a}$).

5.2. Some common bases and their origins

There are many more bases than formants in northern Russian substrate names. The bases vary much areally and there are few bases which would be present in the whole of the Arkhangelsk Region. Therefore, the list below is much less representative than the list of formants above and serves mainly as an illustration. All the examples are from the Pinega District.

As noted above, many of the etymologies for the bases are not verifiable on the basis of the characteristics of the object. Thus, the etymologisation of the bases is often more insecure than the etymologisation of the formants. However, analogical processes which affect the phonological shape of the toponym are not as common in the bases as in the formants and therefore, the bases always have their origin in the specifics of the substrate language toponyms.

The material is presented according to the probability scale presented above in section 3. Only the three most probable groups of etymologies are taken into consideration. As noted above, some elements in substrate toponyms occur both in the bases and in the formants (-cap(b)) 'island', $-pah\partial a$ 'shore', -hemb 'cape', etc.) and these have been left aside here because they have been considered above. As there is no similar systematic presentation of toponymic bases as there is for formants (MATVEEV 2001), no figure for toponyms including a specific formant is given. One should note, however, that besides Pinega district, most of the toponymic types presented here also appear in other areas in the Arkhangelsk Region.

A) Toponyms belonging to toponymic types present in living languages with an etymology that can be verified by language-external facts:

Палт- / **Полт-** | rivers | *Полтома* two rivers, *Палтанские* fields | < Finnic *palte 'slope' (Germanic borrowing). Names denote objects characterised by hilly terrain and slopes.

Шул- / **Сул-** | rivers, riverside objects | **Шуланемь** cape (in two places), *Сульца* river | < Finnic **sula* 'melted; unfrozen' Names denote places which remain open in the winter or open first in the spring (cf. section 6.3. on the double substitution of Finnic **s*.)



Хар- | several kinds of objects | *Хараполы* field (in two places), *Харанемь* meadow | < Finnic *haara 'branch' (Baltic borrowing); names denote geographical features which are somehow 'branched': one *Хараполы* is situated on a hill which has a shape similar to a horseshoe, the other is situated at a confluence.

HOpom- | rivers | HOpoma river (in several places) | < Finnic *jyr(h)ämä 'a deep and wide place in a river'. Names denote rivers which flow through lakes.

Kыл(b)м- | brooks, rivers | Kылма river, Kылмовка spring | < Uralic *külmä (> Finnish kylmä) 'cold'. Names denote objects characterised by especially cold water.

Явр- | brooks and rivers flowing from or through lakes | Явроньга 'lake' | < Proto-Sámi * $j\bar{a}vr\bar{e}$ ~ Finnic-Saami * $j\ddot{a}vri$ 'lake'. It is peculiar that most substrate lake names in the Arkhangelsk Region have been adapted as partial translations. Therefore, the substrate language word for 'lake' has been preserved only in brook and river names. They suggest that in most of the Arkhangelsk Region the word had a phonological shape close to that of Sámi * $i\bar{a}vr\bar{e}$ (> SaN $j\acute{a}vri$). *

Topoc- | lakes, rivers | *Topoco3epo* | < Sámi / Pre-Finnic *toras- 'crosswise' (> saN doares, East Mari toreš 'against') Name denotes lakes which are passed through on the way to other, more important lakes.

Some names which belong to this group have etymologies not as straightforward as those mentioned above. In these cases the naming motivations are not easily understandable and, therefore, the lexemes behind the names are also not easily identifiable. In some cases investigation into place names in the living Finnic languages provides information that makes an etymological interpretation of the toponyms possible. A few cases are presented below.

Kandeno small lake (< Finnic *kantelek [> Finnish kannel]) 'gusli; harp; a musical instrument' (a Slavic borrowing). This name denotes a lake with a shape similar to a gusli. An investigation of Finnic and Karelian lake names derived from similar lexemes (NA) proves that motivation of this kind has indeed been used in naming lakes in the territory of the historical Karelian settlement.

Bapzac a part of a river (a strait) (< Finnic *varkas 'thief', Germanic borrowing). This name denotes a strait by the River Kuloj which forms an al-

⁴⁰ In fact, all the Russian substrate toponyms point to either -vr-, -hr- or -kr- (< *-kr-) in this word (MATVEEV 2002). If these words indeed are connected to the Finnic $j\ddot{a}rvi$, the Baltic etymology for the word ($< *j\acute{a}ura$ 'moor 'moor or sea', NUUTI-NEN 1989) cannot hold.



ternative and shorter waterway when moving along the river. An investigation of Finnic toponyms with similar lexemes proves that this is indeed the likely motivation for several place names derived from *varkaus* 'theft'. ⁴¹ The Finnish expression *kulkea* (*kuin*) *varkain* 'move quickly (literally: 'like a thief')' is also semantically related to the motivation behind **varkas*-toponyms.

Baneadocs marsh < Finnic *valvattus (> Finnish and Karelian valvatus) 'hole in the ice that remains open' from valva- 'stay awake or open' This name denotes an open, moist bog. Investigation of Finnic toponyms with a similar lexical content implies a common naming motivation. This word has obviously been used as a metaphor for open bogs.

Mypò- | Mypòoŭ brook (in several places) < Finnic *murto(i) 'break (n)', a deverbal derivation; in toponyms of Pinega district 'whirlpool' | The names derived from this word stem are connected to brooks which flow into the main river at narrow points where whirlpools arise. Another investigation into Finnic place names connected to a similar naming model revealed the same motivation. In Karelian there is also a dialectal word murto 'whirlpool; deep water'. This clearly is a derivation from murtaa 'break'. The original meaning of the word seems to have been 'to turn back'. One needs to be aware, however, that the word murto is connected to several other name types in Finnic languages as well ('thicket; brake'; rapids').

B) Toponyms which belong to toponymic types present in the living languages but which have an etymology that is not verifiable on any language-external basis

Mamκ- | brooks, lakes, etc. | Mamκοπ brook | < *matka 'road; passway'. In Finland, names of this kind have been given to places which were passed on the way to some important destination. As there is no information available on the traffic routes used by the pre-Slavic populations of northern Russia, it is not possible to verify whether or not a similar kind of motivation is also behind the substrate names of the Pinega basin. As this name type is common among living Finnic languages, it is likely that a similar type existed in substrate languages of the Arkhangelsk Region as well.

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⁴¹ Also, the name of the Finnish town *Varkaus* in Southern Savo seems to be connected to this motivation. This town is situated on an isthmus between two major lakes Kallavesi and Haukivesi near a place where big rapids Ämmänkoski flow from the previous to the latter. Travelling through the rapids by boat may have been avoided by taking a short cut through across the isthmus.

⁴² This is also the meaning of the Mordvinian (Erzya) *murdams* and (Moksha) *mərdems* which have been connected with the Finnic verb with some reservations (in SSA). Also, the North Sámi *murdit* 'retreat', which is a borrowing from Finnish, proposes similar semantics.

Xuò- (Xum-) | settlements, lakes, elevations | Xuòcopa hill, Xumosepo lake | < *hiiti (> Finnish hiisi, Gen. hiiden) 'unholy', originally likely 'sanctuary; centre of a settlement'. Bases derived from *hiiti are typical in the present Finnic languages and they have been considered in detail in the toponymic literature (KOSKI 1967–1970). In Finland and Estonia, the place names formed from the appellative hiis(i) are often connected with old centres of settlements which, quite probably, had sanctuaries. The present semantics of the word seem to have developed relative to the adoption of Christianity. Also in northern Russia, some xum- and xuò-places are situated in the centres of old settlements (cf. Xuòcopa above, section 2.3.). In other cases, this kind of correlation is not self-evident, however. It is probable that archaeological excavations could in some cases provide further support for the etymology.

Хярг- | brooks | Хярга brook (in several places) < *härkä 'bull'; Toponyms formed from a word stem meaning 'bull' are typical of Finnic languages. However, there seems to have been a peculiar toponymic model in the substrate language of the Pinega basin: four small brooks which bare this name all have an especially strong current in spring time, while in the summer they dry up altogether. There is probably some kind of metaphoric naming motivation behind the model.

Чухч- | brooks; settlements | *Чухча* river (2), *Чухчамень* village < Proto-Sámi *ćukčē (> North Sámi čukčá) 'capercaillie; tetrao urogallus' This toponymic etymology has been suggested in several treatises on northern Russian substrate toponymy (cf. MATVEEV 2004: 103–104). The fact that the word related to the Sámi word for capercaillie existed in the substrate languages of the territory seems well founded: the Russian dialectal *чухарь* and the Komi dialectal čukči which both mean 'capercaillie' have, most likely, been borrowed from substrate languages of the territory. ⁴³ However, the naming motivation for the *чухч*-places can hardly be verified in most cases. Moreover, there are other problems related to the interpretation of Sámi elements in substrate names (see section 6.1.).

Hioxu- | rivers, settlements | < Proto- Sámi *ńukćg 'swan' (> North Sámi njukča) As with place names formed from *ćukč \bar{e} it is not possible to verify or falsify this old toponymic etymology (originally suggested by CASTRÉN, cf. MATVEEV 2004: 94–95) on the basis of language-external facts. ⁴⁴

⁴⁴ It has been suggested that this kind of bird names may also have been used as a sort of totem names (MATVEEV 1986). At the present stage of the research, this hypothesis is quite speculative but may well prove to right in principle.



⁴³ The development of the Russian word has certainly been affected by *глухарь*, the literary Russian designation for capercaillie.

C) Toponyms formed from identifiable Uralic lexemes not used in toponymic formation in living languages (or used only according to some other naming motivation)

Кыч(*ac*)- | several kinds of objects | *Кыча* lake *Кычас* lake, *Кычверетия* а passway between marshes < **kicca*(*s*) 'narrow'; the objects denoted to are characterised by their narrowness. Living Finnic languages lack a similar naming model.

Yxm- (*Oxm-*) | rivers, lakes, objects related to bodies of water | *Oxmoma* river (< *ukti 'way; passway' (> Khanty V ογət 'track', etc., Mansi KU āχt id., etc., Hungarian út 'way; road'). As noted by MULLONEN (2002: 208–217) toponyms with this base denote rivers or water routes which have a narrow passway by land to other water systems (Ru. *βοποκ*). It is probable that in these toponyms a word present in the Ugric languages and meaning 'passway' or 'road' has been preserved (SAARIKIVI 2004c: 349). This word has no cognate in present Finnic or Sámi but it seems to have existed in the extinct languages of the Finnic and Sámi type spoken in northern Russia.

5.3. Old Finnic personal names and the northern Russian substrate toponymy

So far, the northern Russian substrate toponyms have been studied almost exclusively on the basis of appellative lexicon. However, the present Finnic languages also have a substantial number of toponyms formed from personal names. These are especially characteristic of settlement and field names. In Finnic languages, toponyms derived from personal names constitute approx. 10% of the total number of toponyms (KIVINIEMI 1990: 143–145). In settlement names their number may be as high as 50% (MULLONEN 1994: 85–86).

In northern Russia, only some isolated examples of substrate toponyms derived from personal names have been presented in the toponymic literature so far (see SAARIKIVI 2003). This is partly due to a lack of historical documentation. There are few documents which name individual pre-Slavic settlers in northern Russia, and probably not a single document that would with certainty connect a particular individual to a specific place. Further, the system of old Finnic personal names has been described fairly superficially.

Only a limited number of Finnic pre-Christian personal names has been preserved in historical sources. It is clear, however, that in a similar manner to toponyms, many Old Finnic personal names have consisted of two parts (*Kauko/valta*, *Iha/lempi*, *Vihta/mieli*)⁴⁵ or have been based on participles

⁴⁵ Kauka- is modern Finnish for 'lengthy, long', valta 'power; might', lempi 'love' and mieli 'will; desire'. Iha and vihta are nonexistent in modern Finnish. The

(Valittu 'choiced', Lemmitty 'beloved', Toivottu 'hoped'). Quite likely, the first part of the two-part names was also used on its own. It may be assumed that when toponyms were formed from personal names, the generic of the name was eliminated and the first part of the name began to be used as the specific of a derived parallel toponym (Ihamieli 'personal name' + mäki 'hill' > Ihamäki, Kaukovalta 'personal name' + la 'locative suffix' > Kaukola settlement).

In living Finnic languages toponyms derived from personal names are most typical in settlement names, quite typical in names connected with agriculture and quite atypical although not nonexistent in hydronyms. The probability of an etymology based on a personal name also follows this form. However, because of a lack of literary sources, all the toponymic etymologies based on personal names would belong at the maximum to group 2 on the probability scale. There is, to be precise, nothing in the places themselves that could verify or falsify an etymology based on a personal name.

In some cases, it is hard or even impossible to decide whether a substrate toponym was based on a personal name or a corresponding appellative. Thus, it is not clear whether toponyms with the bases derivable from the Proto-Finnic *repoi 'fox' (e.g. Pinega settlement name Revomurga, 46 cf. MATVEEV 2004: 63) can be connected to the appellative meaning of the word or to the personal name based on the appellative and attested in literary sources (cf. STOEBKE 1964: 64).

In the following, some northern Russian place name types have been etymologised on the basis of Finnic personal names (some of them were presented earlier in SAARIKIVI 2003).

Ихал(ь)- | settlements, meadows, brooks, etc. | *Ихальнемь* meadow, *Ихала* river, *Ихалово* village, etc. (see MATVEEV 2004: 37–38) | < personal name **Ihala*. The one-time existence of this name in northern Russia is verified by the Novgorod birch bark letter 249, which includes the personal name *Игала* (ZALIZNYAK 2004: 623–624). ⁴⁷ Although the Finnish dialectal and Karelian adjective *ihala* 'lovely; delightful' also exists, it is probable that most of the northern Russian substrate names with this base are derived from personal names. There are many personal names derived from *iha* 'delight' (*Iha-*

⁴⁷ This name has already been identified as Finnic already by HELIMSKI (1986).



former has, however, survived as a derivation *ihana* 'lovely; delightful'. *Vihta* is a name element with a likely Germanic origin.

⁴⁶ *Mypea* is a Russian dialectal geographical appellative meaning 'pit caused by ero sion' (cf. SAARIKIVI 2004a: 196–197).

lempi, Ihamieli, Ihamuoti), ⁴⁸ and **Ihala* certainly also belongs here. The same name is also preserved in the Finnish surname *Ihalainen* (SNK 148, cf. also SAARIKIVI 2003: 144).

Kαθκα- | *Kαθκοπα* village (in the mouth of Dvina) < personal name **Kαυκοi*. A similar name element has been used as a first component of several pre-Christian Finnic personal names (*Kαυκοmieli, Kαυκοvalta, *Καυκοhalu,* ⁴⁹ etc.) and it has also been preserved in several Finnish surnames (*Kαυκinen, Kαυκο, Καυκοnen,* etc., SNK 207–208). ⁵⁰ Some substrate names with the lexeme *kαυκα*- can be connected with the appellative semantics of the element **kαυκα* 'distant, remote', originally 'long' (cf. MATVEEV 2004: 38). ⁵¹

Pakyn- | settlements, bodies of water | *Pakyna* settlement, *Pakynka* river | < personal name ?**Rakkoi(la)*. This frequent northern Russian settlement name type has been interpreted as Finnic though without a true etymology by MATVEEV (1999: 86). It seems likely that it was based on the Karelian personal name **Rakko(i)* which has been preserved in some literary sources and in Finnish surnames *Rakkola* and *Rakkolainen* (SNK 521).

Buxm- | village, branch of a river | Buxmoво (< Buxmyй, a form attested in early documents) village, Buxmoвский river branch | < personal name *Vihto(i). The village name Vihtovo in the Pinega District is one of the oldest in the Dvina basin, attested even in 1137. It is, most likely, connected with an element attested in several old Finnic personal names (Vihtimeeli, Vihtari, Vihtiä, STOEBKE 1964: 105–106). Also, this personal name has been preserved in the birch bark letter 2 (anthroponym Buxmumacъ) and in the Finnish surname Vihtonen (SNK 744).

Xum- | meadows, bodies of water | *Xuma* river, *Himasora* brook, etc. | < personal name *Himo(i). The same name element occurs in compound personal names Himopää, Himatoinen, *Himottu, etc. which have been preserved in old literary sources (STOEBKE 1964: 20–21). Likely, the personal name Γ _{bi,Myŭ}, mentioned in birch bark letter 403 also belongs here. The same element has also been preserved in the Finnish surname Himanen (SNK 120).

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⁴⁸ Literally 'lovely form'. The is name has probably meant, approximately, 'good-looking'.

⁴⁹ This kind of previously nonattested personal name most likely appears in the Novgorod birch bark letter 249 (*У Καβκα2αλα*), referred to above.

⁵⁰ Even today there is a christian name *Kauko* in Finland, although this is a formation of the period of national romanticism.

⁵¹ MATVEEV (ibid.) has also connected the name of the village *Кавкола* to the Finnish *kaukalo* 'vat' and its Finnic cognates. This is extremely unlikely, because no similar toponyms are attested in the present-day Finnic area.

The appellative *himo* means 'lust; desire' and it is likely that this meaning is also behind the personal names.

Aйн- | Aйново village in the Pinega District | < personal name *Aino(i) (not attested in literary documents). The literary meaning of the name was probably 'sole; the only one' (fi. ainoa 'the only one'). Further, such names as these have been preserved in Finnish surnames (Ainas, Ainalinen, Ainoinen).

The examples above demonstrate that Finnic personal names are useful in the search for etymological cognates to northern Russian substrate names. While it has been considered an out-dated tradition in Finnish toponymistics to explain unintelligible place names by loosely suggesting that they may include old personal names, of explanations of this kind should not be categorically rejected. They can be proposed by stricter criteria than those suggested by previous scholars. Especially in cases in which a common element occurs both in surnames and several individual place names connected to settlements, does the reconstruction of an old personal name seem possible. Many Finnic personal names have also been preserved in the Novgorod birch bark letters and this substantially enhances the credibility of some of the comparisons above. In addition, old Finnic personal names have been preserved in surnames and toponyms which denote settlements and belong to types typically derived from personal names (most notably, toponyms with word final -πa, a formant that originates in Finnic settlement name suffix and -ev(o)/-ov(o), Russian settlement name suffix]).

In addition to old Finnic personal names, it also seems likely that personal Christian names have survived in the substrate toponyms of the Dvina basin (Лукомень < ?Лукий, Иванемь < ?Иван, Юрола, Юрьемень < ?Юрий, еtc.). There would be nothing strange in 14–16th century Finnic settlers in the Dvina basin adopting the Christian name system. Similar anthroponyms and toponyms are today commonplace among the Finnic people of northern Russia.

5.4. Appellative substrate vocabulary and substrate toponyms

Many words present in substrate toponyms also occur as appellative borrowings. The borrowing of toponyms and geographical vocabulary are related phenomena which both typically occur in the case of language shift (see in detail SAARIKIVI 2000; AIKIO 2004). Place names and geographical appellatives are learned in a similar manner, while learning the concrete objects they denote.

As noted already by generations of scholars, most of the appellative borrowings in northern Russian dialects are of Finnic origin. In addition, there are a few borrowings considered to be Sámi, some Komi and Nenets borrowings



and vocabulary from unidentiable but, most probably, Uralic sources. Among the frequent semantic fields of Uralic borrowings are words related to geography, weather conditions and northern means of livelihood such as fishing, hunting and reindeer herding (MYZNIKOV 2004: 78–248).

There are two groups of appellative vocabulary that can be considered linguistic substrate in the sense that they have belonged to the vocabulary of an extinct language in a specific area. These are 1) vocabulary that besides appellative use also appears in substrate toponyms and 2) vocabulary that denotes strictly local concepts and has a narrow distribution in dialects. For example, the well-known Finnic borrowing naxma 'bay'; also (through methonomy): 'marsh; moist place; meadow' (< *lahti 'bay', KALIMA 1919: 151)⁵² has a wide distribution in North Russian. In the Pinega District, it forms many Russian toponyms that consist of an adjective attribute and a geographical appellative (Великая лахта 'large bay', Грязная лахта 'soiled bay', etc.). As it also occurs as a formant in substrate toponyms (Куклохта meadow, Киглохта village, Ролахты bay) we know that it has belonged to the extinct Finnic vernacular of the Pinega basin and has not spread there through other Russian dialects. Similar terms with a wide distribution in Russian dialects, but which are fixed in the substrate toponyms of the Pinega District are πy∂a 'rocky islet' (< Finnic luoto id.), καcκα 'young woods' (< Fi. kaski 'burnt-over clearing; woods that grow in it'), εμεκα 'brook that flows out of a lake' (< ?Fi. vieska 'current in rapids)⁵³, щелья 'hill or steep bank by a river' (< *selkä 'ridge (originally: 'back')⁵⁴, etc.

The other group of geographical terms of substrate origin has a very limited distribution in dialects. Typically, these are words which denote the geographical features of some specific microterritory. They may denote only to a few places and, therefore, are used in a manner close to the use of toponyms. Thus, the dialect word *mypea* 'funnel-like pit caused by erosion' is only attested in the Pinega dialect of Russian (SRNG 18: 353) and the adjacent Udora dialect of Komi (KESKJ 179). This is natural in that the objects it denotes are uncommon in most of northern Europe. In the Pinega re-

⁵² The Russian word could also have originated from the pre-Finnic *lakti.

⁵³ This etymology (proposed by the author of this article in SAARIKIVI 2004a: 196) is insecure because the Finnish dialectal *vieska* has a narrow western distribution and the meanings of the Russian and Finnic words are different. According to another also problematic version, this word is a Komi borrowing (REW I: 204; KESKJ 58).

⁵⁴ The initial *щ* which occurs only in some dialects (the other dialects have *ш*), is probably the result of folk etymology. The word was contaminated with the Russian *щель* 'gap; hole' (rivers with steep banks flow through gorges, see SAARIKIVI 2004a: 197).

gion, this word is connected to pits caused by the rapid erosion of soil consisting of karsts. The fact that the word belonged to the substrate language of Pinega basin is reinforced in that *mypea* also occurs as a formant in at least one substrate toponym (*Pesomypea*, a settlement name, cf. above).

Another group of words which seems to originate in the substrate language is used in toponyms not as formants or bases of substrate toponyms, but only quite alone (as the only lexeme in toponym) or in conjunction with the Russian adjective attribute. In these cases, the dialectal distribution and the phonological shape are the main criteria in classifying the words as local substrate borrowings. Thus, Russian dialectal койдома 'passable marshland' has been attested only in Pinega and some nearby districts. The word seems to be connected with Finnic keidas 'high place on a swamp, etc.' which, in turn, is a Germanic borrowing (< *skaiða-z 'passage, distance, interval', SSA). There is no word that would directly correspond to the Russian dialectal койдома (< likely *kaitama) in the Finnic languages, but as we know that the Finnish keidas had *ai in the first syllable and geographical terms with a derivational suffix -mA (or -mO) are commonplace in Finnic languages (Hakulinen 1979: 130–131), it is quite possible that in the extinct Finnic dialect of Pinega, a word *kaitama 'passable swamp' has existed (SAARIKIVI 2004a: 195–196).

A similar case, although with a somewhat wider dialectal distribution is the мег 'bench of a river' which could have been borrowed from *mäki 'hill' (see VESKE 1890: 164). In modern Finnic, mäki only means 'hill' but in the Finnic substrate language of the region, the semantic shift 'hill' > 'bend of a river; promontory' would appear to have taken place. This shift would be explicable in that *mäki* would have first developed the meaning 'a high place by a river'. A similar semantic shift has occurred also in Slavic: the cognate of the Russian *Gepez* 'shore' (< PIE *bhergh-) means 'hill' in Germanic (cf. German Berg).⁵⁵ The presumed semantic shift can be further supported by the use of the word in the Pinega dialect. It is frequent in expressions such as идти через мег 'walk through a bench of a river (i.e. not by the coastline but over land)' and *Ha Mezy* 'at the bend in a river (i.e. not by the shoreline). Moreover, the Finnic mäki 'hill' is probably nonexistent (or very rare) in Finnic substrate toponyms of the Dvina basin although it does belong to most common generics in all of the Finnic languages. As most of the other common generics of Finnic are otherwise present in Dvina basin place

⁵⁵ The word *mee* has also been borrowed into Komi dialects, probably from the substrate languages of the Dvina basin. The etymological explanation given by KESKJ (~ ud *mog*, saN *mohkki*, p. 171) is rejectable on phonological grounds (the vowel correspondences are not regular).



names, the absence of *mäki* would be suprising, especially if one takes into account that it is among the most common geographical appellatives in the toponym formation of many Finnic languages (cf. KIVINIEMI 1990; MULLONEN 1994: 26).

Thus, there are borrowings in North Russian dialects, which have probably originated in extinct Finnic languages with no exact parallels among present-day Finnic idioms. As many of them denote geographical concepts and are used in toponym formation, the study of appellative substrate vocabulary is intimately connected with the study of substrate toponymy. One should note, however, that those toponyms including only a geographical appellative should be classified as Russian and not substrate toponyms.

6. Ethnical interpretation of northern Russian substrate toponyms

6.1. The dating of Russian colonisation in the Dvina basin

The substrate toponyms of the Dvina basin reveal no traces of such Slavic sound shifts as polnoglasie, elimination of nasal vowels or disappearance of the yers. This clearly points to the fact that Slavic spread to this area later than it did to the vicinity of the Gulf of Finland where these phonological phenomena are present in some toponyms. It is not clear, however, from the substrate toponymy where the even approximate borders of these sound shifts are to be found. Many scholars have pointed to such Novgorod Region toponyms as Mcma (< *Mustajoki and Hapoвa < Narva, cf. AGEEVA 1989: 220-221) which presumably represent reflexes of these sound shifts. Moreover, many Novgorod Region river names of probable substrate origin seem to end in a consonant (ibidem.) whereas river names of this kind in the Arkhangelsk Region are rare. This suggests that Novgorod Region names ending in a consonant have had word final yers. One should note, however, that the main bulk of appellative Finnic borrowings in Novgorod dialects are more recent (MYZNIKOV 2004: 261-263) and this leads to the conclusion that Finnic-Slavic contacts in this area lasted for a long period. Also MUL-LONEN (2002: 43-51) has pointed to some toponyms from the Svir' basin which seem to be have been borrowed before the disappearance of the nasal vowels and yers (Винницы < Veps Vingl, Свирь < *Syväri).

The disappearance of the yers has been dated at 1150–1300 by ZALIZNYAK (2004: 59–62). As there are no traces of yers in the toponyms of the Dvina basin, one has to admit that the entire Dvina basin must have been linguistically overwhelmingly Uralic until the beginning of the 14th century.

The distribution of different morphological adaptation types of substrate toponyms is probably connected to the different russification patterns of Uralic populations. It has been demonstrated that the partial translation pat-



tern (cf. section 3.2. above) has spread into those areas in which the Slavic population came from Novgorod (GUSEĽNIKOVA 1994: 12). MULLONEN (2002: 128–132) has convincingly demonstrated that the distribution of brook names with the formant -oŭ and Russian partial translations with the ending -pyueŭ 'brook' correlate with the Ladoga-Tikhvin and Onezhskaja group of Russian dialects and the archaeologically defined border of the early (prior to 1000 AD) and late (after approximately 1250 AD) Slavic colonisation of the Svir' basin. She suggests that the full adaptation of toponyms would have been connected with the Slavic migration to the Svir' basin, while partial translations would be the result of a slow russification of the indigenous Uralic population through language shift.

It is not clear yet whether similar correlation patterns can be observed elsewhere, also. One should note, however, that correlations of this kind are not universal. For instance, in the Finnic-Sámi contact zone (inner Finland) all substrate toponyms are adapted as partial translations (cf. ANTE AIKIO's article in this volume).

6.2. Identification of substrate languages: were there Sámi in the Dvina basin?

Most of the examples referred to above are from Finnic languages. However, all scholars agree that many toponymic types of northern Russia cannot possibly be explained solely on the basis of the Finnic languages. It has been continuously proposed since Castrén that besides Finnic tribes, also the Sámi inhabited northern Russia. As noted above, this argument was based on toponyms which include lexemes present in Sámi languages. It finds limited support in ethnotoponyms and there are also few fragments of oral tradition which could be related to the Sámi (see MATVEEV 2004: 192–193 and article by A. K. MATVEEV in this volume).

However, the northern Russian place names indicate very peculiar kinds of "Sámi" languages. Those Sámi languages known to present linguistics have a large amount of vocabulary without Uralic cognates or loan etymologies (cf. ITKONEN 1948: 16–26). These vocabulary layers can be considered borrowings from from extinct Paleao-European substrate languages (for details see AIKIO 2004, SAARIKIVI 2004a). The frequent but unetymologisable Sámi geographical terms (North Sámi forms given) $nj\acute{a}rga$ 'cape' (< * $\acute{n}arke$) and geadgi 'stone' (< * $k\bar{e}\delta k\bar{e}$) occur in toponyms only to the west of the Dvina basin, and the area of distribution of some other central terms (such as $b\acute{a}kti$ 'rock' [< * $p\bar{a}kt\bar{e}$], roavvi 'place where there has been a forest fire' [< * $r\bar{v}v\bar{e}$], vuotna 'fjord' [< *vuone], etc.) is even more northern and western (SAARIKIVI 2004b: 206–210). Thus, important layers of vocabulary present



in Proto-Sámi and its offsprings are nonexistent in the "Sámi" place names of the Dvina basin.

Further, toponyms with phonological and morphological developments characteristic of Sámi languages do probably not exist in most of the Arkhangelsk Region. Thus, the attribute form of the adjective *guhkki* 'long', *guhkes* (< Proto-Sámi **kukēs*) which occurs in several Sámi substrate origin lake names in Finland and Karelia, is nonexistent in the substrate toponyms of the Dvina basin (SAARIKIVI 2004b: 202). This is symptomatic, because the existence of a separate attribute form of an adjective is a characteristic and innovative feature of the Sámi languages. The fieldwork by the author also implies the conclusion that, in the Pinega basin, toponyms with the base *kuk*- characterised as Sámi by MATVEEV (2004: 185), are more likely connected to the Finnic **kukku(la)* 'hummock'.

The traces of regular Sámi sound shifts have in many cases been flushed away by the Russian adaptation of the place names (cf. results of the Sámi vowel shifts *i, *e, *ü > (North Sámi) a, *a > (North Sámi) uo, etc., and the substrate language—Russian sound correspondences *a, $o \sim o$, e, $a \sim a$, etc. referred to above). However, some Proto-Sámi vowel shifts are attested in toponyms in the western parts of the Arkhangelsk Region (op.cit 196–198, cf. toponymic types nym6- 'small lake' and ene- 'upper'). There are also examples of the Sámi development * \acute{s} > \acute{c} in some appellatives (cf. Russian dialectal appellative uunbma 'an open place in a marsh' (< * $\acute{s}ilm\ddot{a}$ 'eye', MATVEEV 1978)⁵⁶ and toponyms with the base uonm- 'strait' (< $\acute{s}olma$, MATVEEV 2004: 316; SAARIKIVI 2004b: 197–199).⁵⁷

The picture of the substrate languages in the Dvina basin becomes even fuzzier if one takes into account that elements characterised as Sámi by generations of scholars, combine with elements which may only be characterised as Finnic. This results in toponyms which are certainly Uralic, but which are difficult to interprete from the point of view of Uralic linguistic taxonomy. Thus the specific of the name $\mbox{\it Uyxuemeha}$ has been interpreted on the basis of the Sámi * $\mbox{\it cukc\bar{e}}$ (> North Sámi $\mbox{\it cukc\'a}$), 'capercaillie' whereas the generic of the name is without doubt connected to the Finnic * $\mbox{\it neemi}$

⁵⁶ This word is connected to Finnic lexical convention (Finnish form given) *suon-silmä* literally 'marsh-eye' = 'an open place in the marsh' from *silmä* (< *śilmä 'eye'). This convention is nonexistent in Sámi languages, while the offspring of PU *śilmä (> saN čálbmi 'eye') is otherwise present. The word also lacks the Sámi vowel developments.

⁵⁷ Note, that in the latter article it has been argued that this word may also be offspring of Pre-Finnic **ćolma*. The implications of northern Russian toponyms for the history of Finnic and Sámi affricates are discussed below in 6.4.

'promontory; cape', which, in turn, is nonexistent in Sámi (MATVEEV 2004: 225–226, cf. also names like *Ηιοχυαπακιμα*, *Шубоя*, *Шубматка*, etc.). It seems likely that names of this kind are not Sámi-Finnic partial translations either, because no Finnic language has the sound combination -hč- (with the exception of some late Vote cases). Thus it seems justified to suggest that we are dealing with toponyms from extinct languages which shared lexical features of present Finnic and Sámi branches of Uralic languages (see, however, A. K. MATVEEVs differing opinion in his article published in this volume and MATVEEV op.cit.). ⁵⁸

Moreover, as noted above, there are also northern Russian toponymic types etymologisable on the basis of Uralic languages which are, at least apparently, neither Sámi nor Finnic. For example, place names with the bases ухт- and кыч- or the formants -capa or -nana are certainly Uralic, but they cannot be labeled according to the present Uralic branches. This also implies that the toponymic types referred to by MATVEEV with close resemblances in the Sámi languages (cf. HIOX4-, 4YX4-, mopoc- above; see MATVEEV 2004: 210-231 for more types) did not necessarily originate in a language which should be characterised as Sámi in the present sense of the word.⁵⁹ Moreover, many of MATVEEV's etymologies are uncertain (they belong to categories 2, 3 and 4 on the probability scale presented above) and some could well be interpreted as Finnic (cf. toponymic bases $nan\partial - < *palt(t)e$ - 'slope' [and not (North) Sámi bealdu 'field', MATVEEV 2004: 95], 4yza [< ??Vepsian čuga 'corner; spot' or Vepsian *čuhu 'hill', a lexeme reconstructed on the basis of toponymy, MULLONEN 1994: 56-57] and not Sámi *ćokke 'top of the hill', cf. ibid. 102–103], $\kappa y \kappa$ - (< Finnic *kukku(la) and not Sámi *kukkē 'long', cf. ibid.).

Instead of speaking of Sámi toponyms in the eastern and central Dvina basin, one should probably speak of toponyms which share some phonological and lexical features with the Sámi languages. They seem to have originated in Uralic language forms which also underwent the sound shift $*\dot{s} > \dot{c}$ and had several lexemes in common with the Sámi languages. However, proba-

⁵⁹ An especially peculiar case is the base *HIOUX*- which probably is connected to a word meaning 'swan' that is present in many Uralic branches. Words belonging to this connection have many irregular sound correspondences (Sámi has irregular word initial shift $j > \acute{n}$).



Sámi $\check{c}ukc\acute{a}$ is without Uralic cognates. This word presents a phonotactic structure that has no regular correspondence in present-day Finnic (first syllable u + middle consonant cluster, second syllable \check{a}). Therefore, it is likely that even in Sámi, this word is a Palaeo-European substrate borrowing. Komi $\check{c}uk\check{c}i$, referred to as a cognate word in UEW and KESKJ is probably a borrowing from substrate languages of the Dvina basin.

bly not one of the central geographical appellatives which today differentiate Sámi toponymic systems from Finnic systems was present in these languages. The hypothesis that there were substrate languages of non-Finnic and non-Sámi character is further supported by the fact that the historical sources mention several tribes without parallels among the present Uralic peoples.

In the western parts of the Arkhangelsk Region, there seem to have been substrate languages closer to modern Sámi in some respects—two good candidates for areas with such a substrate language are the Beloozero region and the Lower Onega region (see MATVEEV 2004: 114–131; 181–186). But even these languages were lexically not similar to modern Sámi. Place names in the Dvina basin point to a dialect continuum in which lexemes and innovations present in the modern Sámi languages increase to the west and diminish to the east. Where exactly the substrate toponymy should be labeled as Sámi is a question that cannot be unambiguosly answered.

At present the question of non-Finnic substrate languages in the Dvina basin is far from settled. Further, the hypothesis that there were Sámi in the Dvina basin may find support when the etymological study of place names in the area proceeds. Most likely, this must be solved by areal investigation of toponyms. It is sure, however, that possible Sámi languages in this area were linguistically much less similar to the modern Sámi languages than Finnic tribes in the area were to modern Finnic.

6.3. Identification of Finnic tribes

In research history, the Finnic tribes of the Dvina basin were considered Karelian (CASTRÉN 1844, KIRKINEN 1963), Veps (HAAVIO 1965, PIMENOV 1965) and lately Karelian, Veps and other Finnic (MATVEEV 2004: 194–204). In ethnic interpretation of place name material, ethnotoponyms have dominated: the $uy\partial b$ have mainly been interpreted as Veps, while the idea that there were Karelians in the Dvina basin was based on ethnotoponyms derived from the ethonym Kopena.

In addition to Russian ethnotoponyms, the most promising methods in identifying the Finnic substrate languages are a search for vocabulary present in some Finnic languages and nonexistent in others, and a search of naming models historically productive in specific Finnic languages and nonexistent in others. The third method available in differentiating Sámi toponyms from Finnic ones, a search for traces of regular phonological shifts, is not easily applicable in the case of Finnic toponyms, because only minor sound shifts differentiate individual Finnic languages and even their traces have often disappeared, especially if the toponyms have been borrowed from one

Finnic language into another. However, some toponyms still hint at substrate languages with specific phonological characteristics.

As in the case of toponyms characterised as Sámi by generations of scholars, the distribution of lexemes, naming models and phonological shifts characteristic of individual Finnic languages is not easily interpretable in ethnic terms. Thus, in the lower Pinega basin where there are κορεπα-ethnotoponyms, no definite traces of the most frequent Karelian toponymic term *lampi* 'small lake' are attestable. This state of affairs may, of course, be connected with the small number of lakes in this area, but also frequent Karelian name models such as *karsikko* 'memorial tree', *ryhjä* 'centre of a village', *nilos* 'smooth; slippery', *haiseva* 'stinking' (concerning these models see KUZ'MIN 2004, VAHTOLA 1980), etc., are nonexistent in the area. This signifies substantial differences between the languages of Karelians in inner Finland and present-day Karelia, and the probable Karelians in the Dvina basin.

Some name types traditionally characterised as Karelian are present in the Pinega basin, however: cepz- (< *särki 'roach'), πan - (< ?*lappi 'Sámi; North Karelian') and probably even $\kappa eamb$ - (< kuadjad < *kaatiot [~ Russian dialectal zamu 'pants']). The last one of these also points to a Karelian sound shift aa > ua in first syllable. Another possible Karelian phonological shift present in Pinega toponymy is $s > \check{s}$, which seems to occur in the base uvyn- 'unfrozen' (< Karelian $\check{s}ula$ < Proto-Finnic *sula).

In the same area, many substrate toponyms have a phonological shape close to Veps. Thus, the bases *βαρεαc* and *παμδαc* (see above 5.2.) have preserved the word internal consonantism of Proto-Finnic which in other Finnic languages has changed as a result of consonant gradation (**varkas* > Finnish *varas* [Gen. *varkaan*], **lampas* > Finnish *lammas* [Gen. *lampaan*]). At the same time, in the substrate names there are no traces of voiced stops, a phonological feature characteristic of Veps. Also a couple of lexemes nonexis-

⁶¹ The voiced stops in the toponyms *Ламбас*, *Варгас* etc. are a result of the phonological adaptation of substrate names in to Russian (cf. section 4.1.). Voicing of stops is probably a relatively new sound shift in Vepsian. It is not attested in the place name material of *Писцовая книга Обонежской пятины* from the end of the 15th century.



⁶⁰ KIVINIEMI (1977: 200) has identified this as a metaphoric Karelian name type used to refer to lakes which consist of two branches or two lengthy bays. *Кватьозеро* indeed has this kind of a form. If this really is a Karelian name, it has to be supposed that diphtongisation of the *aa* had happened in the substrate language. This is a development characteristic for Karelian only of all the Finnic languages. For the reasons discussed above, identifying *Кватьозеро* as a genuine Karelian place name is, however, premature.

tent in Karelian, but present in Veps appear in Pinega toponyms: *Чуга* (< Veps *čuga* 'angle; spot' or **čuhu*, **čuhak* 'hill', cf. MULLONEN 1994: 56–57), *Пурдева* (< Veps *purde* 'spring'). However, these combine with words which are nonexistent in the living Veps toponymy (such as **hattara* 'cloudlet', in dialects: 'bush' > *Xamapa*, *Xamapмень*, **laama* 'wide place at a riverrun' > *Ламозеро*, **hetteh* > Finnish *hete*] 'spring' > *Xemeльга*).

Thus, while the overall selection of lexemes and the phonological characteristics of the substrate toponyms in the Pinega basin are probably closer to modern Veps than to modern Karelian, the substrate toponyms of the region cannot easily be labeled either Veps or Karelian. In addition, some toponymic types such as settlement names with the formants -naлa and -eepa have their closest parallels in the southern group of the Finnic languages. The fact that the vowel combination e - a has been substituted uniformly in Russian substrate toponyms and yielded the central vowel in Southern Finnic is also a remarkable parallel with Southern Finnic and the substrate languages of the Dvina basin. Furthermore, some northern Russian toponyms also suggest a substrate language that would have preserved the diphthong *ai in cases where most of the Finnic languages have secondary ei, cf. the appellative койдома (section 5.4.), and toponyms with the base хайн- (< ??*haina 'hay', a Baltic borrowing [> Finnish heinä], see MAT-VEEV 2004: 73-74). A similar retention occurs in South Estonian and Livonian. 62

Thus, there are features of various Finnic languages in the substrate toponymy of the Dvina basin. In addition, some words present in northern Russian toponymy can be identified as Finnic, but they appear anomalous from the point of view of closer identification of the substrate language. Thus, the formant -nana 'village' has no appellative cognate anywhere in living Finnic and the frequent formant -capa 'brook' can only be compared to a marginal Finnish and Karelian dialect word which is not common in toponyms in any living language. Also, toponymic types such as κωιν- 'narrow' and many geographical appellatives (κυρωπ 'lenghty bay', ρα∂a 'marsh that grows low woods', κοῦδοσια 'passable marshland, μεε 'bend of the river', cf. section 5.4. above) do not point to any living Finnic language but rather, to a Finnic idiom lexically different from all present-day Finnic languages.

Some facts suggest that the Finnic population of the Dvina consisted of several different linguistically definable groups. Thus, in the Pinega district

⁶² The etymology *хайн-* < *heinä (MATVEEV 2004: 73–74) is not the most reliable. In the Pinega district, there are four names with this base and none of them is connected to a place in which hay now grows.



there are two parallel toponymic bases cyn- and uyn- with a similar motivation (< *sula 'melted; unfrozen'). This suggest that the Finnic population probably arrived in the territory in several waves, in a similar manner to present-day Finland where competing toponymic patterns of different Finnic tribes often exist side by side in the same region (cf. VAHTOLA 1980; KIVINIEMI 1971).

As there are historical sources suggesting a Karelian presence in the Dvina basin in the 15-16th centuries (cf. KIRKINEN 1963), it seems reasonable to assume that some relatively modern Karelian toponyms of the Dvina basin bear witness to Karelian settlers who arrived in the territory just before or simultaneously with the Slavic migrants from the southern Novgorod lands, (probably at a time when the Karelian sound shift aa > ua had already occurred). This is in accordance with the views presented by MATVEEV (2004: 198–201) that Karelians settled along the lower reaches of the river valleys, whereas the Veps diffused into the forests at the southern edge of the Arkhangelsk Region.⁶³ However, this line of reasoning does not answer the question as to why several frequent Karelian toponymic types did not spread into the Dvina basin, or at least, not into the Pinega district. Perhaps this is related to the late appearance of Karelian settlement (probably at a time when several toponymic types present in Karelian toponymy had lost their productivity). It may also be partly due to the geographical differences between Fennoscandia and the Dvina basin.

Before these late Finnic newcomers, tribes speaking an archaic Finnic language forms with the diphthong *ai instead of ei in first syllable, lack of consonant gradation and likely also a mid-central vowel similar to the Estonian \tilde{o} in the phoneme inventory lived in the Dvina basin. It is not clear, how uniform these Finnic language forms were. The fact that there are numerous tribe names attested in the historical literature suggests that there may have been many Finnic tribes without a common ethnonym and identity. The speakers of these Finnic languages employed some toponymic types with no close parallels in the present Finnic languages. However, some of them probably used the same ethnonym $(uy\partial b)$ of themselves as some groups of Veps in the 19th century.

⁶³ MATVEEV (op.cit.) also refers to the fact that in the Beloozero region, there is at least one clear Vepsian sound shift which occurs in the toponymy, namely, is > iš. If this is correct, it would well correspond with historical sources pointing to a Veps settlement in Beloozero (e.g. Russian primary chronicle).



6.4. Permian and still other layers of substrate toponyms

The Permian traces in the toponymy of the Dvina basin are somewhat minor and have therefore, been left mainly untreated above. There are some areas with a substantial number of Permian substrate names such as the lower Vychegda, which was likely inhabited by Permian tribes in the Middle Ages (TURKIN 1971). It has also been proposed that the *moŭmuчu погане* mentioned several times in the Chronicles could have been a Permian tribe. ⁶⁴ In the Pinega basin Permian toponyms, though quite common, seem to form a more recent superstratum layer on Finnic and other layers of substrate toponymy. This is in accordance with a hagiographical account *Житие Стефана Пермского* which mentions Komis who refused to convert to Christianity and moved from Vychegda to Pinega in 14th century. Most certainly, the Pinega basin has been one of the key areas of late Finnic-Permian language contact as there are many Finnic borrowings in the neighbouring Udora dialect of the Komi language (LYTKIN 1967).

The Permian-Finnic linguistic contacts are likely not restricted to the new borrowings. There seem to be borrowings from Finnic which, in addition to Komi, are present also in Udmurt. Moreover, there are also words which seem to have been adopted from Pre-Finnic into Proto-Permian (SAARIKIVI 2006: 33–38). Thus it seems that pre-Finnic and pre-Permian language forms have had fairly long lasting and intimate contact. This same observation has even earlier been made by JORMA KOIVULEHTO in connection with early Germanic and other western Uralic borrowings which spread into the Permian languages (KOIVULEHTO 1981; 1989). This view is also supported by the fact that Finnic toponyms in the Dvina basin point to a Finnic substrate language of archaic character which likely spread into the region as soon as Proto-Finnic began to break up.

In addition to analysing the Finnic, Sámi and Permian layers of toponymy, it is a tradition in Russian onomastic studies to distinguish Meryan and *севернофинская* ('North Finnic') layers of substrate toponymy. Both of these layers of toponymy are, according to MATVEEV (1996, 1998, 2001), spread in the southern parts of the Akhangelsk Region.

The central Russian tribe name *мерья* is attested in several historical sources and there are ethnotoponyms from the same word stem. It is hard to define the distinctive Meryan types of toponyms, however, because the *мерья* is just a tribe name in the Chronicles, not a language that would have been described by linguists. Most of the toponymic types present in the territory connected with *мерья* in historical sources are also present elsewhere. Thus,

⁶⁴ This view was based, among other things, on the toponym *Тоймокары* which figures in the Chronicles and presumably includes the Permian word *kar* 'fortified place'.

the northern Russian topoformants -ma, -H(b)2a, -nona, -6ana and -na occur in toponyms also in the territory historically inhabited by Merya. In the same area there are toponymic types with the closest cognates in Mordvinian, such as the river name formant -na (\sim Mordvinian lej 'river') and the formant mapb (\sim Mordvinian mar 'hummock', for details see AHLQVIST 2001). The toponymic types explained as Meryan in the south of the Dvina basin (most notable by the rivers Ustja and Vashka) have been even otherwise explained, as a heritage of some groups of Maris (AHLQVIST 1997; 2000). Without going into details, it is sufficient to note that there are parallels between the pre-Slavic toponymy of the southern Dvina basin and the Jaroslavl and Kostroma areas. This is only natural in view of the political dependence of these areas on the central Russian principalities. In order to label a toponymy layer of some region as Meryan, however, one should define which toponymic types should be classified as Meryan. Before this is done, Meryan is not too useful a characterisation for a layer of substrate toponyms.

The *севернофинская* type of toponymy is even less clearly defined. Most of its area falls outside the Arkhangelsk Region and the scope of this presentation. According to MATVEEV, a characteristic feature of this group is the preservation of Uralic * \acute{s} (which developed into \emph{s} in Finnic and \acute{c} in Sámi). This would be reflected in those toponyms with the base cenm- (< * \acute{s} olma > Finnic salmi, Sámi \acute{c} oalbmi 'strait'). Though the characteristics of the ceвернофинская group have never been explicitly presented, the idea that in northern Russia there once existed an archaic Uralic substrate language which did not undergo either Finnic or Sámi sound shifts finds some support, in that some substrate toponyms probably did not undergo the Finnic sound shift \emph{s} > \emph{h} (cf. toponymic type nbiui- 'sacred' [> Fi. pyhä], for details see MATVEEV 2004: 232–242, cf. also the dialectal word copbe3 'grayling' which could correspond to the Finnish harjus id. [MYZNIKOV 2003: 75]). Some other toponyms likely preserved word initial *wo (cf. formant -eoŭ, -fooŭ) which later developed into \emph{o} in Finnic and Sámi.

6.5. Northern Russian toponymy and the origin of Uralic subbranches

Needless to say, ethnic conclusions made on the basis of northern Russian toponyms are uncertain because of the varying reliability of the toponymic etymologies they are based on. Notwithstanding these difficulties, some general remarks can be made.

The Proto-Uralic linguistic homeland was, most likely, situated in the southern taiga zone (ITKONEN 1966; JOKI 1973: 358–364; CARPELAN–PARPOLA 2002). Therefore, one must suppose that also the Arkhangelsk Region was

⁶⁵ In the scholarly history, the Uralic linguistic homeland has most often been located either in the southern taiga zone of western Siberia (CASTRÉN, HAJDÚ, JAN-



linguistically non-Uralic at the time it was first settled by humans. It is quite probable that some of the Pre-Uralic toponyms have been preserved in river names. As the Dvina basin is closer to the linguistic homeland of Uralic than the areas in which Finnic and Sámi are spoken at present, it seems likely that at least some parts of this area became linguistically Uralic before the present Finnic and Sámi speaking areas.

As the Permian toponyms in the Dvina basin are of modest number and probably relatively new, the Proto-Permian homeland must have been outside of this territory. This observation is in accordance with the prevailing theories concerning the location of the Proto-Permian speaking area somewhere in the Vjatka basin (BARTENS 2001: 10–11; BELYKH 1999).

The Finnic toponymy of the Dvina basin has at least two and probably more layers. Also, many Germanic and Baltic loanwords (*lampas 'sheep' [< Germanic], *ranta 'shore' [< Germanic], *varkas 'thief' [< Germanic], *härkä 'ox' [< Baltic], *liiva 'sand' [< Baltic], *kelta 'yellow' [< Baltic]) occur in Finnic substrate toponyms of Dvina basin (cf. 6.2. and 6.3. above) and the Finnic substrate languages of the area are thus "modern Finnic", unlike the Sámi (or whatever they should be labeled) substrate languages which cannot be characterised as "modern Sámi" because of the lack of one central vocabulary layer.

Due to the archaic phonological characteristics of some extinct Finnic dialects of the Dvina basin, the Finnic language must have spread to this area quite early. At present, standard theories locate Proto-Finnic somewhere in the vicinity of the Gulf of Finland (KALLIO 2006 with relevant references). The main reason for this is the Proto-Finnic and even earlier borrowings from Proto-Germanic which must have been adopted somewhere in the vicinity of the Gulf of Finland, as there is no evidence of Germanic tribes in inner Russia. 66 Aside from Germanic loanwords, there are other layers of

HUNEN) or in the Middle Volga region (AMINOFF, TOIVONEN, CARPELAN–PARPOLA). At the present, the palaeolinguistic argumentation by CARPELAN–PARPOLA (2002) seems most convincing. As there are established borrowings from Proto-Indo-European in Proto-Uralic, the latter must have been spoken in the vicinity of the former. The Proto-Indo-European homeland, in turn, can be located by cart and wheel vocabulary and the archaeological findings connected with early cart and wheel culture in the Ukrainian steppe (cf. MALLORY 1989). Thus, the Uralic linguistic homeland must have been situated north of this territory, in the Middle Volga region. In addition to loan contacts, this explains the areal distribution of the Uralic languages. It also fits in with the palaeolinguistically meaningful vocabulary reconstructable in Proto-Uralic.

⁶⁶ Proto-Germanic loanwords in Finnic have traditionally been connected to archaeologically discernable Bronze Age influences in the western coasts of Finland and



borrowings in Proto-Finnic and Proto-Sámi which point to a more eastern Finnic homeland, however. The Baltic loanwords may have been adopted both in the vicinity of the Gulf of Finland as well as in central European Russia, but it is especially the Iranian borrowings (cf. KOIVULEHTO 1999b) that imply language contacts in central Russia. Further, the borrowings from Proto-Finnic and even earlier western Uralic language forms to Proto-Permian point to an early presence of Finnic tribes surprisingly far away in the east. The Finnic languages seem thus to have formed a dialect continuum in which Germanic loanwords have spread as far as Proto-Permian and, in the later period, Komi. As part of the same dialect continuum Aryan and Iranian loanwords may have spread from central Russia to dialects which later developed into modern Finnic. Also, sound shifts $(\check{s} > h)$ have probably spread in this way most likely from west to east (and it has traditionally been argued that Proto-Finnic sound shifts originated through Germanic influence [see POSTI 1953, KALLIO 2000]). This is supported by the fact that those toponyms which probably did not undergo the shift $\check{s} > h$ are concentrated to the east of the Dvina basin (cf. MATVEEV 2004: 234-242).

In the later period, new Finnic tribes spread from west to east and brought new toponymic models with Karelian phonological characteristics to the north of the Dvina basin. Veps, in turn, spread into the southwest of the Arkhangelsk Region. The old Finnic population of the Dvina basin was neither Karelian nor Veps, however. They seem to have spoken an archaic language with several Proto-Finnic features and, quite probably, one development in common with the southern group of Finnic (mid-central vowel). Thus it seems that the division of the Finnic languages into a southern and a northern group has old roots. ⁶⁷ The area in which the southern dialects began to emerge was probably situated east of Estonia by Lake Peipus. The spread of an archaic Finnic language form from this area both to the Arkhangelsk Region and to southern Estonia would be understandable.

The present-day Arkhangelsk Region and its neighbouring territories probably played an important role in the development of the Sámi languages as well. As noted above, there are no examples of differentiating Sámi geographical vocabulary in the area whereas the traces of the Sámi sound shifts are likely restricted to the western parts of the area. Moreover, many toponymic types, with the probable Sámi etymologies include lexemes ety-

Estonia. One should note, however, that many germanists consider the dispersal of Proto-Germanic as a substantially later phenomenon.

⁶⁷ Similar point of view has recently been expressed also by KALLIO (2007), though on different grounds.



mologically opaque in Sámi (saN čukcá 'capercaillie' siida 'village', njukča 'swan', suhpi 'aspen' and their counterparts⁶⁸).

According to MATVEEV (1999, 2001, 2004), Finnic and Sámi substrate toponyms exist side by side almost everywhere in the Dvina basin. Such a conclusion seems to be an illusion caused by too straighforward an ethnic interpretation of the toponymic material, however. As the Sámi toponymic layer is very different from that of modern Sámi, it is quite possible that many toponymic types characterised as Sámi by MATVEEV originated in idioms closer to Finnic or Pre-Finnic. At the present phase of research it cannot be established whether toponyms such as Чухчамень with lexemes etymologisable both on the basis of Sámi and Finnic originated from the same kind of extinct idioms as toponyms with formants *-capa* and *-nana* or the toponyms with the base $\kappa_{bl} u$ - characterised as Finnic (although they do not point to any particular living Finnic language) or in substrate languages which were fundamentally different from Finnic. In any case, there are toponymic types which cannot be identified as either Finnic or Sámi.

From the point of view of the identification of substrate languages affricates are of great importance. There are namely certain toponymic types which seem to have preserved the nonpalatised affricate *c, cf. neu- 'spruce' (<*pecä~[>Finnish~petäjä, North Sámi beacci]), nou- 'branch of a river' ($<?*puca~[>Finnish~pudas^{69}]$, cf. even the etymologies of MATVEEV κyu - 'rotten' [> saN guocca], $\kappa ou\kappa em$ - 'eagle' [> saN goaskin]). This affricate seems to have also been preserved in South Estonian (see KALLIO forthcoming), but in the other Finnic languages it has developed into t or s (latter reflex before i). Thus the toponymic types referred to above have, if their etymologies are correct, preserved the Proto-Finnic consonantism and, in this respect, they stand apart from most of the Finnic. Moreover, as noted above, there are examples of a Sámi phonological shift *s > *c in the toponyms. In addition, as also noted above, there are also some toponyms which have probably preserved Proto-Uralic *s and word initial *wo.

The two first two of these do not have any cognates in the other Uralic languages. The two latter display phonological irregularities (such as word initial \acute{n} in $njuk \check{c}a$ and initial syllable u instead of the regular uo in suhpi) and even the words considered as their cognates have many irregularities (cf. Finnish haapa 'aspen' with irregular long a, Mordvinian loksij 'swan' with l instead of j, etc.)

⁶⁹ Finnish *pudas* has a regular cognate in Ob-Ugrian languages (mansi *pasəl*, *posəl*, *posəl*, *posəl* Khanty *păsəl*, etc. 'river branch'). The Proto-Uralic form of the word would be **puca*. It is quite probable that the North Russian toponyms with the base *nou*-belong here as many of them denote river branches. In this case, the phonetic form of the word is quite interesting, with a preserved back affricate and a vocal-ism close to Sámi (note, however, that saN *bovces* 'river branch' does not belong here because of the -*vc*-).

Thus, there seem to be remnants of archaic language forms with a consonantism close to Pre-Finnic (or Proto-Uralic as these are almost identical at the reconstruction level) in the Arkhangelsk Region and neighbouring areas. From the point of view of linguistic prehistory this would be only natural: as the inland area west and northwest of the Uralic linguistic homeland must have become linguistically Uralic before the Baltic Sea coast, where the (Pre-)Finnic-Germanic language contacts presumable took place, it is necessary to assume that those languages which first spread to this area were of a phonologically archaic character. While the Finnic language form spread to these areas from the west some enclaves of these archaic Uralic language forms seem to have escaped this second wave of Uralicisation and probably survived until the Slavicisation of the area.

The Proto-Sámi sound shifts seem to have originated in that area which later became Finnic. After $*\dot{s} > *\dot{c}$, a change which probably occurred in the common ancestor of Proto-Finnic and Proto-Sámi, Sámi vowel rotation (*a > uo, i, *e > a, ea, $*\ddot{a} > \acute{a}$, ie, etc.) took place. The Sámi vowel changes are, quite probably, attested in toponyms in the western parts of the Arkhangelsk Region. As Proto-Sámi also had multiple contacts with Proto-Germanic (cf. KOIVULEHTO 2000; AIKIO 2006), it can be assumed that in a similar manner to the Finnic dialect continuum described above, there was also a Sámi dialect continuum capable of spreading Germanic loanwords from the, what is nowadays, the Finnish coast of the Baltic Sea to the east. The area of the Sámi languages must have been situated to the north and probably also to the east of the Finnic dialect continuum. In the area west of the Arkhangelsk Region Proto-Sámi speakers also encountered populations who spoke a Palaeo-European language(s), from whom they borrowed vocabulary that did not spread into the Dvina basin.

As the Sámi lexemes present in the toponyms of the Arkhangelsk Region are largely opaque in that they do not represent regular Sámi sound shifts, one is inclined to conclude that the rare lexical parallels between the toponymy of the Pinega basin and the Sámi languages may be due to borrowing. For example, the toponymic base *uy*δ- which MATVEEV associates with the Proto-Sámi *supē 'aspen', appears over a large area in which the prevailing toponymic substrate type is Finnic (MATVEEV 2004: 318). Moreover, this word also appears in toponyms which have distinctively Finnic bases and formants (*Шубматка*, *Шубоя*). In the same area, toponyms formed from the Finnic *haapa 'aspen' do not exist (MATVEEV 2004: 308, 318). Thus one could imagine that the Finnic idioms of the Pinega and neighbouring dialects might have borrowed the designation of aspen from the Proto-Sámi found at that time in the western parts of the present-day Arkhangelsk Region. This word would then have become commonplace in the Finnic



toponyms of this area. As for toponymic types such as *yyxy-* 'capercaillie' and *moxy-* 'swan' (cf. also *wud-* 'winter village, SAARIKIVI 2004b: 211) it seems premature to make a suggestion concerning what the mechanism was for their diffusion to the east. Probably, some of these words may be Palaeo-European substrate loans borrowed by Proto-Sámi speakers either from a Uralic speaking population in the Dvina basin or from their non-Uralic speaking predecessors.

References

- АGEEVA, R. A. (1989) Агеева, Р. А. Гидронимия Русского Северо-Запада как источник культурно-исторической информации. АН СССР. Институт научной информации по общественным наукам. Москва, Наука.
- AHLQVIST, AUGUST (1887) Kalevalan karjalaisuus. Kalevalasta itsestään ja muualta. Todistanut AUG. AHLQVIST. Helsinki, Suomen yliopisto.
- АНLQVIST, ARJA (1997) Альквист, Арья Мерьянская проблема на фоне многослойности субстратной топонимии. In: Вопросы языкознания 1997/6, p. 2–36.
- Анlqvist, Arja (2000) Альквист, Арья *Мерьяне*, *не мерьяне*. In: *Вопросы языкознания* 2000/2, р. 45−34, 2000/3, р. 83−97.
- Аньсуівт, Акла (2001) Альквист, Арья Субстратная топонимия Ярославского Повольжя. In: Очерки исторической географии. Северо-Запад России. Славяне и финны. Ed. by Герд, А. С.— Лебедеева, Г. С. Санкт-Петербург, Издательство Санкт-Петербургского университета, р. 436–467.
- AIKIO, ANTE (2001) *Sápmelas loatnasánit suopmelas gielaid davvejoavkkus*. Pro gradu-dutkamus sámegielas. Oulu universitehta. Manuscript.
- AIKIO, ANTE (2004) An essay on substrate studies and the origin of Sámi. In: Etymologie, Entlehnungen und Entwicklungen. Festschrift für Jorma Koivulehto zum 70. Geburtstag. Ed. by HYVÄRINEN, IRMA—KALLIO, PETRI—KORHONEN, JARMO. Mémoires de la Société Neophilologique de Helsinki 63, p. 5–34.
- AIKIO, ANTE 2006 On Germanic-Sámi contacts and Sámi prehistory. JSFOu. 91. p. 9–55.
- AIKIO, ANTE & ASLAK (2001) Heimovaelluksista jatkuvuuteen suomalaisen väestöhistorian tutkimuksen pirstoutuminen. Muinaistutkija 2001/4, p. 2–21.
- AIKIO, SAMULI (2003) *Inarin ja inarilaisten nimiä*. In: *Inari Aanaar. Inarin historia jääkaudesta nykypäivään*. Ed. by LEHTOLA, VELI-PEKKA. Inarin kunta, p. 96–113.

- AINIALA, TERHI (1997) Muuttuva paikannimistö. SKST 667.
- АТАМАNOV, М. G. (1988) Атаманов, М. Г. Удмуртская ономастика. Ижевск. Удмуртия.
- BARTENS, RAIJA (2001) Permiläisten kielten rakenne ja kehitys. MSFOu. 238.
- ВЕLҮКН, S. К. (1999) Белых, С. К. *К вопросы локализации прародины пермян. Пермский мир в раннем средневековье.* РАН, Уральское отделение, Удмуртский ИЯЛИ. Ижевск.
- ВЕRNSHTAM, Т. А. (1973) Бернштам, Т. А. Роль верхневолжской колонизации в освоении Русского Севера. (IX–XV вв.). Фолклор и этнография Русского Севера. Ленинград.
- CARPELAN, CHRISTIAN (1999) Käännekohtia Suomen esihistoriassa aikavälillä 5100–1000 eKr. In: Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan. Ed. by FOGELBERG, P. Bidrag till kännedom av Finlands natur och folk 153. Helsinki, Societas Scientiarum Fennicae, p. 249–280.
- CARPELAN, CHRISTIAN—PARPOLA, ASKO (2002) Emergence, Contacts and Dispersal of Proto-Indo-European, Proto-Uralic and Proto-Aryan in Archaeological Perspective. In: Early Contacts between Uralic and Indo-European: Linguistic and archaeological considerations. Ed. by CARPELAN, CHRISTIAN—PARPOLA, ASKO—KOSKIKALLIO, PETTERI. MSFOu. 242. Helsinki, p. 55–150.
- CASTRÉN, M. A. (1844) *Anmärkningar om Sawolotschesskaja Tshud*. Suomi 1844, p. 3–22.
- DMITRIEVA, Т. N. (2006) Дмитриева, Т. Н. *Топонимия реки Казым*. Екатеринбург. УрГУ.
- EUROPAEUS, D. E. D. (1868–1870) *Tietoja suomalais-ungarilaisten kansojen muinaisista olopaikoista*. Suomi II. 7, p. 1–190. 8, p. 27–106.
- FASTER, MARIKO—SAAR, EVAR *Võromaa kotussõnumist*. Ed. By PÄLL, PEETER. Võru instituudi toimõndusõq 13. Võro, Võro instituut.
- GALKIN, I. S.—VORONTSOVA, O. P. (2002) Галкин, И. С.—Воронцова, О. П. Топонимия республики Марий Эл. Историко-этимологический анализ. Йошкар-Ола, Издательство марийского полиграфкомбината.
- GLINSKIKH, G. V. (1983) Глинских, Г. В. О принципах и методах исследования субстратной топонимии. In: Вопросы ономастики 17. Методы топонимических исследовании. Сборник научных трудов. Свердловск, Издательство УрГУ., р. 3−22.
- GRÜNTHAL, RIHO (1997) *Livvistä liiviin. Itämerensuomalaiset etnonyymit.* Castreaniumin toimitteita 53. Helsinki.
- GUSEĽNIKOVA, M. L. (1994) Гусельникова, М. Л. *Полукальки в топонимии Русского Севера*. Канд. дисс. Екатеринбург, УрГУ. Manuscript.
- HAAVIO, MARTTI (1965) *Bjarmien vallan kukoistus ja tuho. Historiaa ja runoutta*. Runot suomentanut Aale Tynni. Porvoo–Helsinki, WSOY.

- HAKULINEN, LAURI (1979) Suomen kielen rakenne ja kehitys. Otavan korkeakoulukirjasto. Helsinki, Otava.
- HAUSENBERG, ANU-REET (1983) Probleme der ostseefinnisch-permischen Sprachkontakte. Akademie der Wissenschaften der Estnischen SSR. Preprint KKI 23.
- НЕLIMSKIJ, J. А. (1986) Хелимский, Е. А. О прибалтийско-финском языковом материале в новгородских берестяных грамотах. In: Новгородские грамоты на бересте (из раскопок 1977–1983 гг.). VIII. Ed. by Янин, В. Л.—Зализняк, А. А. Москва, р. 252–259.
- HOLST, JAN HENRIK (2001) Die Herkunft des Estnischen Vokals õ. In: JSFOu. 89, p. 57–98.
- HÄKKINEN, KAISA (1985) Suomen kielen sanaston historiallista taustaa. Fennistica 7. Turku, Åbo Akademi.
- ITKONEN, ERKKI (1966) Suomalais-ugrilaisen kielen- ja historiantutkimuksen alalta. Tietolipas 20. Helsinki, SKS.
- ITKONEN, T. I. (1948) Suomen lappalaiset vuoteen 1945. Ensimmäinen osa. Porvoo–Helsinki. WSOY.
- ITKONEN, TERHO (1998) Reflections on Pre-Uralic and Sámi-Finnic protolanguage. In: FUF 54, p. 229–266.
- ЈАСКSON, Т. N. (1993) Джаксон, Т. Н. Исландские королевские саги о Восточной Европы (с древнейших времен до 1000 г.). Тексты, перевод, комментарии. Древнейшие источники по истории народов восточной Европы. Москва, Наука.
- JANHUNEN, JUHA (1977) Samojedischer Wortschatz. Gemeinsamojedische Etymologien. Castrenianumin toimitteita 17. Helsinki.
- JOKI, AULIS J. (1973) Uralier und Indogermanen. Die älteren Berührungen zwischen Uralischen und Indogermanischen Sprachen. MSFOu. 151. Helsinki.
- Кавініна, N. V. (1997) Кабинина, Н. В. *Топонимия дельты Северной Двины*. Канд. дисс. Екатеринбург, УрГУ. Manuscript.
- KALIMA, JALO (1919) Die ostseefinnischen Lehnwörter der Russischen. MSFOu. 44.
- KALIMA, JALO (1944a) Zu den anlautenden Sibilanten der ostseefinnischen Ortsnamen im Russischen. In: FUF 28, p. 151–162.
- KALIMA, JALO (1944b) Einige Russische Ortsnamentypen. In: FUF 28, p. 99–150.
- KALIMA, JALO (1946) *Venäjän vierasperäisten nimien tutkimisesta*. Suomalaisen Tiedeakatemian esitelmät ja pöytäkirjat 1945. Helsinki, Suomalainen tiedeakatemia, p. 101–110.
- KALLASMAA, MARJA (2000) Saaremaa kohanimed 2. Tallinn, Eesti keele instituut.

- KALLASMAA, MARJA (2003) *Läänemurde loodus- ja viljelusnimed.* Ed. by ROSS, EEVI. Tallinn, Eesti keele sihtasutus.
- KALLIO, PETRI (2000) Posti's superstrate theory at the threshold of the new millenium. In: Facing Finnic. Some challenges to historical and contact linguistics. Ed. by LAAKSO, JOHANNA. Castreaniumin toimitteita 59, p. 80–99.
- KALLIO, PETRI (2006) Suomen kantakielten absoluuttista kronologiaa. In: Virittäjä 110, p. 2–25.
- KALLIO, PETRI (2007) Kantasuomen konsonanttihistoriaa. In: Sámit, sánit, sátnehámit. Riepmočála Pekka Sammallahtii miessemánu 21. beaivve 2007. Doaim. JUSSI YLIKOSKI ja ANTE AIKIO. MSFOu 253. p. 229–250.
- KANNISTO, ARTTURI (1927) Über die früheren Wohngebiete der Wogulen im Lichte der Ortsnamenforschung. In: FUF 18, p. 57–89.
- КЕЅКЈА = ЛЫТКИН, В. И.—ГУЛЯЕВ, Е. С. *Краткий этимологический словарь коми языка. Переиздание с дополнением.* Сыктывкар, Коми книжное издательство. 1999.
- KETTUNEN, LAURI (1954–1955) Etymologische Untersuchung über estnische Ortsnamen. Annales Academiae Scientiarum Fennicae. B 90, p. 1–2.
- KIRKINEN, HEIKKI (1963) Karjala idän kulttuuripiirissä. Bysantin ja Venäjän yhteyksiä keskiajan Karjalaan. Helsinki, Kirjayhtymä.
- KIVINIEMI, EERO (1971) Suomen partisiippinimistöä. Ensimmäisen partisiipin sisältävät henkilö- ja paikannimet. SKST 295.
- KIVINIEMI, EERO (1977) Väärät vedet. Tutkimus mallien osuudesta nimistönmuodostuksessa. SKST 377.
- KIVINIEMI, EERO (1990) *Perustietoa paikannimistä*. Suomi 149. Helsinki, SKS. KOIVULEHTO, JORMA (1981) *Paikan ja joukon tulo kieleen*. In: *Virittäjä* 85, p. 195–213.
- KOIVULEHTO, JORMA (1989) *Ehkä* ja *ehto, yskä* ja *ystävä.* In: *JSFOu.* 82, p. 171–192.
- KOIVULEHTO, JORMA (1997) Were the Baltic Finns "clubmen"? In: You name it. Perspectives on onomastic research. Ed. by PITKÄNEN, RITVA LIISA— MALLAT, KAIJA. Studia Fennica linguistica 7, p. 151–169.
- KOIVULEHTO, JORMA (1999a) Das Verhältnis des Ostseefinnischen und Lappischen im Lichte der älteren Lehnwörter: die Substitution des fremden Wortausgangs *-CVz im Lappischen. In: Sprachen in Finnland und Estland. Ed. by LEHTIMÄKI, PEKKA. Wiesbaden, p. 7–22.
- KOIVULEHTO, JORMA (1999b) Varhaiset indoeurooppalaiskontaktit. Aika ja paikka lainasanojen valossa. In: Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan. Ed. by FOGELBERG, PAUL. Bidrag till kännedom av Finlands nature och folk. 131. Helsinki, Societas Scientiarum Fennicae, p. 207–236.

Janne Saarikivi

- KOIVULEHTO, JORMA (2000) Contact with non-Germanic languages II. Relations to the east. In: The Nordic languages. An international handbook of the history of the North Germanic languages. Vol 1. Ed. by BANDLE, OSKAR—BRAUNMÜLLER, KURT—JAHR, ERNST HÅKAN—KRAKER, ALLAN—NAUMANN, HANS-PETER—TELEMAN, ULF. Walter de Gruyter, Berin–New York, p. 583–594.
- KOLPAKOV, E. M.—RYABTSEVA, E. N. (1994) *A new type of Chud burial construction*. Fennoscandia Archaelogica 11. Helsinki, Suomen arkeologinen seura, p. 77–86.
- КОМУАGINA, L. Р. (1994) Комягина, Л. П. *Лексический атлас Архангельской области*. Архангельск, Издательство международного университета им. М. В. Ломоносова.
- KORHONEN, MIKKO (1981) Johdatus lapin kielen historiaan. SKST 370.
- KOSKI, MAUNO (1967–1970) *Itämerensuomalaisten kielten hiisi-sanue: semanttinen tutkimus*. Turun yliopiston julkaisuja. Sarja C. Scripta lingua fennica edita. 5, 7.
- КUZ'MIN, D. V. (2004) Кузьмин, Д. В. *Ареальная дистрибуция топонимных моделей Беломорской Карелии*. Канд. дисс. Петрозаводск. Manuscript.
- LASHUK, L. P. (1958) Лашук, Л. П. Очерк этнической истории Печорского края. Опыт историко-этнографического исследования. Сыктывкар, Коми книжное издательство.
- LEHTIRANTA, JUHANI (1989) Yhteissaamelainen sanasto. MSFOu. 200.
- LYTKIN, VASILI (1967) Vepsäläiset ja komisyrjäänit. In: Virittäjä 71, p. 23–27.
- МАКАROV, N. А. (1993) Макаров, Н. А. *Русский Север. Таинственное средневековье.* Москва, Институт археологии РАН Российсий фонд фундаментельных исследовании.
- МАКАROV, N. А. (1997) Макаров, Н. А. Колонизация северных окраин Древней Руси в XI–XIII вв. По материалам арчеологических памятников на волоках Белоозерья и Поонежья. Москва, Скрипторий.
- MALLORY, JOSEPH (1989) In search of the Indo-Europeans. Language, archaeology and myth. London, Thames & Hudson.
- МАНУИКНІН, І. S.(2002) Манюхин, И. С. *Происхождение саамов. Опыт комплексного изучения*. Петрозаводск, Карельский научный центр РАН, ИЯЛИ.
- МАТУЕЕУ, А. К. (1978) Матвеев, А. К. *Русская диалектная* чильма. *Этимология русских диалектных слов*. Свердловск, УрГУ, р. 54–59.
- МАТУЕЕУ, А. К. (1980) Матвеев, А. К. Этимологический словарь субстратных топонимов Русского Севера. Том 1. Прибалтийско-финские и саамские форманты и основы. Свердловск, УрГУ. Мапиscript.

- МАТУЕЕУ, А. К. (1986) Матвеев, А. К. *Методы топонимических исследовании*. Учебное пособие. Свердловск, УрГУ.
- МАТУЕЕV, А. К. (1996) Матвеев, А. К. Субстратная топонимия Русского Севера и мерянская проблема. In: Вопросы языкознания 1996/1, p. 3–24.
- МАТУЕЕУ, А. К. (1998) Матвеев, А. К. *Мерянская топонимия на Русском Севере. Фантом или феномен?* In: *Вопросы языкознания* 1998/5, p. 90−105.
- МАТУЕЕУ, А. К. (1999) Матвеев, А. К. Древнее население севера европейского части России. Опыт лингвоэтнической карты 1. Известия Уральского государственного университета. Гуманитарные науки, Вып. 2. 13/1999. Екатеринбург, УрГУ, р. 80−88.
- МАТУЕЕУ, А. К. (2001) Матвеев, А. К. *Субстратная топонимия Русско-го Севера* 1. Екатериннбург, Издательство Уральского университета.
- МАТУЕЕУ, А. К. (2002) Матвеев, А. К. *Субстратные лимнонимы Русского Севера*. Финно-угорское наследие в русском языке 2. Екатеринбург, УрГУ, р. 190–194.
- МАТУЕЕУ, А. К. (2004) Матвеев, А. К. *Субстратная топонимия Русско-го Севера* 2. Екатериннбург, Издательство Уральского университета.
- МЕĽNІКОVA, Ү. А. (1986) Мельникова, Е. А. Древнескандинавские географические сочинения. Тексты, перевод, комментарии. In: Древнейшие источники по истории народов восточной Европы. Ed. by Янин, В. Л. Москва, Наука.
- MIKKOLA, J. J. (1894) Die ältere Berührungen zwischen Ostseefinnisch und Slavisch. 1. Slavische Lehnwörter in den westfinnischen Sprachen. MSFOu. 8.
- МІКНР = Материалы по истории крестянского хозяйства и подвинностей XVI—XVII вв. Еd. by ВОСКБОЙНИКОВА, Н. П.—КОПАНЕВ, А. И.—ПОБЕДИМОВА, Г. А. Москва—Ленинград, Академия Наук СССР, Ленинградское отделение института истории СССР. Ленинградское отделение археографической комиссии. 1977.
- MULLONEN, I. I. (1988) Муллонен, И. И. Гидронимия бассейна реки Ояти. Петрозаводск, Карелия.
- MULLONEN, I. I. (1994) Муллонен, И. И. *Очерки вепсской топонимии*. РАН, Карельский научный центр, ИЯЛИ. Санкт-Петербург, Наука.
- МҮZNІКОV, S. A. (2003) Мызников, С. А. Атлас субстратной и заимствованной лексики русских говоров Северо-Запада. Санкт-Петербург, Наука.

Janne Saarikivi

- МҮZNІКОV, S. A. (2004) Мызников, С. А. Лексика финно-угорского происхождения русских говоров Северо–Запада. Этимологический и лингвогеографический анализ. Санкт-Петербуг, Наука.
- NASONOV, A. N. (1951) Насонов, А. Н. "Русская земля" и образование территории Древнерусского государства. Москва, Наука.
- NAZARENKO, V. A.—OVSYANNIKOV, O. V.—RYABININ, Y. A. (1984) Назаренко, В. А.—Овсянников, О. В.—Рябинин, Е. А. Средневековые памятники Чуди заволочской. In: Советская археология 1984/4, p. 197−215.
- NUUTINEN, OLLI (1989) Järvi *balttilainen laina*. In: *Virittäjä* 93, p. 497–503.
- OVSYANNIKOV, O. V. (1980) First-discovered Burialfield of "Zavolochye Tschud". Fenno-ugri et slavi. Symposium: "The Cultural Relations between the Peoples and the Countries of the Baltic Area during the Iron Age and the Early Middle Ages". Helsingin yliopiston arkeologian laitos. Moniste 22. Helsinki, p. 228–236.
- РОРОV, А. І. (1965) Попов, А. И. *Географические названия*. *Введение в топонимику*. АН СССР, Географичекое общество СССР. Москва–Ленинград, Наука.
- РОРОVА, Ү. Ү. (1999) Попова, Е. Ю. *Этнонимия Русского Севера*. Канд. дисс. УрГУ, Екатеринбург. Manuscript.
- POSTI, LAURI (1953–1954) From Pre-Finnic to late Proto-Finnic. In: FUF 31, p. 1–91.
- РОZНАВІТЅКАУА, S. К. (1997) Пожарицкая, С. К. *Русская диалектоло-гия*. Москва. МГУ, Издательство Московского университета.
- RYABININ, Y. A. (1997) Рябинин, Е. А. Финно-угорские племена в составе Древней Руси. К истории славяно-финских этнокультурных связей. Историко-археологические очерки. Санкт-Петербургский государственный университет Институт истории материальной культуры РАН. Санкт-Петербург, Издательство Санкт-петербургского университета.
- REW = MAX VASMER *Russisches etymologisches Wörterbuch*. Indogermanische Bibliothek, 2. Reihe (Wörterbücher). Heidelberg, Carl Winter, 1953–1958
- RÄISÄNEN, ALPO (2003) Nimet mieltä kiehtovat. Etymologista nimistöntutkimusta. SKST 936.
- SAARIKIVI, JANNE (2000) Kontaktilähtöinen kielenmuutos, substraatti ja substraattinimistö. In: Virittäjä 104, p. 392–415.
- SAARIKIVI, JANNE (2002) Саарикиви, Я. Саамская субстратная топонимия Русского Севера с точки зрения сравнительной финно-угристики. In: Финно-угорское наследие в русском языке 2. Екатеринбург, УрГУ, р. 94–112.

- SAARIKIVI, JANNE (2003) Саарикиви, Я. Прибалтийско-финская антропонимия в субстратных топонимах Русского Севера. Перспективы изучения. In: Этимологические исследования 8. Екатеринбург, УрГУ, р. 136–147.
- SAARIKIVI, JANNE (2004a) *Is there Palaeo-European substratum interferences in the western branches of Uralic?* In: *JSFOu.* 90, p. 187–214.
- SAARIKIVI, JANNE (2004b) Über die saamischen Substratennamen des Nordrusslands und Finnlands. In: FUF 58, p. 162–234.
- SAARIKIVI JANNE (2004c) *Namenforschung am Swir*. In: *FUF* 58, p. 344–352.
- SAARIKIVI, JANNE (2006) Substrata Uralica. Studies on Finno-Ugrian Substrate in Northern Russian dialects. Academic dissertation. Tartu.
- SAARIKIVI, JANNE—GRÜNTHAL, RIHO (2005) Itämerensuomen uralilainen tausta. In: Muuttuva muoto. Kirjoituksia Tapani Lehtisen 60-vuotispäivän kunniaksi. Ed. by GRÜNTHAL, RIHO—SUUTARI, TONI—VAATTO-VAARA, JOHANNA. Kieli 16. Helsinki, Helsingin yliopiston suomen kielen laitos, p. 111–146.
- SAMMALLAHTI, PEKKA (1988) Historical phonology of Uralic languages. With special reference to Samoyed, Ugric and Permic. In: Uralic languages. Description, history and foreign influences. Ed. by SINOR, DENIS. Leiden–New York–København–Köln., E. J. Brill, p. 478–554.
- SARHIMAA, ANNELI (1995) Karjalan kansat ja kielet kontaktissa. In: Virittäjä 99, p. 191–223.
- SAVELJEVA, E. A. (1992) Die ethnokulturellen Kontakte der Perm Wytschegodskaja mit den westlichen Nachbarnsvölker. In: Suomen varhaishistoria. JULKU, KYÖSTI. Studia Historica Septentrionalia 21. Rovaniemi, Pohjois-Suomen historiallinen yhdistys, p. 495–506.
- SHILOV, A. L. (1999) Шилов, А. Л. Заметки по исторической топонимике Русского Севера. Москва.
- SIMINA, G. Y. (1980) Симина, Г. Я: Географические названия. По материалам письменных памятников и современной топонимики Пинежья. АН СССР. Географическое общество СССР. Ленинград, Наука.
- SJÖGREN, ANDREAS JOHANN (1832a) Ueber die älteren Wohnsitze der Jemen. Ein Beitrag zur Geschichte der Tshudischen Völker Russlands. Mémoires de l'académie impériale des sciences de St. Pétersbourg, VIeme Série. Sciences politiques, historie et philologie. St. Pétersbourg, p. 263–346.
- SJÖGREN, ANDREAS JOHANN (1832b) Wann und wie wurden Sawolotschje und Sawolokschen Tschuden russisch? Ein kritischer Versuch zur Aufklärung der Geschichte des russischen Nordens. Mémoires de l'académie impériale des sciences de St. Pétersbourg, VIeme Série. Sciences politiques, historie et philologie. St. Pétersbourg, p. 491–526.

- SNK = MIKKONEN, PIRJO—PAIKKALA, SIRKKA *Sukunimet*. Revised edition. Otava, 2000.
- SRNG = *Словарь русских народных говоров*. Ed. by Филин, Ф. П. (т. 1–23), СОРОКОЛЕТОВ, Ф. П. (24–). Москва–Ленинград (Санкт-Петербург) 1965–.
- SSA = Suomen sanojen alkuperä. Etymologinen sanakirja. Ed. by ITKONEN, ERKKI—KULONEN, ULLA-MAIJA. SKST 556, Kotimaisten kielten tutkimuskeskuksen julkaisuja 62. 1992–2000.
- STOEBKE, DETLEF-ECKHARD (1964) *Die ostseefinnischen Personennamen in Rahmen des urfinnischen Namensystems*. Nord- und ost-europäische Geschichtstudien Hamburg. Leibniz.
- ТКАСНЕNКО, О. V. (1985) Ткаченко, О. В. *Мерянский язык*. АН Украинской ССР. Киев, Наукова думка.
- TURKIN, A. I. (1971) Туркин, А. И. *Топонимия нижней Вычегды*. Канд. дисс. АН СССР, Институт языкознания. Москва. Manuscript.
- TURKIN, A. I. (1989) = Туркин, А. И. *Топонимия Коми АССР*. Докт. дисс. Москва. Manuscript.
- UINO, PIRJO (1997) Ancient Karelia: Archaelogical studies. Suomen muinaismuistoyhdistyksen aikakauskirja 104. Helsinki.
- VAHTOLA, JOUKO (1980) *Tornionjoki- ja Kemijokilaakson asutuksen synty*. *Nimistötieteellinen ja historiallinen tutkimus*. Studia Historica Septentrionalia 3. Rovaniemi, Pohjois-Suomen historiallinen yhdistys.
- VASMER, MAX (1934–36) Beiträge zur historischen Völkerkunde Osteuropas. II: Die ehemalige Ausbreitung der Westfinnen in den heutigen slawischen Länder (1934). III: Merja und Tsceremissen (1935). IV: Die ehemalige Ausbreitung der Lappen und Permier in Nordrussland. Berlin: Preussische Akademie der Wissenschaften. (Sonderausgabe aus den Sitzungsberichten der Preussischen Akademie der Wissenschaften. Phil-Hist. Klasse).
- VASMER, MAX (1941) Die alten Bevölkerungsverhältnisse Russlands im Lichte der Sprachforschung. Preussische Akademie der Wissenschaften. Vorträge und Schriften. Heft 5. Berlin.
- VEENKER, WOLFGANG (1967) Die Frage des finnougrischen Substrats in der russischen Sprache. Indiana University publications, Uralic and Altaic Series 82. Bloomington, Indiana University.
- WIKLUND, K.B (1911) Lapparnas forna utbredning i Finland och Ryssland belyst af ortnamnen. In: Le Monde Oriental 5, p. 101–136, 175–196.
- VOSTOKOV, A. KH. (1812) Востоков, А. X. Задача любителям этимологии. Санктпетербургский вестник 2, р. 204–215.
- VOSTRIKOV, O. V. (1990) Востриков, О. В. Финно-угорский субстрат в русском языке. Учебное пособие по спецкурсу. Свердловск, УрГУ.

- ZALIZNYAK, A. A. (2004) Зализняк, А. А. Дребвненовгородский диалект. Второе издание, переработанное с учетом материала находок 1995–2003 гг. Москва, Языки славянской культуры.
- ZHEREBTSOV, L. N. (1982) Жеребцов, Л. Н.: *Историко-культурные* взаимоотношения коми с соседними народами: *X* начало *XX* вв. Коми филиал АН СССР, ИЯЛИ. Москва, Наука.

Archive materials

- NA = Nimiarkisto. Yleiskokoelma. Kotimaisten kielten tutkimuskeskus, Helsinki.
- STE = Севернорусская топонимическая экспедиция. Основная и районная картотека. Уральский государственный университет. Кафедра русского языка и общего языкознания. Лаборатория топонимии. Екатеринбург.

O. A. Teush (Yekaterinburg, Russia)

Finnic Geographical Terminology in the Toponymy of Northern Russia

ne of the most thoroughly tested and reliable methods of establishing the etymology of substratum toponyms is to study its connections with the geographical terminology of those present-day languages which are closest to the assumed source language of the substratum names. A search for parallels of substratum toponyms in the dialectal appellative lexicon is no less important, since the latter allows for "compensation" of the onomastic lexical material, which for objective reasons, is incomplete (MATVEEV 1973: 332) and gives it a convincing semantic foundation.

In the toponymy and lexicon of northern Russia, the Finnic linguistic material, characteristic of the territories adjacent to the region under discussion, can be productively used for research purposes. In the appellative lexicon of the Arkhangelsk and Vologda dialects there are several dozen attested borrowings from the Finnic languages related to geographical terminology. Most of these are also found in the toponymy of the region and, as a rule, their toponymic area of distribution is wider than their distribution in the appellative lexicon. For example, the appellative $\kappa \acute{a}c\kappa a$ 'pasture in a forest' (< Karelian, Olonetsian kaski 'woodland cleared by burning', Lude kask, $ka\acute{s}k$ 'cleared woodland (before being burnt down)', Veps $ka\acute{s}k$ 'cleared woodland') occurs only in the Pinega dialect, whereas the $\kappa ac\kappa a$ -toponyms are much more widespread (Vel'., V.-T., Karg., K.-G., On., Pin., Ples., Kholm., Shenk. districts).

A complete analysis of Finnic geographical terminology in the lexicon and toponymy of northern Russia should be a topic for large-scale investigation and, therefore, is not set as a goal for the present study. Here we will only examine those geographical terms borrowed from the Finnic languages which have been attested to be independent toponyms (and not just bases or formants of compound toponyms), or those which are also present in the appellative lexicon but have a rather narrow area of distribution. Toponyms and appellatives widely used in the northern Russian dialects (such as κάρα, ηýχημα 'inlet' μάμδολα 'forest tract' ýμημα 'moist place in a bog' μάλεα 'ridge covered with forest') are not included in this treatise. Hydronyms, too, will mostly remain outside this investigation, since the names of rivers include characteristics that are highly specific compared to the names of other features. The Russian dialectal material is taken from the lexical and toponymic archive of the Toponymic Expedition of the Ural State Univer-

sity (= STE). This material is collected by fieldwork in the Arkhangelsk and Vologda regions. ¹

Аланга, hayfield (On.), Оланга, hayfield (Vyt.) ~ Kar. alango 'hollow, valley, damp sloping meadow on a riverside or lakeside', Veps alang 'low place', Fin. alanko 'id.' (MM 20–21). Since both toponyms refer only to hayfields, and other objects with the same kind of name are not attested, they should be related to the given Finnic geographical term rather than the hydronyms with the formant $-V_H(b)$ га. The replacement of initial Finnic a with Russian o is not an isolated phenomenon but is attested by other examples as well, compare Russian dialectal \acute{o}_{11} 'marsh' < Kar., Fin. alho 'lowland' (KALIMA 175–176).

*Алона (< Алонский, stream) (On.) ~ Fin. alanne 'lowland, plain', Kar. alanneh 'area surrounded with a marsh; small lake near two rivers or marshes' (MM 21). This reconstruction is debatable: the name of the stream could also have emerged in Russian or from the term *алонга, which can be compared with Kar. alango, Veps alang, Fin. alanko (see above).

Вайма, fishing spot (Vyt.) ~ Fin. *vajoama* 'hollow, cavity; gap' (FRSI. 693). The semantic shift 'pit, cavity' > 'fishing spot' is fairly frequent (see *Гавда* below).

Ваны, hayfield (Kholm.), Верхние Ваны, hayfield, Нижние Ваны, hayfield, Слободские Ваны, hayfield (Kholm.). In the appellative lexicon: ва́на 'small pool or lakelet in a riverbed; flood meadow' (Kholm.) ~ Kar. vana 'deep riverbed; trail of water in a sea; river, stream, etc.', Olon. vana 'water trail; (long, narrow) gap', Lude vana 'unfrozen stretch of water; (long, narrow) gap', Veps van 'hollow; crevice', Fin. vana 'furrow; riverbed; water trail' (MM 100).

Bapaza, field (Kholm., Shenk.), **Bapazu**, hayfield (Kon.), **Bapaxa**, hill (On.), field (Shenk.), **Bapaxu**, hills (On., Ples.), hayfield (Ples., Tot.). In the appellative lexicon the term βάρακ, βάρακ 'hill, hillock, steep (river) bank' is attested in the STE archive in the Onega district of Arkhangelsk region only. ~ Fin. *vaara* 'fell; height, hill; mound with a slope overgrown with wood', Kar. *vuara*, *voara*, Olon. *vaara* 'tree-covered hill' (MM 102). The ending -αεα/-ακα, regularly occurring in the Russian lexeme, could have emerged in Russian (on the basis of the suffix -ακ) as well as in the source language of the borrowing, which is more likely (on the basis of the suffix -kka, Gramm. 237). The semantics of the appellative underlying this name ('hill') and its reference coincide only in two toponyms. In the other cases the geographical term has a distinctive function, distinguishing hill features

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¹ In this article, as in the article by A. K. MATVEEV (cf. pages 129–139 in this volume), names of Russian administrative units are translated as follows: область =region, район =district (editor).

from other objects such as meadows and fields. In the analysis of the aforementioned toponyms and Russian appellatives it is necessary also to consider the corresponding Saami word (North Saami *várri*, Kildin Saami *vārre* 'forest; hill, mound', MM 102), which also could have been the source of borrowing.

Bap3a, hayfield (Sok.), river, marsh (V.-T.) ~ Olon. *varzi* 'arm; handle shaft; (in toponyms:) place along a (water)way' (MAKAROV 41), Fin. *varsi* 'area along something' (FRSI. 713). The geographical name is metaphoric, compare Olon. *varzi* 'handle, shaft' (MAKAROV 41), Fin. *varsi* 'stem (of a plant); stalk; handle, shaft' (FRSI. 713).

Buda, distinct natural area (On., Shenk.), Budы, field (Vyt.), Bumuкa, stream, distinct natural area (On.), Budoza, field, hayfield (Vashk.), Budozu, forest, marsh (Karg.) ~ Kar. viita, viida 'dense fir grove; tall pine or birch growing forest', Olon. viida, viidu 'small fir grove', viidakko 'bush undergrowth; fir grove', Lude viid 'small fir grove', viidak, viidik, viidikkö 'young, short, coniferous (sometimes mixed) forest', Veps vida 'young fir grove', Fin. viita 'grove', viidakko 'bush undergrowth; fir grove' (MM 100– 101). The author of this article has observed that the toponym **Buda** in the Onega district really refers to dense fir woods in which hayfields are found. In the Vashka district the toponym **Budoza** refers to a clearing and hayfield. Витика, a stream name in Vashka district represents a rather common type of metonymy: the name of a natural district has developed into the name of a stream flowing through it or along its boundary. The Russian toponyms can be traced back to different Finnic lexemes: the Russian form Витика is closer to the Finnish and Karelian words, whereas the other afore-mentioned toponyms may be connected to Karelian and Veps. Otherwise, the toponyms Витика, Видога, Видоги, judging by their endings, could reflect Finnic collective derivatives with the suffixes -k/-kko/-kkö.

Гавда (Хавда), fishing spot, hayfield (Vyt.), *Гавды*, two fishing spots, distinct natural area (Vyt.) ~ Kar. hauta, hauda 'pit, depression', Olon. hauda, haudu, Lude haud 'pit; grave; cellar', Veps haud 'pit' (MM 28). The semantic possibility of using a term meaning 'pit' for a fishing spot used for seine fishing is beyond doubt. In all probability, the denotations such as 'distinct natural area' and 'hayfield' are secondary in this case. The substitution of Finnic h with Russian ε , x is common in this region (MATVEEV 1975: 288–289).

Гожими (Гожоми), forest (Bel.), Загомезь (Загомезье), hayfield, forest (Kotl.). The toponyms above can be compared with the Veps houmeh 'field

² lit. 'stem, shaft' (editor's note).

(in a forest) sown with cereals; clearing' (MM 26). This word is the loan original of the Russian dialectal εýмежи 'field, cornfield (field for cereal cultivation)', widely attested in the Russian dialects of Karelia (KALIMA 94–95). In the Beloozero toponyms a metathesis may have occurred in the original *Γοмижи that reflects the Veps ou in another way. The toponyms Загомезь (Загомезье) allow us to reconstruct *Γοмезь, whose word ending can be compared with Veps haumez 'field (in a forest) sown with cereals; area cleared by burning; forest clearing' (MM 26).

Гольмы, hayfield (Len.) ~ Kar. *holmu* 'channel; strait; sheltered harbour' (MM 30). According to the STE archive, Lake **Гольминское** is situated beside a hayfield called **Гольмы**, and for this reason the reconstruction of the semantics of this toponym as 'a narrow strip of water connecting two basins' is unproblematic. However, there is a problem concerning the location of the toponym, since the Lensk district in which the toponym is attested, is situated in the easternmost part of the Arkhangelsk Region, that which is the furthest from the Karelian-speaking territory. On the other hand, the correspondence Finnic $h \sim \text{Russian } z$ is characteristic of the western districts of the region (MATVEEV 1975: 188–289).

Kaŭóa, stream (Vashk.) ~ Kar., Olon. *kaivo* 'spring, source; pit; well' (MM 35). The replacement of Karelian v with Russian σ is fairly regular in the south-western part of northern Russia. As for its reference, the name is obviously given to a stream source of which is in a spring.

Камары, marsh (Ples.) ~ Olon. *kamari* 'locality or boundary; distinct area' (MAKAROV 122), Fin. *kamara* 'crust; earth surface' (FRS1. 192). *Шомуша*, a name used parallel with *Камары* and referring to the same object may be a calque, assuming that the meaning 'edge' lies behind the toponyms under investigation, compare Russian dialectal *шумуша* 'edge of a marsh' (Shenk.), originating from the Veps *soum* 'corner of a house' (ZM 500).

Кевка (**Кевки**), field on a high bank of the river Onega (On), **Кевка**, mound, hayfield on this mound (Nyand). ~ Kar. $ke\ddot{u}kk\ddot{a}$, Olon. $ke\ddot{u}kk\ddot{u}$ 'mound, hillock' (MM 37). The replacement of the Finnic \ddot{u} with Russian g is not surprising, if one takes into account the northern Russian dialectal alternation $g \sim \ddot{y} \sim y$.

Кеды, village, natural district, fishing spot (Prim.), **Кады**, hayfield (Len.), **Большая Када** and **Малая Када**, hayfield (Lesh.), **Верхняя Када** and **Нижняя Када**, parts of a village (Lesh.) ~ *keto*, *kedo* Olon., Lude *kedo*, Fin. *keto* 'clearing; burnt-over clearing overgrown with vegetation; long term fallow' (MM 38). The fact that in the toponyms **Када**, **Кады** the Finnic *e* were substituted with *a* in Russian (see MATVEEV 1968 for more details)

hints that these originated in an extinct language of the Zavolochye region.³ The semantics of the Finnic appellative do not contradict the characteristics of the object it refers to. The toponym $Ka\partial o\kappa$, hayfield, as well as the appellative $\kappa \acute{a}\partial o\kappa$, $\kappa \acute{a}\partial y\kappa$ 'hayfield in a forest', attested in the Vashka district of the Vologda region, may also be connected here. The suffix $-a\kappa/-o\kappa/-y\kappa$ is likely a result of Russian derivational adaptation.

Кезанки, field (Vashk.) ~ Kar., Olon. *kezando*, *kezändö*, Lude *kezand*(o), *kezänd*(o), Veps *kezand* 'fallow', Fin. *kesanto* 'field lying fallow; unsown field' (MM 38). The change in the word ending ($-nd- > -н\kappa-$) was caused by a transformation of the original *Auslaut*, infrequent in Russian, with the widespread suffix $-ah\kappa-$.

Kenda, natural district on the shore of the Lake Onega (Vyt.), Kendeso, field (On.), Kendume (Kentdume), forest strip on the sea shore, field (On.). In the appellative lexicon κέηda is attested in the meaning 'stony ridge or sandy height overgrown with forest and situated on the sea shore' (Vyt.) ~ Kar. kenttä, kentti 'flat dry hayfield or meadow; sandy riverbank', kenttä 'infertile land; mossy area', Olon. kentti 'dry, flat meadow or sand by a river', Veps kend 'riverside or lakeside, edge of a marsh', Fin. kentä, kenttä 'earlier field, meadow in a flat place' (MM 38). The Onega district toponyms result from Russian derivational adaptation (the suffixes -ee-, -um-).

Кивика, village (Kon.), *Кивицкие*, promontories (Bel.) ~ Kar., Olon., Lude *kivikkö*, Fin. *kivikko* 'stony spot' (MM 39–40). The suggested etymology is confirmed by the rapids name *Камешник*, which is situated nearby the village *Кивика* on the river Svetica and, apparently, is a metonymic calque from the Finnic toponym.

Kuma, field (Vin.), **Kumaxa**, meadow (Vel'sk). ~ Kar. $k\ddot{u}t\ddot{o}$ 'clearing or cornfield (field for cereal cultivation) in a marshy area', Fin. $kyt\ddot{o}$ 'plot in a marsh burnt for ploughing' (MM 48). For the reflection of Finnic \ddot{u} as Russian \dot{i} see MATVEEV 2000: 138. The suffix -ax- in **Kumaxa** has emerged in the process of Russian derivational adaptation.

Колка, marsh (Kir.), hayfield, field (Ples.), Колки, hayfield (Karg.), Колкас (Колкаса, Колкасы), forest (V.-T.) ~ Fin. kolkka, kolkkaus 'corner, nook; outskirts; area' (FRSI. 249).

³ Cf. articles by JANNE SAARIKIVI and ALEKSANDR MATVEEV in this volume in which another explanation for this phonetic substitution is given. — *Zavolochye* (Ru. *Заволочье*) is a geographical notion used in Russian Middle Age sources of the Novgorod region lying outside the basic administrative units, the pyatinas (editor).

Konda, village (Nyand.) ~ Kar. *kontu*, *kondu*, Olon. *kondu*, Lude *kond*, *kondu* 'tenant farm; croft; plot of land', Fin. *kontu*, *konto* 'house, courtyard, farm; plot of land' (MM 40). According to old settlement name registers, the earlier name of the village was **Kondo**, that is, literally 'courtyards'.

Kopea, hayfield (Prim.) ~ Fin. *korva* 'ear, handle; place along something, for example, a river or rapids', Kar. *korva* 'ear, handle; area, end, boundary' (SKES 221).

Koxma, hayfield (Ples.) ~ Kar. *kohta* 'place; area, locality', Olon. *kohta*, *kohtu*, Lude *koht*, *kohte*, *kohtu*, Veps *koht* 'place (especially opposite something), the opposite side of something, the opposite bank (of a river)' (MM 40). This etymology is supported by extralinguistic facts: hayfield **Koxma** is situated on the right bank of the River Shorda, opposite the village of Velikij Navolok.

Κγκοῦ, hill (Bab., Vyt.), *Κγκοπ*, hill (Ples.), *Κγκορα*, hill (Vashk.), field (K.-G.) ~ Kar. *kukkula*, *kukkura*, *kukkuri*, Olon. *kukkuri* 'steep hill; hillock; peak of a hill or a mound', Fin. *kukku* 'conical peak', *kukkula*, *kukkelo*, *kukkura* 'peak (of a hill)' (MM 45). Although the base *Kγκ*- may be interpreted in several ways (MATVEEV 1977: 165–167), the references of the aforementioned Russian toponyms lead to the conclusion that the version suggested here is the most convincing.

Kyn, village (Bab., Prim.), Kynowka, natural district (Ustyuzh.), Kynk, field (Vashk.) ~ Kar. kuja, kujo, Olon., Lude, Veps kujo 'path between fences or hedges; back lane', Fin. kuja id. (MM 44). The toponym Kynowka is a diminutive derivation that has emerged in Russian. In the toponym Kynk the final $-\kappa$ probably reflects the Finnic collective suffix.

Ладва, lake, meadow (On.), village (Bab.), **Ладба**, river, hayfield, lake (On.) ~ Kar. *latva*, *ladva*, Olon. *ladvu*, Lude *ladv*, *ladve*, *ladu*, Fin. *latva* 'upper reaches; spring of a river' (MM 53).

Лама, field, hayfield (V.-T.), Лама, hayfield (Kholm.), Лама, field (Shenk.) ~ Kar., Olon. laama 'stagnant backwater in estuary', Fin. laami, laamu 'pond, pool; puddle' (MM 49). The difference between the semantics of the Finnic appellative and the objects it refers to implies that in this particular case the name is of metonymic origin. At the same time, the aforementioned toponyms may also originate from Veps lamad 'clearing; plot of land' (ZM 273), which, in its turn, is a likely borrowing from Russian (? < лом, лома 'scrap, fragments').

Πεμκα (**Πεμκο**), island in Lake Lozskoe (Bel.) ~ Kar., Olon., Lude *liete*, Veps *l'ete* 'sand; silt' (MM 54). The diminutive suffix $-\kappa$ - probably originated in Russian. The source of the toponym can also be found in Fin. *letto*

'small rocky island near the coast; reef' (MM 54), which is semantically closer to the object referred to. However, the territory in which the toponym is attested points rather to a Veps origin.

Tuzu, hayfield, marsh, forest (Bab.) \sim Olon. *liga* 'mud; sludge' (MAKAROV 185), Fin. *lika* 'dirt; mud, slush' (FRSI. 329). In the appellative lexicon, the word $n\hat{u}za$ is used in the meaning 'puddle, pit with water in it; back-water; damp place in a forest' (Bab.). The meaning of this geographical term may have developed in the substrate language as well as in the Russian dialects. In Russian, the word is used only in its geographical meaning and it is undoubtedly derived from a geographical term, verified by its plural form.

Лодьма, river (Prim.) ~ Kar. *lotma*, *lodma*, Olon. *lodmu*, *lodma*, Lude *lodm*, *lodmo* 'hollow, valley; depression; low lying area between hills or heights' Fin. *lotma*, *lotmo* 'hollow, valley' (MM 55). Terms meaning 'lowland, valley, hollow' occur in other river names, too, compare *Homka*, *Ypa* below.

Малдан (Малдань, Малдынь), lake, natural district (On.) ~ Kar. *malto, maldo*, Olon. *maldo* 'place in a river with a slow current, reaches; leeward bank', Lude *maldo* 'pool, back-water' (MM 58). The ending -ан/-ань reflects, in all likelihood, the Karelian genitive suffix. This makes it possible to assume that we are dealing with a complex toponym subject to ellipsis rather than with a geographical term used on its own, compare the name of the rapids *Maldinkoski* and that of the stream *Maldinoja* in the Karelian toponymy (MM 58).

Матка, river (Vel'.), *Малая Матка* and *Большая Матка*, rivers (Kon.), *Матка*, hayfield (Kon.), *Матки*, hayfield (Kholm.), *Заматка*, hayfield (V.-T.), *Подматки*, hayfield (Karg.) ~ Kar. *matka*, Olon. *matku*, Lude *matk*, *matku*, Veps *matk*, Fin. *matka* 'road, way; distance' (MM 59). The word *мутка* 'isthmus between an island and mainland', attested in the appellative lexicon of the Beloozero district, Vologda region, can, according to its semantics and the vowel in the first syllable, be traced back to the Saami *muotki* 'isthmus' that is genetically related to the afore-mentioned Finnic words.

Memycы, clearing burnt for cultivation (Prim.) ~ Kar. mätäs, Olon. mätäs, mätäz 'hummock, mound', Lude mät(t)äz, mätäs 'hummock; bush', Veps mät(t)äz, mätäz 'hummock; mound, hillock', Fin. mätäs 'hummock' (MM

⁴ In this article, the Northern Saami forms are referred to as simply 'Saami'. They do not imply that the languages spoken in the Northern Russia would have been closest to Northern Saami but represent the entire group of Saami languages (editor).

62). The fact that the toponym is in plural form points to the original meaning 'hummocks; mounds'.

Мечаек, forest (Len.), *Худой Меч*, clearing burnt for cultivation (Len.), *Мечка*, village, confluence, natural district (Prim.) ~ Kar. *meččä*, Olon. *meččü*, *meččö*, Lude *mečč*, *mečče*, Veps *mec* 'forest', Kar., Olon. *mečikkö*, Lude *meččik*, *meččiko* 'forest; copse' (MM 59).

Hessi, clearing burnt for cultivation (Lesh.), **H**esso (Vashk.) ~ Kar. $\acute{n}eva$ 'body of water'; Olon. $\acute{n}eva$ 'body of water, pool; swamp, quagmire', Fin. neva 'open fen; boggy area' (MM 63). The marsh name **H**esso contains a Russian -os- and represents a substitution of the Finnic v with Russian o. The vowel in the first syllable of the toponym $\emph{H}essi$ can be explained in the light of the Russian shift e > o in stressed position, typical of northern Russian dialects.

Hema, hayfield on the bank of the River Nemnyuga (Mez.), field (Prim.), homestead on the right bank of the River Mekhren'ga (Ples.), **Hemы**, marsh, field (Bab.), **Bepxhue Hemы** and **Humhue Hemы**, hayfields on the right bank of the River Mezen' (Mez.) ~ Kar., Olon. *niemi*, Lude *niem*, *niemi*, Veps *nem*', Fin. *niemi* 'promontory, headland' (MM 63). This etymology is supported by the fact that the majority of objects listed are situated on promontories along the banks of rivers.

Нива (*Нивка*), reaches of the River Svetica (Kon.), branch of the River Severnaja Dvina (Vin.) ~ Kar., Fin. *niva* 'rapids, reaches of a river with a rapid current' (MM 65). The semantics of the Finnic appellative coincide remarkably well with the referred objects and this corroborates the given etymology. In Russian the toponyms have been subject to derivation (suffix $-\kappa$ -).

Нитушки, clearing made by burning (Vyt.) ~ Kar. *niittu*, *niittü* 'hayfield, meadow', *niitoš* 'mown area', Olon. *niittu*, *niittü*, Lude *niitti*, *niit*, *niit*, Veps *nit*, *niit*, *niit*' 'meadow, hayfield', Fin. *niitty* 'meadow' (MM 64). The Russian toponym is derived using the suffix -yuk-, if it is related to *niittu*, *niittü*, etc., or with the suffix - κ -, if Kar. *niitoš* is its loan original.

Homκa, river (Vyt.) ~ Kar., Olon., Fin. *notko*, Veps *notk* 'crevice; hollow, depression' (MM 66).

Hypмa, village, river (Gryaz.) ~ Kar., Olon. *nurmi* 'meadow', Lude *nurm*, *nurmi* 'meadow, hayfield', Fin. *nurmi* 'meadow; grass; lawn' (MM 66). The name of the river was probably derived from the name of the village.

Опус (*Опуз*), field (Mez.) ~ Olon. *alus*, Lude *alust* 'expanse, place, territory', Fin. *alus*, *alusta* 'lower part; base; foundation' (MM 21). Concerning the correspondence Finnic a ~ Russian o see MATVEEV 1968.

Падры, hayfield (Kholm.) ~ Kar. patero, padura 'small depression, pit', Fin. patero 'depression, pit', patelo 'small valley, hollow' (MM 70). The suggested etymology above cannot be regarded as absolutely reliable, because this toponym can be given a Russian interpretation as well (and be considered to have emerged on the basis of the archaic prefix na- and the root $-\partial p$ - 'tear; flog; tussle'). However, the possibility of a Finnic origin should also be considered. That this toponym has been borrowed cannot be excluded because the same term with a different consonantal structure is attested in the dialectal lexicon: $n\'{a}mposuha$ 'damp, marshy place' (Vel'.). The fact that the toponym occurs in plural form (-bi) is a further argument in favour of the idea that it is based on a geographical term from a substratum language.

Палат (Палата, Палот), forest, field (Ust.), Палатас, village (Bab.) ~ Olon. palates 'land burned down by a forest fire; clearing burnt down for cultivation', Lude, Veps 'forest destroyed by fire' (MM 69). The official name of the village Палатас — Погорелое, is a direct translation of the Finnic word.

Hacma, village (Len.) ~ Olon. *pawstu* 'part of a forest assigned for felling' (MAKAROV 258).

Honma, field (Ust.) ~ polto 'part of a forest destroyed in a fire or burnt down' (MAKAROV 278). The toponym can also be connected to Kar. palte 'slope of a hill', Olon. palte '(southern, forestless) slope; edge (of rocks under the water, edge of a field or forest)', Lude palte 'slope, hillside' Fin. palte 'edge; (steep) river bank; hill slope; hill', all of which are connected with Lule Saami buoldda 'hill slope' (MM 70). In this case the toponym **Honma**, which could have been borrowed either from an extinct language or is Saami in origin, reflects the correspondence Finnic $a \sim \text{Russian } o$, or is borrowed either from Saami or from some extinct language.

Pasa, hayfield, natural district, rocky and fast-flowing current (Vin.), **Paca**, field (Mez.), part of a village (Mez.), **Pacsi**, hayfield (Mez.) ~ Kar. *rasi*, *razi* 'old unscorched clearing; forest with a great number of trees fallen or felled', Olon. *razi* 'cleared, unscorched woodland', Lude *razi* 'clearing left unscorched and untended for the next year' (MM 79).

Раяка, field, hayfield (Vyt.), hayfield (Vashk.), Тленья Раяка, field (Vyt.), Раяки, hayfield (Vyt.), Рябинов Раек, natural disrict (Vyt.), Райка, forest (Ustyuzh.), Мишкин Раяк, forest (Vyt.). In the Russian dialects ра́ек, ра́ека, ра́ечка, ра́яка, ра́яка, ра́яка are used with the meaning 'small young forest' (Vyt.) ~ Kar., Olon. rajakko, Lude rajakko, rajak, Veps rajak 'deserted clearing overgrown with trees', Fin. rajakko 'deserted clearing overgrown with deciduous forest' (MM 77).

Сарьги, village (Vyt.), Сарьго (Сарья), natural district (K.-В.), Сарьги (Сарьги), hayfield (On.), Сарьга, promontory (Shenk.) ~ Olon. sargu, Veps sarg 'strip of ploughed land; plot, allotment (of cultivated land)', Fin. sarka 'strip of a field situated between ditches, part of a field, usually narrow and long; field; allotment; separate fields forming a whole; allotment belonging to one courtyard, including arable land and forests; separate plots of land divided by borders'; 'part of marshland dried for cultivation and having a rectangular shape, situated between ditches' (MM 85). In the Russian appellative lexicon the following two words are attested: cápea 'strip of hayfield' (On.), cápьгa 'watery place in a marsh; tiny island in a marsh' (Shenk.). It is not easy to explain the semantic shift of the appellative cápьгa. It may have taken place under the reversing influence of toponyms: the place name Сарьга in Shenkur district is described by the informants as a damp and watery place.

Сельга, hayfield, village, hill (Vyt.). In the appellative lexicon *се́льга* means 'oblong elevations on a moor overgrown with forest; long and narrow island in a lake; marshy area in a forest; high bank of a river or lake' (Vyt.) ~ Kar. *selgä*, Olon. *selgü*, Lude *selg*, *selgü*, Veps *selg* 'ridge, heights, cliff, hill' (MM 86).

Сельгама, hayfield (Vyt.), *Большая Сельгама*, hayfield, *Ванина Сельгама*, hayfield, *Малая Сельгама*, hayfield (Vyt.) ~ Fin. *selkämä* 'mountain ridge; cliff' (FRSl. 556).

Copòyuku, hayfield (Vyt.) ~ Kar. *sorto*, *sordo*, Olon. *sordo*, Lude *sord*, *sordo*, Veps *sord* 'fence made of tree branches; enclosed pasture', Fin. *sorto*, *sortto* 'place where there are a lot of fallen trees, fallen forest; timberfelling site' (MM 91). The toponym is adapted in Russian by means of the suffix $-νu\kappa$ -.

Сюрьга (Сюрьга), hill, road along a hill (On.), Сюрьга, road (On.), Сюрьга, hill (Vyt.), Сюрьги, forest allotment (Bab.), Сурьи, hill (Bab.) ~ Kar. sürjä, Olon. sürjü, Veps sürj 'side; edge, fringe; roadside', Fin. syrjä 'side; backwoods, land; isthmus; heights, ridge; beach, dunes' (MM 92). Taking into account the correspondence Finnic ü ~ Russian ы, А. К. МАТУЕЕУ (1973: 351) relates these as well as the toponyms Сырья, meadow (On.), Сырья, settlement (On.) to the same source. Given this phonematic correspondence, one can also ask whether the word сырья 'low-lying hayfield' (On.) could also belong here. In this case, its meaning could have changed under the influence of folk etymology (cf. Russian сырой 'raw; damp').

Сярга, village (Vyt.) ~ Kar. särkkä, Olon. särkkü, särkü, Lude särkke 'steep river bank; hillock, hill, ridge; cliff', särkkü 'sandy shoal', Fin. särkkä, särkä 'under-water, or partly above the surface, elongated sandy shoal along

a bank or in a river bed; accumulation of sand; sandy shoal; mountain ridge; hill, hillock, heights' (MM 93).

Tespuxa, field (Kon.) ~ Fin *töyry* 'hummmock, mound, elevation' (FRSI. 673). The shift $y > \tilde{y} > e$ after a vowel and before a consonant, which is common in northern Russian dialects, has also occurred in this toponym. In addition, the frequent Russian microtoponymic suffix -ux- has been added to the same name stem.

Υὔκα, hayfield (Karg.) ~ Veps *uig* 'narrow strip of stubble-field, protruding into a forest' (MM 97). The devoiced consonant of the Russian toponym makes Veps a less probable source of borrowing. Compare, from this point of view, Fin. *uikama* 'lowland, valley' (MM 97).

Ynomoc, field or hayfield (Bab.) ~ Kar. *upotes, upotez, upotuz,* Olon. *Upotes, upotus, upotuz,* Veps *upotez* 'boggy place sticky with mud' (MM 98).

Ура I, river, *Ура II,* river, *Ура III,* river (Pin), *Урка,* river (Pin), *Вешний Ур,* settlement for forest workers (Pin.) ~ Kar., Olon. *ura, uro* 'furrow, ravine; riverbed; path', Olon. *uro* 'hollow; gully', *urkku* 'not very deep depression', Lude *ura* 'ravine between cliffs', Veps *uru* 'furrow; den, burrow', Fin. *ura* 'path; riverbed; furrow, wheel track' as well as Kar. *uuro* 'deep and narrow ravine with a stream running along its bottom; depression; thick forest', Fin. *uuro* 'narrow and deep gully; ravine between hummocks; stream bed', *uura* 'gully; depression' (MM 98). All the objects referred to by the Russian toponyms are small rivers, and this accords with the semantics of the proposed loan original. The only exception is the name of a forest workers' settlement *Вешний Ур,* that is of metonymic origin and was originally applied to a hydro-object, namely, a deep and long valley filling up with water in the spring floods, as demonstrated by the attribute *вешний* 'typical of, related to spring'.

Ypòoma, village (Kotl., Len.), settlement (K.-B.), Ypmaκu, hayfield (Ples.) ~ Olon. uurdo, uurdain 'waterworn ravine', Lude 'muddy gully', Veps urdam 'waterworn ravine', Fin. urtti 'narrow and deep bed in rapids; bad road', as well as Veps urtik 'spring; boggy and muddy place in a forest; water filled pit in a forest; muddy and slimy ground' (MM 98). The toponym Ypòoma is closer to Karelian and Veps words. The name of the hayfield Ypòoma may, from the point of view of both phonematics and semantics, be interpreted on the basis of Veps urtik rather than Fin. urtti.

Xaκa, marsh, natural district (Pin.) ~ Kar. *haka* 'enclosed pasture; grazing ground', Fin. *haka* 'grazing ground' (MM 26).

Халья 1, hayfield (Pin.), Халья 2, hayfield (Pin.), Большая Халья, hayfield (Pin.), Высокая Халья, hayfield (Pin.), Степина Халья, hayfield



(Pin.), *Харьки*, hayfield (Mez.). In the appellative lexicon xáлья means 'mound, elevation; islet in a marsh' (V.-T., Pin.) ~ Kar. harja, harju 'peak, crest (of a mountain); hillock, hill; sandy shoal', Olon. harju 'heights; the top of a hill or crest of a furrow', Fin. harja 'peak; crest of a mountain', harju 'sandy bank or shoal, low fell ridge' (MM 27). For the toponym Xapbku, an initial *Xapb and the diminutive suffix - κ - should reconstructed. In this, as well as in the appellative Xanbs, xánbs, the shift r > n could have taken place as early as in the substratum language, compare the alternations of r/l in Fin. patero/patelo (MM 70), kukkula/kukkura (MM 45), or in Russian, compare hs'neza/hs'peza 'duckweed (lemna)'.

Хамбыс, promontory (Bab.) ~ Lude *hambas*, Veps *hambaz* 'sharp projection; curve, bend' (MM 27).

Хорь, forest allotment (Gryaz), hayfield (Kad.), farmstead (Chag.), Хорек, hill (K.-G.), Хори, forest allotment (Cerep.), hayfield (Kad.), Хорики, marsh (Tot.), Хорьки, forest allotment (Nyuks.), compare also Хорь, island; Хорьки, island; Хорьи, hayfield. In Russian the appellative хорь means 'promontory; headland' (Cherep.), 'place where berries are picked, glade' (Babush., Bel.). *χορьκ*μ, in turn, means 'island emerging during flooding' (Bel.), 'tussocks' (Tarn.). In the Kostroma dialects xopb refers to a 'small sandy island in a river'. Following J. KALIMA, M. VASMER traces North Russian xopb 'small island in a river; shoal' back to Fin. kari 'rock, sandy shoal', Kar. kari 'rocky rapids with little water, pile of rocks, reef', Est. kari 'reef, rock' (VASMER IV, 270). In our view, the semantics of the appellative loan and the objects it refers to can be better explained as originating from the same source as Russian Халья, ха́лья ~ Kar. harja, harju, Olon. harju, Fin. harja, harju (see above). Such a comparison also seems to be phonetically better founded. Firstly, the problem related to the difference between the initial consonants (Finnic k- and Russian x-) does not arise. Secondly, the area of distribution of *Xopb*, *xopb* and its derivatives and correspondence defined by A. K. MATVEEV for Finnic $a \sim \text{Russian } o$ in the south-western part of the region under consideration coincide, whereas the lexemes *Халья*, ха́лья are attested only in the Pinega and Verkhnyaya Tojma districts of Arkhangelsk Region and Харьки in Mezen' district (north-east), where the correspondence Finnic $a \sim \text{Russian } a$ is commonplace (MATVEEV 1968: 125, KALIMA 46–47). Thus, in the lexicon and substratum toponymy of northern Russia Халья, ха́лья and Хорь, хорь reflect the variants of one and the same lexeme, borrowed at various times from different Finnic languages.

⁵ lit. 'mane; brush' (editor).

⁶ lit. 'tooth' (editor).

Yapκa, hayfield (V.-T.) ~ Kar. *čärkkä*, Olon. *čärkkü* 'steep riverbank; hillock, hill, ridge' (MM 93).

Ψυρακ (**Ψυροκ**, **Ψυρο**ε), island in Lake Jarbozero, island in lake Unzhinskoe, island in lake Druzhinskoe (Vashk.), **Ψυρακ**, hayfield (Vyt.). In the appellative lexicon νμροκ means 'sandy shoal in a lake' and νμρο denotes 'copse' (Bab.) ~ Veps čirak 'shoal in a lake' (ZM 59). The referral shift of the term for the naming a hayfield in Vytegra district is related to the rather common semantic shift 'island' > 'lofty section of a locality'. The same shift is also reflected in the appellative νμρο.

Yymóyxa, meadow (Nyand.) \sim Veps *čumb* 'corner, cul-de-sac'. The name is extended through the toponym formative suffix -yx-, frequent in denominations of fields, hayfields and meadows.

Чурга (Чурьга), hill, field (Vyt.), Чурга, hayfield (Vashk.). These toponyms have no direct correspondences in the Finnic languages. Compare, however, Veps čurg 'corner of a room' (ZM 66), which refers to a possible meaning 'hill' that may have existed in the substratum language. The reconstruction of the etymon in the form *čurg 'hill' is corroborated by Russian чурга 'mound, hillock', recorded in the dialectal lexicon (Shenk.) and by the fact that in the Vashka district the hayfield Чурга is located near the village of Gora, lit. 'hill', whose name may be best interpreted as a metonymic calque of the substratum name.

Чуры, field (Vyt.) ~ Kar. čura, Olon. čura, čuro, Lude čura, Veps čura 'side, end, outlying, direction; locality; area of land' (MM 24).

 $IO\kappa$, rapids in the River Iksa (Ples.) ~ Fin. *juka* 'waterfall; rapids, not steep and completely covered in foam' (MM 32).

HOm, marsh (Kholm.), *HOma*, field, hayfield (Vil.), *HOmo*, hayfield (Vin.) ~ Kar., Olon. *juuma* 'deep place in a river or lake; waterway; depths', Fin. *juoma*, *uoma* 'riverbed; deepest place in a river or lake', as well as Kar., Olon. *juomu*, Fin. *juomu*, *uomu* 'gap; scratch, strip, stripe; furrow, wheeltrack, waterworn ravine' (MM 32). From a semantic point of view, the references of the toponyms to geographical objects can best be explained on the basis of the meanings 'furrow, wheel-track; waterworn ravine'.

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Toponyms that can be traced back to Finnic compounds deserve special attention. In order to distinguish such names in the substratum toponymy of northern Russia, it is particularly important to separate them from toponyms containing a base and formant. The study of compounds is complicated because of the incompleteness of Finnic lexical sources, which do not list all the compound lexemes, a deficiency usually remarked on in prefaces to dic-

tionaries. Therefore, the list of toponyms that follows is not exhaustive and could be extensively complemented.

Алома, marsh, hayfield, fishing spot (Nyand.) ~ Fin. alamaa 'lowland' (FRS1. 28), < Fin. ala- 'lower' (FRS1. 27) and maa 'earth, locality, land; country, area, countryside' (FRS1. 353).

Bumumeu, hayfield, village (Bab.), natural district (Chag.) ~ Olon. *viidumeččii* 'small dense fir forest' (MAKAROV 431), < *viidu* 'small dense forest; grove' (MAKAROV 431), *meččii* 'forest' (MAKAROV 203). Complex lexemes similar to the Karelian word quoted above obviously occur also in other Finnic languages, but they are not recorded in the sources available to us. At least the devoiced *-m-* in the Russian toponym is indicative of a source of borrowing different from the Olonets Karelian.

Илем, depression (K.-G.), Илема, long and deep depression (K.-G.), river (Pin.), Илемо, long and deep depression (Vashk.), Илемец, hayfield (V.-T.), Илемское, field (V.-T.) ~ Fin. ylämaa 'highland; high ground; heights, slope' (FRSI. 783) can be traced back to Fin. ylä- 'upper, top' (FRSI. 783) and maa 'earth, land; country, area, countryside' (FRSI. 353). For more details on the correspondence between Russian Ил- and Finnish ylä- see MATVEEV 2001: 85–86. It is not surprising that in the toponymy of northern Russia, the afore-mentioned term is used mainly for naming depressions since a depression or deep valley is a place between two heights and the term could have been applied originally to an entire locality.

Кивиним, hayfield (Bab.) ~ Olon. *kiviniittii* 'stony meadow' (MAKAROV 145). The other name of the hayfield used in parallel is **Каменная Пожня** 'stony stubble-field' and this can be considered a literal translation from the Finnic original.

Macenza, high dry place in a forest, hills (Ples.), Macenza (Масельга), village (Karg.), Macenьгa, hayfield (Vyt.), field (On.) ~ Kar. moanselgä, Olon. moanselgü, muanselgü 'ridge; boundary between water systems', Fin. maanselkä 'mountain ridge; range of hillocks dividing water systems' (ММ 60), Fin. maaselkä 'heights' (KALIMA 163). This complex lexeme derives from the Kar. moa, mua, Fin. maa 'earth, soil; area, locality; field' (ММ 60) and the Kar. selgä, Olon. selgü 'ridge, heights, hillock, hill', Fin. selkä 'ridge, range of hills' (ММ 86).

Палома, hayfield (N'and.) ~ Olon. palomua 'burnt-down area' (MAKAROV 254) < Olon. palo 'burnt-down area, clearing made by burning' (MAKAROV 254) and mua 'earth, soil; field; plot' (MAKAROV 209).

Самалсы, hayfield (Karg.) ~ Olon., Fin. *sammalsuo* 'mossy marsh' (MA-KAROV 325; FRSI. 547) < Olon., Fin. *sammal* 'moss' (MAKAROV 325;

FRS1. 547) and *suo* 'marsh' (MAKAROV 350; FRS1. 593). The change in the ending of the word is a result of Russian adaptation: geographical terms are rather frequent in their plural forms in Russian toponymy. In this case, the plural is indicated by the -*bi* marker.

Чурома, village (Bel.), *Чурома* (*Чуромы*), field (Vyt.) ~ Veps *čuruma*, Olon. *čuwrumua* 'sandy soil' (ZM 66; MAKAROV 40), derived from Veps *čuru*, Olon. *čuwru* 'pebble, large grain sand; grit' (ZM 66; MAKAROV 40) and Veps *ma*, Olon. *mua* 'earth, soil; land, field, plot' (ZM 313; MAKAROV 209). This independent use of the term in the toponymy of northern Russia suggests that the meaning of the word comprises the semantics of quality as well as referring to a place. Thus, the initial meaning of the toponym can be reconstructed as 'place with sandy soil'.

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Taking everything in the consideration, the etymological correspondences discussed above make it possible to suppose that the substratum toponyms and the Russian dialectal lexemes derived from Finnic geographical terms are attested, with a few exceptions, in the western, north-western, western and central regions of northern Russia, which means that they are common in the zone in which Finnic toponymic types are widespread.

From a morphological point of view, it is noteworthy that these terms frequently occur in their plural forms, especially when the semantics of the initial appellative is different from the object(s) it refers to. In Russian, pluralisation is one of the most elaborate ways the geographical terms function in the toponymy. This leads us to the conclusion that many Finnic geographical terms underlying the toponyms, and not attested in the present-day Russian dialectal appellative lexicon, used to be current in Russian dialects and were first borrowed as appellatives.

The phonetic shapes of the borrowings demonstrate both a variety of origins and a possible emergence of phonetically similar toponyms and lexemes from different sources.

Abbreviations

Districts of administration	D
in Arkhangelsk Region	

Kholmogorskaya Kholm. K.-B. Krasnoborsk Karg. Kargopol' Kon. Konosha Kotl. Kotlas Len. Lensk Lesh. Leshukonskoe Mez. Mezen' Nyandoma Nyand. On. Onega Pin. Pinega Ples. Pleseck Prim. Primorsk Shenk. Shenkur Ust. Ustje V.-T. Verkhnyaya Tojma Veľ. Veľsk Vil. Vilegodsk

Vinogradovo

Districts of administration in Vologda Region

Bab. Babaevo Babush. Babushkin Bel. Beloozero Chag. Chagodoshchenskij Cherep. Cherepovets Gryaz. Gryazovets K.-G. Kichmengskij Gorodok Kad. Kaduj Kir. Kirillovskoe Nyuks. Nyuksenitsa Sok. Sokol Tarn. Tarnogskij Gorodok Tot. Tot'ma Ustyuzh. Ustyuzhna Vashk. Vashka

Vytegra

References

Vyt.

- FRS1. = Φ инско-русский словарь. Ed. by ВАХРОС, И.—ЩЕРБАКОВ, А. Таллин, 1998.
- Gramm. = *Грамматика финского языка*. Москва–Ленинград, 1958.
- KALIMA, J. (1919) Die ostseefinnischen Lehnwörter im Russischen. MSFOu. XLIV. Helsinki.
- МАКАROV, G. N. (1990) Макаров, Г. Н. Словарь карельского языка. Ливвиковский диалект. Петрозаводск.
- МАТУЕЕV, А. К. (1968) Матвеев, А. К. Об отражении одного финскорусского фонетического соответствия в субстратной топонимии Русского Севера. In: Советское финно-угроведение 4, p. 121–126.
- МАТУЕЕУ, А. К. (1973) Матвеев, А. К. Этимологизация субстратных топонимов и апеллятивные заимствования. In: Этимология. Москва, р. 332–335.

Vin.

- MATVEEV, A. K. (1975) Матвеев, А. К. К вопросу об отражении перехода *š > h в субстратной топонимике Русского Севера. In: Congressus internationalis fenno-ugristarum IV. Pars I. Tallinn, p. 121–126.
- MATVEEV, A. K. (1977) Матвеев, А. К. *Топонимические этимологии*. *X*. In: *Советское финно-угроведение* 13, p. 125–126.
- МАТУЕЕУ, А. К. (2001) Матвеев, А. К. *Субстратная топонимия Русского Севера I.* Екатеринбург.
- ММ = МАМОNTOVA, N. N.—MULLONEN, I. I. (1991) Мамонтова, Н. Н.—Муллонен, И. И. *Прибалтийско-финская географическая лексика Карелии*. Петрозаводск.
- SKES = Suomen kielen etymologinen sanakirja. Lexica Societatis Fenno-Ugricae XII. Helsinki, 1955–1981.
- VASMER, M. (1964–1973) Фасмер, М. Этимологический словарь русского языка. Москва.
- ZM = ZAYTSEVA, M. I.—MULLONEN, M. I. (1972) Зайцева, М. И.— Муллонен, М. И. Словарь вепсского языка. Ленинград.

A. K. Matveev (Yekaterinburg, Russia)

Saami Substrate Toponymy in Northern Russia

JÖGREN, A. I. (1861) and CASTRÉN, M. A. (1862) were the first to identify a few Saami names in the substrate toponymy of northern Russia. Later, this field of research was further developed by M. VASMER (1936, 1941) and A. I. POPOV (1947, 1948). Several studies, more or less related to the topic of the Saami substrate toponymy of northern Russia, have been published by the author of this article (MATVEEV 1969, 1973, 1976, 1979, 1995, 2001, etc.). At present there are a number of linguistic features characteristic of northern Russia that can be interpreted as of Saami origin. The first attempts to analyse Saami (i.e. Proto-Saami) toponyms have been made and this makes it possible, at least to a certain extent, to describe more exactly the prehistory of the Saami and their language, insofar as the Saami substrate toponymy provides the only clues to its history. However, traditional Saami and, in general, Finno-Ugrian studies appear to have made hardly any use of this new material. The reasons for this can be both objective and subjective, although it seems rather difficult to distinguish Saami toponyms from Finnic names, which are widespread in northern Russia and to which the former are genetically related.

In this paper some of the results of a study of the Saami substrate toponymy will be discussed. Further, ways in which Saami components can be identified in the substrate toponymy of northern Russia and how they can be distinguished from Finnic names will be outlined.

It would seem that the substratal Saami place names of northern Russia could be compared to the Saami toponyms of Karelia, but such a comparison would be insufficient. The toponymy of northern Russia consists of a Russian upper layer with underlying Finnic (basically Karelian) and Saami layers. These latter can be considered a substrate and sub-substrate in respect to Russian. In Karelia, however, Saami toponymy is to be regarded as a substrate of the Karelian layer, whereas the upper layer is a Karelian-Russian adstrate.

The sub-substratal character of the majority of the Saami names in northern Russia is primarily supported by the small number of ethnonyms formed from the endonym for the Saami people *ποπь* (or *ποπαρь*), whereas formations from the ethnonym *καρεπ* 'Karelian' are frequent in northern Russia. Nevertheless, there are a few reliable ethnotoponyms derived from *ποπь* (*ποπαρь*) in northern Russia that point to Russian-Saami contacts: the lake name *Ποποκοe* in the Pleseck and Kholmogorskaya districts of the Ark-

hangelsk Region, the toponym \mathcal{N} a natural areain the Vozhega and Sokol districts of the Vologda Region, the oikonyms \mathcal{N} anapuxa, in the Kotlas district of the Arkhangelsk Region and in the Ust'-Kubenskoje district of the Vologda Region and the forest name \mathcal{N} in the Vel'sk district of the Arkhangelsk Region. Such names are, however, too few for drawing any well-founded conclusions concerning the areas that used to be inhabited by the Saami in northern Russia.

Another factor suggesting that the Saami substrate toponymy is basically sub-substratal in character is the small number of Saami borrowings in the appellative lexicon of the northern Russian dialects (cf., however, \(\nu\)e\(\text{v}\)e\(\text{nma}\) 'strait', 'narrow opening of a fishing snare' ~ Saami \(\text{coalbmi}\) 'strait', \(\mu\)spoa 'fishing snare' ~ Saami \(\mu\)earlow ami \(\mu\)ero sami \(\mu\)ero more remarkable taking into consideration the substantial number of Finnic loans in the Russian dialects (for more details see MATVEEV 1995).

The assumption that the ancient Saami dialects of northern Russia are mostly sub-substratal in character also allows us to reveal the basic difficulties in determining the Saami substrate toponymy. Firstly, the Saami languages are very close to the Finnic languages, and in the past these two groups of languages were even closer to one-another than now. This closeness is well reflected in the remarkable similarity in geographical terminology and, consequently, of the bases of compound toponyms, compare Finnish joki ~ Proto-Saami *joke 'river', Finnish vaara ~ Proto-Saami *vare 'hill', and others (the Proto-Saami forms are taken from LEHTIRANTA 1989). Naturally, if only the frequently occurring word final toponymic elements (-Vza 'river', -вара 'hill', etc.) are considered, it is impossible to decide whether the substrate toponym in question is of Finnic or Saami origin. Secondly, in the process of acquisition of the Saami substrate toponymy by Finnic speakers, formants could have been directly translated, that is, a Saami geographical term could have been replaced by a Finnic one. Thus, the name of the natural area Шублохта in the Mezen' district contains the Proto-Saami base *supē 'aspen' and the formant -лохта, which is close to Proto-Saami *lokte 'inlet'. On the other hand, in a document from 1627 the variant Шублахта is attested, which refers to a portage (a stretch of land or road between two navigable waters over which boats can be carried, hence "portage") in the vicinity of the town of Pinega (SGKE 533) and can be interpreted by comparing it with Proto-Saami *supē and Finnish lahti 'inlet, bay'.

This may explain why distinctive Saami formants like - $puн\partial a$ in $IIIaн\partial o-puн\partial a$ 'on the moss lake' (Plat. 288), compare Finnish ranta, North Saami riddu, Kil'din Saami $rin^dt(^A)$ '(river) bank', are rarely found in the substrate toponymy of northern Russia, and, apart from some exceptions, do not play



an important role in distinguishing Saami toponyms from Finnic. Compare, however the names Kанзобала, Pындобала, Yучебала, etc., in which the formant - δ ала can be compared with Proto-Saami * $p\bar{e}l\bar{e}$, North Saami bealli 'half; side', together with Finnish puoli id., as well as bases that can be related to Proto-Saami * $k\bar{a}nc\bar{e}$ 'fellow; community', Kil'din Saami $k\bar{a}\bar{\eta}_3$, Norwegian Saami riddu '(river) bank', Kil'din Saami $rin^dt(^A)$, Proto-Saami * $c\bar{e}c\bar{e}$ 'uncle', North Saami $c\bar{e}ahci$. Moreover, the etymology of the toponym $c\bar{e}ahci$ is also supported by a metonymic calque documented in a census and inventory book from 1678: "Д. Чючюбала, д. Сеталская пуста" 'Ču-čubala village, [beside] the deserted village Setalskaja' (~ Finnish $c\bar{e}ahci$ + locative suffix -cA). For different interpretations of such names, cAyuecAna among others, see MATVEEV 1995: 38, 1996: 20–21, 2001: 206–210.

What has been stated so far complicates the study of the Saami substrate toponymy. However, there are also facts which help to identify the Saami elements in the substrate toponymy of northern Russia.

1. If the linguo-ethnic identification of substrate toponyms with a specific base is uncertain, it is necessary to investigate its distribution in relation to other areal phenomena. Thus, substrate toponyms with the base курья 'river inlet; small river', which can be compared to Proto-Saami *kurg and Finnish kuru 'long and narrow cavity; crevice', may derive either from Finnic (Тойнокурья ~ Finnish toinen 'second; other') or Saami (Нюхкурья < *Нюхчкурья ~ Proto-Saami *ńukcg 'swan'). The distribution of this toponymic type, however, is primarily confined to the eastern part of the region, in which Finnic names are less frequent. Toponyms with the base -курья are especially numerous in the Kuloj and Mezen' basins, where no traces of the distinctive Finnic bases uxan- 'wonderful, lovely; delightful, enchanting', муст- 'black', ранд- 'riverside; bank', хаб- 'aspen' have been found so far. Therefore, it can be concluded that in the Mezen'-Kuloj sub-region names with the base -курья are of Saami rather than Finnic origin. Such reliably distinctive Saami names as Толбаскурки < *Толбаскурья ~ Proto-Saami *tōlpe, North Saami duolbas 'plain; flat' well confirm this hypothesis. Toponyms with typical Saami bases such as *yay-* (Proto-Saami *ćāćē) 'water' чухч- (Proto-Saami *ćukčē) 'woodgrouse', шид- (Proto-Saami *sijte) 'settlement', and others, are also common in this region.

The linguistic affiliation of hydronyms with the formant $-\delta o \tilde{u}$ in the Lake Beloye region can be defined in a similar way. This base can be compared with the Saami $v \tilde{u} g j j^e$ (Notozero), $v u \sigma j j^e$ (Kil'din), $v j \sigma j j \varepsilon$ (Jokan'ga) 'stream'. The comparison with Livonian $v \sigma j \tilde{u}$ 'water-filled hollow' is less convincing both geographically and semantically. But the main factor connecting the Lake Beloye names with $-\delta \sigma \tilde{u}$ to Saami languages is their co-occurrence in this subregion with toponyms of other types that contain Saami bases and



stems, compare *Куколохта* (~ Proto-Saami *kukkē 'long', *lōkte 'inlet'), Чёлмосора (~ Proto-Saami *cōlmē 'waterflow', *sōrē 'branch', etc.).

- 2. Phonetic features also provide the means for identifying Saami substrate toponyms. Thus, Υëλμοςορα and Πηρολοκμα are defined as being of Saami origin on the basis of a comparison between Proto-Saami *cɔ̄lmē 'sound, channel' and *sōrē 'branch' and the corresponding Finnish words salmi and haara ~ saara. In a similar manner, Proto-Saami *supē 'aspen' and *lōkte 'inlet' can be compared to Finnish haapa and lahti. There are, however, debatable cases. To mention one, Finnic ă could have been, in the early period of Finno-Ugrian-Slavic contacts, rendered by the Russian o (MIKKOLA 1938: 20–21, KALIMA 1919: 46–47). Thus, toponyms with the bases -λaxma ~ -λοxma, -λαμκα ~ -λοκπα (cf. Finnish matka '[stretch of] road', and Proto-Saami *mōtkē id.), -capa ~ -copa and the corresponding stems λaxm-~λοxm-, λαμκ-~λοκπ-, cap-~cop- could also be considered borrowings from Finnic acquired in different periods.
- **3.** In debatable cases it is important to take the toponymic environment of a given name into account, which involves taking a micro-regional approach to the etymological analysis of adjacent names. The toponyms Γαδπαχma and Κyŭκαπαχma in the basin of Kenozero must be interpreted as Finnic (cf. Finnish haapa 'aspen', kuikka 'black-throated diver'), whereas Πωιμεποχma and Ψyχποχma (< *Ψyχνηοχma) in the region of Lake Mosha should be traced back to Saami (cf. Proto-Saami *pęsē 'holy', *ćukcē 'capercaillie').

Such a micro-regional approach may enable us to solve rather complicated problems. Thus, in the basin of the River Laja that flows into the White Sea west of the Northern Dvina estuary, seven meadow names with the base -мотка '(stretch of) road' are attested. As mentioned above, the formant -мотка can be considered either Finnic (~ matka) or Saami (~ *mōtkē, cf. above) in origin. It should be noted, however, that since there are a number of other Saami microtoponyms attested in the area that were subject to Russian adaptation at a relatively late date, and a substitution of Finnic a with the Russian o is characteristic of the initial period of Finnic-Russian contacts, a Saami origin for these names seems better founded. Unfortunately, these do not contain unambiguous Saami lexemes that might support this hypothesis, rather this proposal is supported by other evidence: the lake and river name Чёлма (Proto-Saami *cōlmē 'strait, sound') in the Laja basin as well as a number of meadow names with the formants -нема and -мина (< -нема), which can be interpreted as of Finnic origin (Finnic *nēmi 'promontory') but combining with Saami bases, compare Небрисмина and Proto-Saami *nēvrē 'bad' (a connection with Finnish nauris, North Saami navrraš, Kil'din Saami nauras 'beet' [SSA 2: 210] is less likely), Силосмина (and Lake Силозеро in its immediate vicinity) and Proto-Saami *silē 'tired, ex-

hausted', Kil'din sill 'poor in fish' (ITKONEN 1958: 498), $IIIy\delta nema$ and Proto-Saami * $sup\bar{e}$ 'aspen', and others. Of course, it might be proposed that these names represent Saami–Finnic semi-calques¹ that are examples of Saami toponymy acquired by Finnic people, but it would seem much more natural to assume that in the language of the local Saami there was a term referring to such features as 'promontory' and 'meadow on the promontory', and that this was related to the Finnish niemi (for details see below).

4. The most reliable indicators of the Saami character of the toponymy are those lexemes differentiating Saami from other languages that occur frequently in certain areas and, therefore, permit us to outline the territory of ancient Saami dialects with a relatively high degree of certainty. The most characteristic lexemes of this kind are, for example, HOX4- (HOX4a, HOX4озеро), in the Lake Beloye region нюкш- (Нюкша, Нюкшозеро) ~ Proto-Saami *ńukce 'swan', чач- (Чача, Чачема) ~ Proto-Saami *ćāćē 'water', чёлм- (Чёлмозеро, Чёлмус) ~ Proto-Saami *cɔ̄lmē 'waterflow', чухч-(Чухча, Чухчерьма), in the Lake Beloye region чукш- (Чукша, Чукшобой) ~ Proto-Saami *ćukcē 'wood-grouse', шид- (Шидбой, Шидкурья) ~ Proto-Saami *sijtē 'settlement'. Investigating the distribution of the toponyms with these lexemes enables us to outline two zones of Saami dialects in northern Russia: a northern one, which is larger, from the White Sea to, approximately, the line Kenozero — lower Vaga — upper Pinega, and a southwestern one, relatively isolated from the former, in the Lake Beloye region. Thus, the northern zone covers the lower reaches of the River Onega, the lower reaches of the Northern Dvina, the River Pinega basin (except for the upper reaches), the lower reaches of the River Vaga and the River Kuloj and River Mezen' basins. Within this area, the following toponymic bases can be considered Saami: кук- (Кукобой, Куколохта) ~ Proto-Saami *kukkē 'long', $\kappa y u - (K y u e s a, K y u e n a n \partial a) \sim \text{Proto-Saami } *k \bar{o} c c e k$, Kil'din $k \bar{u}^d t s$ 'rotten; sour', лохт- (Лохтозеро, Лохтура) ~ Proto-Saami *lōkte 'inlet', мотк- (Моткас, Моткозеро) ~ Proto-Saami *mōtkē '(stretch of) road', нёрм- (Нёрмуга, Нёрмус) ~ Saami Kil'din ńòrm(A) 'meadow; grass covered with water', neu- (Печгора, Печкурья) ~ Proto-Saami * $p\bar{\varepsilon}c\bar{e}$ 'pine', nьш-(Пышега, Пышелохта) ~ Proto-Saami *pesē 'holy', руш- (Рушева, Рушемин) ~ North Saami ruošša, Kil'din $r\bar{u}$ šš $(^A)$ 'Russian' шуб- (Шубач, Шубоя) ~ Proto-Saami *supē 'aspen', шунд- (Шундова, Шундозеро) ~ Proto-Saami *suntē 'ice free, unfrozen', явр- (Яврогора, Явроя) ~ Proto-Saami *jāvrē 'lake', and others. In a number of cases the bases are indinstinctive from the point of view of distinguishing between Saami and Finnic origin, compare $a\kappa$ - (Акозеро, Акокурья) ~ Proto-Saami * $\bar{a}kk\bar{e}$ 'old woman', Finnish akka id. Nevertheless, the majority of names discussed

¹ i.e. partial direct translations (editor)

above can be related to Proto-Saami with a considerable degree of certainty, which also accords with the zone of their one-time distribution. Consequently, it is preferable to regard names that can be traced back either to Saami or Finnic as Saami toponyms in this zone, or seek further arguments to establish their Finnic origin.

In view of the established facts, it is the presence of the consonant $u (< *\check{s})$, corresponding to modern Saami s and Finnish h, which can be considered the most salient feature of the Saami substrate toponymy, distinguishing it from modern Saami languages. Examples supporting this include, for example, wy6- 'aspen' ~ Finnish haapa, Northern Saami suhpi (Proto-Saami *supē), uud- 'settlement', Finnish hiisi, North Saami siida (Proto-Saami *sijtē), пыш- 'holy' ~ Finnish pyhä, North Saami bassi (Proto-Saami *pesē). Since not too much factual evidence has so far been gathered, the question arises as to whether it is really the ancient Finno-Ugrian $*\check{s}$ (> Saami s) that is reflected in the Saami substrate toponymy or whether the Saami *s has undergone a secondary change to š in extinct Saami language(s) of this area. This suggestion, in turn, raises certain doubts, although it can be supported with such correspondences as the Finnish $s \sim \text{Saami } s \sim \text{Proto-Saami } *s \text{ side}$ by side with $u (< *\check{s})$ compare $uyh\partial$ - 'ice free', still taking into consideration the Finnish sunta id., North Saami suddi, Proto-Saami *suntē (< Finnic) as well as шог- (in Шоговары) 'birch' as opposed to North Saami soahki, Proto-Saami * $s\bar{\jmath}k\bar{e}$. This problem will require further research.

On the other hand, there are plenty of phonetic features relating the Saami substrate toponymy to the adjacent Kola Saami dialects. The most conspicuous of these is the preservation of nasals in the group nasal + homorganic stop. This is an archaic feature, which is typical only of Proto-Saami and the Kola Saami (Kil'din, Jokan'ga), compare the bases лонд- (Лонда, Лондушка) 'bird', рынд- (Рында, Рындобала) '(river) bank', шунд- (Шундова, Шундозеро) 'ice free', янг- (Янгозеро, Янголохта) 'marsh' and Ter Saami (Jokan'ga) $lo\bar{\eta}^d \xi$, $rin^d \xi$, $su\bar{\eta} de$, jie 'ηke along with North Saami loddi, riddu, jeaggi and Proto-Saami * $lont\bar{e}$, * $sunt\bar{e}$, * $j\bar{e}\eta k\bar{e}$.

Another phonetic feature is the shift $*k > \chi$ in the combinations of k with dentals $(*kt, *kc, *k\check{c})$. This feature is shared by the Saami substrate toponymy and Kil'din Saami and is present in Skolt and Inari Saami, as well. On the other hand, Proto-Saami *k survives in the dialects of the Ter Saami as well as in all the other dialects of Saami, compare the bases noxm-(Noxmypa) 'inlet', noxu-(Hoxua) 'swan', noxu-(Hoxua) 'autumn; autumn rest', noxu-(Hoxua) 'wood-grouse', and, correspondingly, Proto-Saami noxu-(Noxu-(

It should also be noted that the voicing of intervocalic single consonants as well as clusters is common in the Saami substrate toponymy, compare the stems ne3- 'nest' ~ Proto-Saami *pesē, uud- 'settlement' ~ *sijtē, uoc-'birch' ~ *sōke, шуб- 'aspen' ~ *supē, лонд- 'bird' ~ *lontē, шунд- 'ice free' ~ *suntē, etc. This phenomenon is also characteristic of the of Kil'din and Jokan'ga Saami, for example, in combinations with nasals, though in Saami substrate toponymy it is more widespread. At present it is difficult to say whether this can be traced back to a substrate Saami forms or whether it has emerged under Russian influence in the process of the acquisition of medialised stops in intervocalic position. Thus, the study of the consonant system of the Saami substrate toponyms and its features disclosed so far reveals that Kil'din Saami is closest to the northern (Dvina) dialect of those Saami who used to inhabit northern Russia. In the speech of south-western (Lake Beloye) Saami there was a significant phonological peculiarity: the * $kt > \chi t \, (Joxmosepo)$ shift had also occurred here, whereas the northern x4 was acquired by Russian as кш (Нюкша, Нюкшозеро; Чекша, Чекшозеро; Чукша, Чукшобой).

As far as vocalism is concerned, the most interesting correspondences are those of Proto-Saami *o, contradictory in character which are not altogether clear. What should first be noted is that in a number of formants the Russian o is a fairly regular substitute for the reconstructed Proto-Saami *o, compare *lōkte and лохт-, -лохта 'inlet', *mōtkē and мотк-, -мотка '(stretch) of road', *sōl̄j and coл-, -coлo, -coлово 'island', *sōrē and cop-, -copa 'branch'. However, some bases reflect facts of a different character, compare $*k\bar{o}l\bar{e}$ 'fish', yet $\kappa y\pi$ - ($Ky\pi o\bar{u}$), $*h\bar{o}n\bar{e}$ 'nose' (in toponyms: 'headland'), yet нюн- (Нюнега), etc. It can be inferred that o in bases is the Russian reflex of the Finnic a, which emerged when Finnic speakers adopted the Saami substrate toponyms, calquing the Saami words with the Finnish lahti, matka, salo, etc. If all this is accepted, the Russians must have acquired such names at a very early date, when the substitution of Russian o for Finnic a was still taking place, which is highly unlikely. It should also be assumed that, in the Russian forms, both o and y correspond to Proto-Saami *o, which may be accounted for by the peculiarities of the local Saami dialects as well as the specific features of phonological adaptation (e.g. combinatoric changes in the vocalism) of different words in Russian.

In the ancient Saami toponymy there are a number of distinctive lexemes belonging to geographical terminology and referring to flora and fauna, which constitute toponymic types and unequivocally corroborate the presence of a Saami component in the substrate toponymy of northern Russia, distinguishing it from Finnic phonologically or lexically, compare κyπ- 'fish' ~ Finnish kala, ποκm- 'inlet' ~ Finnish lahti, μομκ- '(stretch of) road' ~ Finnish mat-



ka, нёрм- 'meadow' ~ Finnish nurmi, нюхч- 'swan' ~ Finnish joutsen, палд-'field' ~ Finnish pelto, neч- 'pine' ~ Finnish petäjä, рынд- '(river) bank' ~ Finnish ranta, чёлм- 'waterflow' ~ Finnish salmi, чехч- 'autumn; autumn dwelling place' ~ Finnish syksy, uud- 'settlement' ~ Finnish hiisi, uyb-'aspen' ~ Finnish haapa, явр- 'lake' ~ Finnish järvi, чач- 'water' ~ Finnish vesi, yyxy- 'capercaillie' ~ Finnish metso and others. On the other hand, there are lexemes attested in the substrate toponymy of northern Russia that are not characteristic of Saami, but are present only in the Finnic languages. Thus, the Saami word for 'stone' (Proto-Saami $*k\bar{\epsilon}\delta k\bar{e}$, North Saami geađgi, Kil'din $kie\delta^g k^E$, Jokan'ga $kie\delta^g ke$) is not found in the substrate toponymy of northern Russia. This calls to attention the highly frequently occurring base κυβ-, κεβ- 'stone', as it can be compared with various Finno-Ugrian words, from Finnic (Finnish kivi 'stone') to cognates in Mordvinian, Permian and Ugric. If the adjacent Saami names are also taken into consideration, toponyms with the base кив-, кев- may be regarded as Saami (Кивокурья, Кевбово, etc.). Such a conclusion, however, must always depend on the linguistic environment, because names of this kind may also be related to Finnic languages.

The absence in the Saami substrate toponymy of the important standard Saami base with the meaning 'promontory'-Proto-Saami *narke, North Saami *njárga*, Kiľdin $\dot{n}a\dot{r}^g k(^A)$, Jokan'ga $\dot{n}a\dot{r}^g k(^A)$, is also worth mentioning. As the combination of the standard Saami bases with the formants -HEM, -нема (> -мень, -мин, -мина, etc.) and with the meaning 'promontory' as well as their equivalents in the Finnic languages (Finnish niemi, etc.) frequently occur (Чухченема, Шиднема, Шубнема, Явромень, etc.), it would seem likely that in the micro-regions where other Saami names are also regularly attested, toponyms of this kind are not Saami-Finnic semi-calques, but rather genuine Saami constructions with a base akin to the Finnish niemi, which has replaced *nārke in the substrate toponymy of northern Russia, where there are very compact areas covered by names of this type. For example, in the basin of the River Jerga numerous forest and terrain names have the formant -мин(a) attached to obvious Saami bases (Чухмин < *Чухчмин, Шубачмина, etc.). It remains an open question whether the toponymic lexemes, surviving in the forms *kub-*, *keb-* and *hem-*, *hema-*, were shared by Finnic and Saami and later lost in modern Saami or, on the other hand, borrowed by the Saami from a Finnic-speaking population. However, the latter alternative is less likely, as it seems that Finnic speakers at some period in history replaced the ancient Saami population in the territory of northern Russia.

² This meaning is only attested as a naming motivation.

The suffixes -Vu and -Vc are rather clearly identifiable elements of word formation in the Saami substrate toponymy. The formant -Vu has a high frequency of occurrence both in baseless toponyms ($IIIy\delta au$, fairly widespread) and in those with a base ($IIIy\delta au$, $IIIy\delta au$, $IIIy\delta au$, fairly widespread) and in those with a base ($IIIy\delta au$, $IIIy\delta au$, $IIIy\delta au$, fairly widespread). Comparable adjectival suffixes are also found in Saami languages as well (KORHONEN 1981: 315–329). The semantics of the suffix can with caution be understood: names like marsh $Ped\kappa ouy\delta au$, $IIIy\delta au$, IIIIu, IIIII, IIIIII, IIIII, IIII

The suffix -Vc with its variants (see *Небрисмина, Силосмина, Толбаскурки* above) may be considered a Saami suffix of qualitative adjectives in at least some of the cases (see KERT 1971: 166).

At present, it would seem too early to present an overall linguistic, historical or ethnographic summary from the results of Saami substrate toponymy research. Nevertheless, some general and more or less well-founded ideas can be formulated which, however, should be regarded merely as attempts to interpret one particular source of information concerning the ethnic history of the Saami people, namely, substrate toponymy.

- 1. The Saami layer of the substrate toponymy of northern Russia is older than Finnic. It is related to the north-western part of northern Russia and is clearly divided into two zones: the northern one (Dvina region), which is linguistically close to the dialects of Kola Saami, especially Kil'din Saami, but has a few features not yet fully clarified, and the south-western one (Lake Beloye region), which also has its own characteristics.
- **2.** In the territory of northern Russia, a period of intensive Saami-Finnic linguo-ethnic interaction was followed by the assimilation of the Saami into the Finnic population. For this reason one of the most topical issues in the study of Saami and Finnic toponymic systems concerns their differentiation, especially on account of the fact that the migrations of the Finnic peoples to the region under consideration occurred in several waves.
- **3.** In several micro-regions of northern Russia, the Slavs came into direct contact with the Saami population.

References

- CASTRÉN, M. A. (1862) Bemerkungen über sawolotscheskaja Tschud. In: Nordische Reisen und Forschungen. V. Kleinere Schriften VII. Sankt-Peterburg, p. 86–106.
- ITKONEN, T. I. (1958) Koltan- ja kuolanlapin sanakirja I–II. Helsinki.
- KALIMA, JALO (1919) Die ostseefinnischen Lehnwörter im Russischen. MSFOu. 44. Helsinki.
- КЕRT, G. M. (1971) Керт, Г. М. *Саамский язык. Кильдинский диалект*. Ленинград.
- KORHONEN, MIKKO (1981) Johdatus lapin kielen historiaan. Helsinki.
- LEHTIRANTA, J. (1989) Yhteissaamelainen sanasto. MSFOu. 200. Helsinki.
- МАТУЕЕУ, А. К. (1969) Матвеев, А. К. Происхождение основных пластов субстратной топонимии Русского Севера In: Вопросы языкознания 1969/5, р. 42–54.
- МАТУЕЕУ, А. К. (1973) Матвеев, А. К. Топонимические этимологии IV. Коррелятивные топонимы с интервокальными консонантными группами хч и кш в субстратной топонимии Русского Севера. In: Советское финно-угроведение 9, р. 25–28.
- МАТУЕЕV, А. К. (1976) Матвеев, А. К. Этимологизация субстратных топонимов и моделирование компонентов топонимических систем. In: Вопросы языкознания 1976/3, p. 58–73.
- МАТУЕЕУ, А. К. (1979) Матвеев, А. К. Древнее саамское население на территории севера Восточно-Европейской равнины. In: К истории малых народностей Европейского Севера СССР. Петрозаводск, р. 5—14.
- МАТУЕЕУ, А. К. (1995) Матвеев, А. К. Апеллятивные заимствования и стратификация субстратных топонимов. In: Вопросы языкознания 1995/2, p. 29–42.
- МАТУЕЕV, А. К. (1996) Матвеев, А. К. Субстратная топонимия Русского Севера и мерянская проблема. In: Вопросы языкознания 1996/1, p. 3–23.
- МАТУЕЕУ, А. К. (2001) Матвеев, А. К. *Субстратная топонимия Русского Севера I.* Екатеринбург.
- MIKKOLA, J. J. (1938) Die älteren Berührungen zwischen Ostseefinnisch und Russisch. MSFOu. 75. Helsinki.
- Plat. = Платежная книга Каргопольского уезда 1555–1556 гг. In: Материалы по истории Европейского Севера СССР. Северный археографический сборник 2. Вологда, 1972, р. 253–290.
- РОРОV, А. І. (1947) Попов, А. И. *Из истории финно-угорских народ*ностей. Дисс. докт. ист. наук. Ленинград. Manuscript.

- РОРОV, А. І. (1948) Попов, А. И. *Топонимика Белозерского края*. In: *Учение записки Ленинградского государственного унститута* 105. Серия востоковедческих наук 2. Советское финно-урговедение. Ленинград, р. 164–174.
- SGKE = *Сборник грамот Коллегии Экономич I*. Грамоты Двинского уезда. Петербург, 1922.
- SJÖGREN, J. A. (1861) Die Syrjänen, ein historisch-statistisch-philologischer Versuch. In: Gesammelte Schriften I. Historisch-ethnographische Abhandlungen über den finnisch-russischen Norden VII. Sankt-Peterburg, p. 233–459.
- SSA = Suomen sanojen alkuperä. Etymologinen sanakirja I–III. Helsinki, 1992–2000.
- VASMER, MAX (1936) *Beiträge zur historischen Völkerkunde Osteuropas IV*. Die ehemalige Ausbreitung der Lappen und Permien in Nordrussland. SPAV. Phil.-hist. Klasse, XX. Berlin, p. 176–270.
- VASMER, MAX (1941) Die alten Bevölkerungsverhältnisse Russlands im Lichte der Sprachforschung. Preussische Akademie der Wissenschaften. Vorträge und Schriften. Heft 5. Berlin.

Irma Mullonen (Petrozavodsk, Russia)

Toponym Contacts along the River Svir

he River Svir connects the two largest lakes in Europe, the Onega and the Ladoga. During the conquests of the north-eastern Europe, this river was the focus of attention for thousands of years. The territory along the Svir is multilingual. Down the river itself and southwest of its banks a Russian population is to be found; the area along its northern tributaries is inhabited by Karelians, whereas in the southern part of the region there are Veps-speaking people.

It is clear that the present-day demographic structure of the area is the result of a long historical process and has emerged as a result of active contacts between various ethnic groups. Of the ethnic groups in this area, the Karelian-Ludes were the last to appear as a result of Karelian-Veps interaction in the 16th–17th centuries. Russians, who are the most populous nationality along the Svir at present, can be divided into two dialectal groups, which not only emerged at different times, but also penetrated into the area in different ways. From west to east a weakening of the Russian element and a growth of Finnic characteristics in the toponymy can be observed.

The Russians penetrated into the Svir area in the early centuries of the second millennium, although for quite a long time their influence was restricted to the western part of the area and the old administrative centres. The Vepsians, who used to form the core of the population, arrived in the Svir area at the turn of the first and second millennia, gradually assimilating the local inhabitants who spoke a language of proto-Saami type. How gradual this settlement process was is well reflected in the multi-stratal toponymy. As a result of this settlement process, the character of contact relations can be best described, not so much with the help of the toponym layers from different periods and different languages, but rather, through an analysis of the means by which toponyms from a foreign language were adapted.

The extensive diversity of language contacts can be traced back to three adaptation patterns of toponyms: direct adaptation with corresponding phonological substitution, morphological and semantic adaptation. The concrete realisation of these adaptation techniques however, depends on several conditions, including certain particularly important factors such as the typological character of the contacting languages, their genetic relationships, the intensity of contacts, the presence or absence of bilingualism, the official or unofficial status of the contacting languages and, over and above all, the so-



cial, historical and ethno-cultural background factors involved in the contacts in question.

1. Veps-Karelian contacts

The language contacts involved in the Veps and Karelian-Lude toponymy can be viewed as resulting from the interaction of two closely related toponymic systems. Further, Veps played a significant role in the formation of the Lude dialect of Karelian. Under such conditions, Veps toponyms were fully integrated into the Karelian system. A shared toponymic lexicon, together with uniform principles of toponym formation and a set of suffixes common to both languages is an objective precondition for the integration. Phonological criteria are not particularly illuminating because toponyms, acquired by immigrant Karelians were easily built into the phonological system of the local Karelian dialects: Veps *Matkoja* ~ Lude *Matkoja*, Veps *Saroja* ~ Lude *Suaroja*, Veps *Ledoja* ~ Lude *Liedoja*, etc. The Lude toponyms listed can be the result of either direct adaptation or mirror translation. ¹

If two closely related toponymic systems enter into contact, the methodological problem of how to define either of them becomes interesting. How can elements inherited from Veps be shown to exist in present-day Lude toponymy? One possibility is to look for distinctive toponymic bases that can be traced back to the Veps lexicon. Because the number of lexemes that are productive in place-name bases is, at the same time, rather limited and the Karelian and Veps toponyms are remarkably similar, such bases are not numerous. The names of elevations, Čuhak, Čuhak, Čuhakod, Čuhak/mägi, currently found among the Veps toponyms at the southern reaches of the River Svir include the indisputable Veps word čuhak, čuhuk 'hillock, mound'. It does not occur in other Finnic languages, so its presence in the toponyms of the Lude-speaking northern bank of the Svir (cf., the hillock Čuhakko/mägi, the promontory Ču-huk/niemi) is an obvious reference to Veps. Another illustrative example is the Veps geographical term kar, kara 'bay', which has been appropriated as the appellative kuar, kuare in the Kuujärvi dialect of Lude. This term is widely used in the toponymy north of the Svir, and not only in Kuujärvi, but also beyond its boundaries, across the northern border of the Svir basin, in the Šuja basin (Pada/kuar, Kuaran/ abai, Kuar/sel'g, Kuare). The fact that this pattern is frequently found in the Lude-speaking area, although it does not occur in the neighbouring Olonets Karelian region, testifies to its Veps origin.



¹ i.e. translation of the base of the toponym (editor).

Another criterion for distinguishing Karelian and Veps elements is supplied by certain types of toponyms that are characteristic of one of the contacting toponymic systems, yet missing in the other. For example, the hydronymic model $P\ddot{a}\ddot{a}/\ddot{p}\ddot{a}rvi$ (pää 'head', järvi 'lake') used for naming source lakes, that is, sources of water systems, is Karelian. This toponymic model is unknown in Veps toponymy, which applies the models Ladv-, Matk-, $Yl\ddot{a}/\ddot{p}\ddot{a}rv$ (which can, by the way, be found in Karelian toponymy, as well). In this context the absence of the $P\ddot{a}\ddot{a}/\ddot{p}\ddot{a}rvi$ model at the northern reaches of the Svir is important. Here the earlier Veps naming tradition has been preserved.

On the other hand, the hydronym model Pühä/järvi 'holy lake', at the northern reaches of the Svir, must be considered of Veps heritage. It is frequent in the Veps toponymic system, whereas in Karelian it occurs only in the area north of Lake Ladoga, that is, in ancient Karelian territory. The model, however, did not spread to the Olonets isthmus or central and northern Karelia with the arrival of the Karelians into these areas. Why the model disappeared from Karelian toponymy can be explained through the semantic change that had occurred in the meaning of the lexeme *pühä. The primary meaning 'boundary', present in hydronyms (the base used to refer to upper, water parting lakes, i.e., to those which are situated in "border" areas), took on a new meaning 'holy', which resulted in this base losing its usefulness for naming source lakes. Pühä/järvi in Karelia, including the northern Svir area, is a Veps toponymic model. The area it now covers began to take shape during the settling of the region by the Vepses, which preceded the Karelian occupation; that is, the settlement process was going on at a time when the word pühä was still being used mainly in its primary sense.

Metaphoric toponyms also belong to those toponymic models which are important. As they are characteristic only of a particular toponymic system, they carry distinctive force and can be used in differentiating toponymic heritage of different languages. For instance, *Kukoi(n)harj, Kukiharj* (literally: 'cock's comb or crest') can be quoted as an example of a Veps figurative toponym used for naming elevated ground, a hill or a knoll. This figurative model is in active use in the southern (Veps) region of the Svir, although some names (the hills *Kukuoinhard', Kukuohard'un/selge, Kukoiharja*) have also been attested in the Lude-speaking northern Svir area and beyond the northern boundary of the Svir basin, in the Šuja drainage area. Taking into account that the model is absent in the Karelian toponymy of the territory neighbouring the Svir, one can postulate its Veps origin.

Concerning their geographical distribution, the distinctive Veps models noted above have a peculiar character. All are connected to the water route leading from the Svir to the north and, what is more, it is along this route that the language and ethnic border separating Olonets Karelians and Kare-



lian Ludes runs. Although there is a Veps basis in both the Olonets and the Lude dialects of southern Karelia, it is more discernable in Lude. If one proceeds from the fact that the distinctive Veps models are characteristic of microtoponyms, it may be posited that the Veps influence continued to spread from the Svir basin right up to recent centuries.

2. The adaptation of Finnic toponymy to the Russian toponymic system

2.1. Direct adaptation

Of those methods for integrating Finnic toponyms of the Svir area, the so-called direct adaptation is by far the most important. This means acquisition of the sound structure of the given toponym. About 70 per cent of all substratum toponyms in the Russian-speaking Svir area have emerged as a result of direct adaptation.

The Finnic toponyms that have been integrated into Russian through direct adaptation have different morphological structures and are built into a system of simple basic nouns, often taking on gender markers: Габнема < *Hab/nem (complex toponym), Ихала < *Ihal (simple toponym, with suffixation), Кайбое < *Kaiv/oja (complex), Пера < *Perä (simple basic toponym), Немель < *Nemel (lit. 'on the promontory', i.e., a microtoponym formed with the help of a locative case suffix).

The presence or absence of adaptation models and their productivity in the continuum of microtoponyms in a particular region can serve as a criterion for determining the chronology of the contacts and the russification of the local Finnic population. Changes in microtoponymy occur relatively rapidly owing to its instability. This means that old names, if replaced by new ones, will be abandoned. This is the reason the preservation of Finnic place names, especially a systematic preservation, is indicative of recent contact. In the Svir region, the number of Finnic toponyms incorporated into Russian through direct adaptation perceptibly increases from west to east, which accords with the chronology of Russian penetration into the region. In addition, in the west of the Russian-speaking Svir area, centres with minimal traces of Finnic elements in toponymy exist, as well as areas that are relatively saturated with them, suggesting that the Russian settlements in the territories surrounding the medieval grave-yards were of a "breeding ground" character. It is not surprising that here we find that the number of toponyms belonging to the Finnic substratum layer is the smallest.

Direct adaptation is accompanied by shifts in the phonetic shape of the toponyms, which depend on the characteristics of the phonological systems of the contacting languages. Sounds that do not have adequate Russian

equivalents have been replaced by those closest in realisation to the primary forms. Finnic h before a vowel is replaced with g: $\Gamma a B \partial / o 3 e p o < *Haud / j \ddot{a} r v$ (haud 'pit'), $\Pi o z a < *Pohj$ (pohj 'the end of a bay'), $\Pi o z a < *Leteh$ (leteh 'sand'). On the other hand, the complete disappearance of h is not infrequent: the toponyms $\Pi p \delta o i m a$ (meadow), $\Pi p \delta u i m a$ (river), $\Pi p \delta o i m a$ (lake) contain Finnic hirvi 'elk' in their bases. If h is dropped before the front vowels e, \ddot{a} , \ddot{u} , \ddot{o} , a prothetic j, often occurring in Russian, is attached: $E\delta o / \kappa o i m a$ (k i m a) (k i m a) 'eagle owl, k i m a0 'k i

Word-initial Veps e, absent in native Russian words, changed its form of realisation, either being transformed into o, with the eventual attachment of a prothetic e, or closing to become a Russian e [je], with a subsequent transformation of j into e, which is typical of the Russian dialects along the Svir. As a result, the Veps lake name Enarv (< Veps $en\ddot{a}$ 'big') changed into Bohosepo (Ohosepo in 16th century documents). The Veps river name Enoja, from the same base, became $\Gamma ehos$ or $\Gamma ehys$. Therefore, it can be assumed that variants with an initial o are older than those with an initial j. The former are used in areas that were russified earlier and are linked to the biggest and most conspicuous rivers and lakes, which, of course, acquired their Russian names earlier.

The different ways of acquisition of certain Finnic phonemes and their combinations are connected not only with changes that have taken place in Russian phonology over the centuries, but also with the evolution of Finnic, and in particular Veps, phonology. The toponymy of the Svir area, for example, reflects different stages in the labialisation of *l*, characteristic of all Veps dialects, with a subsequent series of changes in the emerging diphthong. The hydronyms Tanbeuhckuŭ (stream) and Toŭδa (river) can both be traced to talv 'winter', but in the first name the word is reflected in its early phonological form, absent from the present-day language, whereas the second reflects its modern form (talv > tauv > touv). The simplification of the Finnic stem -kse- into -se- in Veps is another process whose various stages are reflected in the Russian toponymy (cf. Menykca, Cepmakca west of the Svir vs. Badpyca, Bummyca in the eastern area, on the border of the present-day Veps settlements).

2.2. Suffixation

The most significant method of morphological adaptation of Finnic toponyms in the Svir region is suffixation. This can be accounted for by the productivity of the suffixation method of toponym formation in Russian. It is especially important to note that the original meaning of the Russian suffixes used in toponyms is no longer appropriate in most cases. In substratum to-



ponyms, these suffixes can act as formal elements differentiating names from appellatives. This enables them to function in combination with foreign bases in which suffixes are employed as adaptors introducing toponyms into classes of names of the same type.

A comparison of the current use of suffixed models for the integration of Finnic toponyms with their degree of productivity in the Russian toponymic system of the Svir area shows, as a rule, a direct connection: the popularity of a suffix is usually related to its spread to foreign toponyms. This is amply exemplified by river names in the Svir basin, many of which take the suffix -ка: (Сарка, Корбойка, Ягремка, Каномка, Вадожка, Паешка, Муромка and others) as well as by oikonyms having the possessive derivation suffixes -ево/-ово (the villages Куково, Лембово, Кокоево, Кургово, Игово, Гайгово) and -ино (the villages Тойвино, Кургино, Куйвино, Кяргино). In terrain names the suffixes -ица/-ец (Розменица, Мегрица, Мегренец) are frequently found. The suffixes listed above are widely applied in the formation of Russian toponyms falling into the afore-mentioned categories.

This relationship between the class of object and a suffix often has a historical character: the suffixes employed as adaptors used to be productive at a particular historical moment when and in the historical area from which the bearers of the Russian toponymic system moved into the Veps-speaking Svir area. The well-known East Slavic river suffixes: -ица (Ейница, Пялица, Сарица, Пагодрица, Урьица) and -ина (Важина, Ирвина, Савина, Аштина) are used in the Svir area almost exclusively with substratum bases: by the time of Russian colonisation along the middle reaches of the river (it is to this area that the models -uha and -uua are linked) the geographical features had already been given names, which were adapted with the help of ordinary Russian suffixes. Because potamonyms with these suffixes are very stable formations, such a reconstruction of events would seem to be quite natural. Similarly, the oikonym suffix -uuu/-uuы, which is Proto-Slavic in origin and appears in the north-east concurrently with East Slavic colonisation, does not combine with Russian bases in the Svir area. On the other hand, it is productively present in the adaptation of oikonyms of pre-Russian origin (Винницы, Вачукиницы, Рекиничи, Уштовичи, Коковичи, Мустиничи, Тервиничи, Имоченииы, Валданииы). This was not at all accidental.

In the Svir area, the Old Russian oikonym pattern with word-final -ичи/-ицы occurs in the integration of original Finnic settlement names with an -l-suffix into the class of Russian oikonyms. This is convincingly evidenced by the Finnic and Russian variants of one and the same settlement name: the Veps village Karhil is called Kapzuhuvu. Other examples are: Vingl ~ Винницы, Sagil ~ Согиницы, Šond'al ~ Шондовичи, etc. Thus, it can be concluded that in the present-day Russian-speaking Svir area a number of

oikonyms of this type emerged according to the following scheme: the Russian suffix $-uuu/-uu\omega$ replaced the Veps suffix -l. This supposition is further supported by a remarkable example to be found in the so-called Svyatoslav Charter of the 13th century, in which the present-day village $IO\kappa coв uuu$ (with the -uuu suffix), situated in the Russian-speaking Svir area, is called $IO\kappa cona$ (with the I[a] suffix).

Why was it the Old Russian model -uчu/-uцы that replaced the Veps oikonymy with -l? This may have been caused by the semantic relationship between the bases. Russian toponyms with -uчu were derived from personal names in the area west of the Svir. An anthroponymic origin is typical of Finnic oikonymy, too, and includes the Veps -l formations: compare Rahkoil from the ancient Finnic personal name Rahkoi, Reboil from the anthroponym Reboi, etc. (MULLONEN 1994: 87–97). These names are sufficiently transparent in russianised names with -uчu/-uцы: Валданицы: сотраге the ancient personal name Valta, Valto (Veps Vald); Имоченицы: сотраге the Veps anthroponym Himač (from the word himač 'wished for, long-awaited [child]'); Курикиничи, compare the nickname Kurik 'stupid, fathead'.

It may be of interest to add that the model of adaptation described can also be found beyond the northern boundary of the Svir area, in the Karelian-Lude dialect. What is noteworthy, however, is that the Russian suffixes -uvu or -uuu do not replace the Karelian suffix, but are attached to it: Kunil ~ Кунилицы, Jurgil ~ Юргилицы, Sudal ~ Судалицы, etc. Moreover, a number of original Karelian names do not take the suffix -uuu but are adapted by other suffixed models: Teppul ~ Tennyльская, Homal ~ Хомовская (with the Russian suffix -cкая), Tykkyl ~ Тюккуево (with the Russian suffix -eво). This contrast can obviously be accounted for by the fact that unlike the Svir area, the Karelian territory remained the periphery of an area covered by the Russian model -uvu/-uuu. That is why there is a lack of consistency in its use.

In the territory occupied by the southern Vepsians the -ичи/-ицы model has not become widespread. Here the original Veps oikonymy of the *l*-type is reflected in Russian either through direct adaptation (Veps *Noidal* ~ Russian *Нойдала*, Veps *Korvoil'* ~ Russian *Корвала*); or through a Russian suffix: Veps *Kurgoil'* ~ Russian *Курголово*, Veps *Čaigii* (< *Čaigil) ~ Russian *Чайгино* (JOALAID 1999: 231–232).

Judging by considerable secondary evidence, there are no clear-cut rules, nor is there any noticeable consistency concerning which Finnic structural models underlie those adapted with suffixation. Another important factor involved in the process of suffixal integration of Finnic toponyms is that they are typically adapted to corresponding Russian toponymic classes. As a re-



sult, one Finnic structural toponym type can be adapted in several ways. What becomes prominently emphasised against this background is the consistent replacement of the Veps *l*-suffixed oikonym model with the Russian -ичи/-ицы (Karhil ~ Каргиничи) north of the Svir. The bilingualism of the population was an obvious contributing factor in the emergence of the correspondence ичи/-ицы ~ -l at a time when the toponymy was being "semitranslated" through the replacement of the Veps oikonym formant with its Russian counterpart. This hypothesis is also corroborated by areal data showing that the territorial distribution of the -ичи/-ицы oikonym type coincides with that area in which a number of types of toponymic semi-calques² are commonplace.

In Veps toponymy there is also a suffix borrowed from the Russian place name suffix inventory: -šin (Russian -uuha), which is often used in the formation of agronyms, that is, denominations of plots of land, forests, etc. used for agricultural purposes: Teroušin, Timukoušin, Pehoušin, Ofonoušin, Nazaroušin, etc. This suffix is attached to anthroponyms, a practice also typical of Russian. In contrast to the mass integration of Finnic toponymy into the Russian place name system, the penetration of Russian models into Veps toponymic formation is extremely rare. Furthermore, the use of the suffix -šin is an example of direct toponymic contact proper. It does not affect Veps appellative word formation. It would also seem obvious that the borrowing of the suffix -uuha resulted from its extremely frequent occurrence in the Russian toponymy of the Svir area. However, social factors are also not entirely negligible: the use of the model with -uuha in tax documents, that is, in official language, could have contributed to its permanency in Veps toponymy as well.

2.3. Calquing

The semantic adaptation of Finnic toponymy also manifests itself through calquing. Total or partial calquing is a characteristically north Russian way of adapting Finnic toponymy to Russian. An onymic calque is a name borrowed through literal translation. In onomastics it has been a tradition to distinguish total calques, resulting from a complete morpheme-by-morpheme translation of a foreign pattern (*Pitk/järv* > Долг/озе-ро, Долгое озеро), and semi-calques—compounds consisting of a substratum (untranslated) base and a Russian geographical term, which is the translation of a commonly occurring generic of complex Finnic primary forms (*Kaid/järv* > *Kaŭð/osepo*, *Kiv/oja* ~ *Kub/pyueŭ*). Semi-calques became widespread in northern Russian toponymy. Although compounding does also occur in Russian toponymy, its



² i.e. partial translations (editor).

role is only secondary. The fact that compound names as a structural type have assumed such a great importance in northern Russia can be explained by Finnic structural and morphological interference. A condition for such interference would be the gradual russification of the local Finnic population through a stage of bilingualism (GUSEĽNIKOVA 1996). Therefore, semicalques are to be regarded as evidence of substratum interference rather than as examples of borrowing.

In the Svir area there are 19 types of semi-calques, though these do differ in productiveness. Some of them are represented by several dozens of examples:

- -болото 'moor, marsh' (Кайд/болото, Ким/болото, Пурн/болото)
- -гора 'hill' (Кябель/гора, Кумба/гора, Сай/гора, Чур/гора)
- -наволок 'promontory' (Кар/наволок, Мадар/наволок, Пель/наволок)
- -озеро 'lake' (Канж/озеро, Леп/озеро, Перх/озеро, Чик/озеро)
- -остров 'island' (Из/остров, Колк/остров, Ламб/остров)
- -ручей 'stream' (Bex/ручей, Кунд/ручей, Луп/ручей, Пехк/ручей, Ян/ручей).

For various reasons other types of semi-calques are limited to relatively small areas. For example, the lack of productiveness of semi-calques with the determinant -nopo2 'rapids' (Pынь/nopo2, Kow/nopo2, Ca2ap/nopo2) is accounted for by the rarity of the relevant geographical feature, that is, rapids, north of the river Svir. The almost total absence of semi-calques with -peka 'river' (Γυμ/peka, Κηῦ/peka, Παῦ/peka) can be understood on the basis of the fact that Finnic potamonyms in the Svir area mostly consist of one lexeme only and their formation with a determinant is extremely rare. Semi-calques with the basic element -zy6a 'bay', very popular in Russian toponymy in the vicinity of Lake Onega, are almost entirely absent in the neighbouring Svir area (Πep/zy6a), because the Russian dialect term zy6a in the sense 'bay' is practically absent along the Svir.

As for the ethno-linguistic interpretation of semi-calques, it is important to note that they can be linked to a particular area along the Svir. They are frequently found in the upper, north-eastern reaches of the river. Beyond the south-western boundaries of this area the structurally complex Finnic primary forms underwent a process of direct adaptation that is fundamentally different from that described above. In other words, the Veps denomination of the stream Kiv/oja was adapted in the south-western reaches of the Svir as Kubon, whereas in the north-east it is Kub/pyueŭ, compare also the headland name Hab/nem reflected as \Gammaabhem and $\Gammaab/habonok$ respectively. It should also be added that the dividing line between the two types has a general rather than a local character, as it is the Svir area that can be considered the outpost of an extensive territory of semi-calques widespread in the region of the earlier Novgorod settlement in northern Russia. The western

boundary of the majority of semi-calques in the Svir area is the same as that separating the Ladoga-Tikhvin and Onega groups of northern Russian dialects, whose formation can be traced back to the 13th–14th centuries. In the Ladoga-Tikhvin zone (especially in its south-western part) the Old Russian settlers' culture flourished and the population became dense enough to lead to a relatively quick assimilation of the local Finnic inhabitants, whereas the present settlement of the Onega zone, in all probability, took shape without any radical change in the ethnic structure as a consequence of the gradual acquisition of Russian by the Finnic-speaking population through a stage of bilingualism. Such conditions were especially favourable for the emergence of semi-calques.

Thus, the areas of semi-calques reflect a gradual russification of the Finnic Svir area from the south-west to the north-east. Moreover, it is within the context of this areal segmentation that the most complex group of semicalques should be interpreted. These semi-calques contain a dialectal lexeme, borrowed from a Finnic source as their basic component. In the Russian-populated districts of the Svir there are a great number of toponyms with the determinants $-\kappa apa$ 'bay', from Veps kar(a) 'a small inlet in rivers or lakes' (Габкара, Куккаскара, Ледокара, Лепкара, Умбаркара); -орга 'low-lying marshy land, overgrown dense fir wood', from Veps org 'gully; ditch, low-lying land, thick forest' (Габорга, Вехкорга, Лепорга, Кайдорга, Редорга, Сивдорга); -сельга 'dry hill, overgrown with forest used for agriculture', from Veps sel'g 'hill' (Габсельга, Койсельга, Мурдосельга, Палосельга, Савесельга, Вераньсельга, Кортосельга, Курсельга, Нисельга, Педайсельга, Ребосельга) and a few others. The basic problem that emerges in connection with the analysis of the word formation model peculiar to this toponym group is whether they are semi-calques (and in this case their determinant is expressed by a Russian dialectal lexeme) or whether they have come about as a result of the direct integration of the Veps toponyms into the Russian toponymic system. Since the territory in which the toponyms listed above are found goes beyond the western boundary of the area of traditional semi-calques, it may be inferred that at least some of these originated through direct adaptation of Finnic toponyms: Габсельга < *Habselg, Лепкара < *Lepkar, Кайдорга < *Kaidorg. What speaks for this is the fact that the phonological changes occurring in -сельга and -opea are restricted to toponyms in which the bases are not perceived as independent elements of the name although they do correspond to the Russian dialectal lexemes *сельга* and *орга*: compare *Лепсерьга* < *Lepserg < *Lepselg (according to the law of dissimilation of l > r); Ейнерга < *Heińerg < *Heińorg (heiń 'grass, hay'). However, the existence of toponyms formed through direct adaptation does not rule out the possibility that some of those names with the determinants -сельга, -орга, -кара, etc. have been

formed according to a semi-calque pattern in which the determinative³ is perceived as a native Russian geographical term.

Total calques, externally identical to Russian toponyms, are harder to identify than semi-calques. This can be done successfully if the synchronic or diachronic variants of the toponym are available and one of them reflects the Finnic original while the other can be recognised as its Russian translation. The stream Кондручей (< Veps kondi 'bear') was recorded as Медвежий ручей in 17th century documentation and Гирболото (< hirvi 'elk') became established as Лошей Мох (мох meaning 'marsh' in some Russian dialects). The scribes did not use genuine Russian toponyms but loan translations which, however, did not become rooted in oral practice, because the latter favoured semi-calques characteristic of the upper Svir. For example, synchronic variants are represented by the coexistence of two names for one and the same marsh along the lower Svir: Койвуши (Veps koiv 'birch') and Березняки.

Analogically, metonymic calques—the use of a translated name for an adjacent reference—can also be regarded as evidence of translation. If Грязный ручей 'muddy stream' flows out of Редозеро (Veps redu 'mud'), it can be inferred that the denomination of the stream is the translation of the original Veps specific. In exactly the same way, the coexistence of the pair Елчинручей (< *Joučen/oja, Veps joučen 'swan') and Лебежье озеро 'swan lake', from which the stream flows, refers to the name of the lake which has been translated.

Russian correspondences (translations) of particular, for example, metaphoric, naming patterns, whose equivalents are otherwise not frequent in the Russian toponymy proper of the region, can be considered another means of identifying calques. In the Veps Svir area the metaphoric model *Kukoinhaŕj*, lit. 'rooster's comb' is frequently used as a name for elevated terrain. In the Russian-speaking Svir area this Veps toponymic model takes the form Петуний Гребень, which is a calque. The fact that this pattern is not characteristic of the toponymy of adjacent Russian districts also suggests that a loan translation is in question.

Finally, cases in which a mass of substratum toponyms, mostly hydronyms, of a compact area are interspersed with Russian toponyms are also illustrative. This is even more the case if they meet the conditions favourable to translation, as described below.

³ The word *determinative* here refers to the same component of a toponym that, in the English toponymic literature, is also often referred to as a *generic* (editor).



Calques can be shown to exist out not only in the Russian—or, to be more precise, russianised—Svir area, but also in its bilingual regions, in the present-day Vepsian and Karelian districts, where both the Finnic and the Russian variants are used simultaneously for certain categories of toponyms. In the first instance, bilingual variants are typical of oikonyms and hydronyms, and applied to major lakes and rivers. They can be found in the official (Russian) language, and are indicated in maps and records of various kinds.

The problem of how calques are formed is closely interrelated with that of translation in toponymy. Why are some of the etymologically transparent toponymic bases translated in the process of adaptation (*Pitk/järv*, *pitk* 'long' is changed to Долгозеро or Долгое озеро 'long lake') and others are not (*Kaid/järv*, *kaid* 'narrow' remains *Kaŭdosepo* in Russian use)? To what extent is this process accidental or, on the contrary, regular?

During the work on the Словарь гидронимов Юго-Восточного Приладожья (бассейн реки Свирь) [Dictionary of Hydronyms of the South-East Ladoga Area (the Svir Basin)], which comprises of six thousand water names in the Svir basin, certain trends surfaced which are related to the translation of hydronyms. It turned out that of all the semantic classes involved in the formation of hydronyms, it is lexemes with a qualifying meaning that are translated most consistently, and even these are restricted to definite bases: must- 'black' (Must/järv > Черное озеро 'black lake'), vouged- 'white' (Vouged/järv > Белозеро or Белое озеро 'white lake'), pitk-'long', vär- 'crooked, curved', süvä 'deep', in the forest toponyms laged-'open, forestless' (in Russian equvalents: гладкий 'flat, level; smooth'). Of other semantic classes, there are two specific toponymic bases that are frequently translated: hein 'hay' (Hein/joja, -so, -järv > Сенной ручей, Сенное болото, Сенное озеро or Сеннозеро) and haug- 'pike'. This tendency is also historically corroborated by 18th century documentation. Furthermore, this is not limited to the Svir, but is typical of the whole of the Onega region, which was settled by a Russian population at about the same time as the Svir

It is fairly obvious that one of the essential conditions for the translatability of Finnic toponymic specifics is the presence of an equivalent model in the receiving Russian toponymic system in the same or in a contiguous territory. If such a model does exist, the toponym to be adapted is adjusted to it and thus occupies a place in a ready pattern. However, if a model is not available, the possibility of translation is limited even when the structure of the name is transparent.

What has to be taken into account, besides the afore-mentioned, is the chronological framework for the existence of productive toponymic models.

At an early stage in Veps-Russian contacts in the Svir area, the productive Veps hydronymic base *ahven*- 'perch' was translated as *ompeų-/ocmpeų*- 'perch' as its Russian dialectal equivalent (*Ahnuź/d'ogi* > *Ocmpeчина*). However, because this word was later lost in the Russian dialects of the area, the productive Russian topobase also ceased to be used. Since the corresponding base *окунь* 'perch' is neither used in the territories of late russification nor in those of bilingualism, the Veps base *ahven*- remains practically untranslated: *Ahvenjärv*, *Ahnjärv* > *Aгвеньозеро*, *Агнозеро*. Thus, the problem of translation is closely connected to the chronological framework of use of the given toponymic patterns and understanding this framework is vital to the solution of problems connected with the linguistic as well as the ethnic history of a particular territory.

The tendency of translating Veps hydronyms as described here is not at all regular or obligatory (cf. translations of specific Veps metaphoric toponyms noted above). Rather, it should be examined from the point of view of how it reveals the criteria used in the translation of toponyms.

Unlike semi-calques, total calques do not show any clear-cut territorial distribution, or rather this cannot be demonstrated due to the external similarity of Russian toponyms and calques.

The analysis of the material of the Svir area testifies to the Finnic heritage having mainly a substratum, that is not borrowed, character in the Russian toponymy and taking shape in the process of the gradual russification of the local Finnic population. The traces of superstratum, that is, the influence of the Russian denomination system on that of the Finnic, if examined against this background, are minimal. Furthermore, it would be more precise to speak about adstratum interrelations that were not accompanied by the assimilation of recent Russian arrivals amongst the local population, but which were brought about by their coexistence in a common territory. The most conspicuous example of Russian influence in the Veps and Karelian toponymy of the Svir area is the afore-mentioned adaptation of the Russian suffixed model -щина in the form -šin. In other cases the interaction is restricted to the introduction of Russian variants of Finnic place names into the Veps and Karelian toponymy. As a rule, this affects the names of rivers and settlements that are widely spread in the Russian-speaking community because of their use in the official language. These have been adapted by the bilingual Finnic inhabitants of the Svir area: the Veps name of the river Sara has been integrated into Russian toponymy as *Capκa* (with the suffix -κa, typical of Russian potamonyms). This Russian toponym, in turn, has been reintroduced by bilingual Vepsians as Sark. In a similar way, the Veps oikonym Norj was turned into the Russian village name Норгино (with the



Russian possessive suffix -uho), and has later become widespread as Norgin among Veps speakers.

An exploration of the regularities of toponymic contacts contributes to the understanding of ethnic processes in the past. The first important conclusion that can be drawn from the analysis of Finnic-Russian toponymic contacts is that Finnic heritage must inevitably be taken into account in the analysis of Russian dialects. As regards the method of adaptation of Finnic toponyms in the Russian-speaking Svir area, three microzones can be distinguished: south-western, central and north-eastern. The boundaries between these areas have been established on the basis of toponymic evidence coinciding with dialectal boundaries. One of these separates the Ladoga-Tikhvin dialect zone from the Onega zone, the other divides the Ladoga-Tikhvin dialects into two groups: western and eastern. The mechanism of adaptation of toponymic types suggests various patterns of Finnic-Russian contacts in the areas concerned. In the south-west (the Pasha basin), Russian settlement was obviously more populous and vigorous, dispersing the Finnic-speakers in such a way that the language of the latter is now reflected in the western dialects of the Ladoga-Tikhvin zone only in isolated instances of toponymic and dialectal vocabulary. On the other hand, the north-eastern fringe of the Svir area (the Onega dialects) is mainly populated by Finnic-speakers who have changed their language to Russian. The emergence of semi-calques characteristic for this region has occurred in a bilingual situation. Between these two poles there exists a buffer zone, the eastern dialects of the Ladoga-Tikhvin area, in which some adaptation models (e.g. oikonyms with -uчu/ -ииы) have arisen as a result of bilingualism.

The second conclusion, of an ethno-historical character, which is no less significant, concerns the various chronological layers of colonisation of the different territories in the Svir area. The fact that Finnic microtoponymy is so well preserved in the east can to a great extent be accounted for by the relatively late russification of this territory. The transition to Russian, needless to say, was by no means an instantaneous event. In the Svir area there are a few centres in which, although the Finnic layer is poorly attested, the adaptation of Finnic place names took a different course from that in the neighbouring region, with different models of adaptation being employed. As a rule, such centres coincide with old administrative ones.

Another essential ethno-historical conclusion that follows from the application of different adaptation patterns along the southern border of the Svir area on the one hand and along its northern border on the other is that such a distribution of adaptation patterns may be the result of somewhat different processes in the Old Russian settlement. One of the corridors of Old Russian infiltration could obviously have been the territory where the River Pasha



suddenly bends eastwards and the riverbed comes closest to the River Tikhvin. In this south-western corner of the Svir area Finnic microtoponymy is practically absent and, conversely, a great variety of Russian microtoponymic bases is present with a wide range of suffixes and prefixes. There are items from the Novgorod dialectal lexicon that have long been obsolete in the present dialects of the core Novgorod area, but which are fixed in the toponymy of this region. Besides this incursion from the south there must have been another wave of penetration into the Svir area proper, marked, for example, by hydronyms with the old Slavic suffix -гост/-гощь: Мило-гость, Рудогощь, Вяргость, Онегость in the lower reaches of the Ojat' and Pasha. This suffix can also be traced in Novgorod territories proper, but the western Svir is the easternmost boundary of its distribution in the Onega-Ladoga region.

3. Pre-Finnic heritage in the Veps toponymy of the Svir

The Svir toponymy preserves convincing pre-Veps traces, which are especially conspicuous in the hydronymy, that is, in river and lake names. It would seem very difficult to explain how this ancient toponymy was integrated into the Veps naming system, mainly because it is not known which language its creators spoke. Whether that language was related to the Finnic languages and how many languages there were in the region is also unknown. The analysis of the ancient Svir toponymy and data forthcoming from other relevant fields of study suggest that it could have been Proto-Saami. The reflection of Proto-Saami vocalism in, for example, the first syllable, is fairly consistent here. Early Proto-Finnic *a is represented through two Proto-Saami variants on the Svir: o (Sondal < *sonte- 'sever, cut off') and *a ($\Pi an zo sepo). The ancient *<math>\ddot{a}$ moved from front to back and turned into Proto-Saami * \bar{a} accordingly ($Ba6\pi o\kappa < *v\bar{a}vl\bar{e}$ 'waterway, navigating channel').4 In bases with a second syllable open vowel the first syllable e opened to become *e, which is reflected in the north as *a ($P\ddot{a}l'l\ddot{a}rv < *pelj\bar{e}$ 'ear'). The Early Proto-Finnic close vowels *i and * \ddot{u} eventually coalesced in Proto-Saami *i < *e (*Mnekca* $< *el\bar{e}$ 'upper'-for more details of the phonetic peculiarities of ancient Veps toponymy see MULLONEN 2002).

An analysis of this material makes it possible to draw some conclusions about the specific features of the language contact. Most Svir toponymic bases are not rare, but found in areas that extend beyond the region and include Karelia, the adjacent districts of Finland, spreading south to the Upper

⁴ This happened in the first syllable before the second syllable open vowel. Before the second syllable close vowel $*\ddot{a} > *\bar{e}$ (editor).



Volga and east to the Northern Dvina. Such an areal distribution is rather convincing testimony to the substratum character of interrelations, and means that this toponymy has become part of the Veps system of geographical names as a result of linguistic assimilation, that is, the gradual "vepsification" of the creators of the ancient toponymy. That is also the reason why the phonetic integration of the ancient toponymy is so consistent and systematic in character.

For objective reasons, the pre-Finnic toponymic heritage evidenced in the Svir area does not give a sufficiently clear picture of the mechanism involved in integrating the ancient toponymy into the Veps toposystem along the Svir. The exact rules of phonological adaptation cannot be established: all that can be stated is that the relationship of the two phonetic systems—the adopted and the adopting—does not provide enough information to reveal them clearly.

It is also for this reason, the genetic linguistic relationship of the contacting languages, that the process of the structural adaptation of this toponymic layer is not sufficiently apparent either. A structural analysis of toponyms in the Onega area testifies to the absence of specific substratum determinants⁵ similar to the Finnic ones in the Russian toponymy (cf. the island Maskcaps: Veps sar 'island'; the stream Kuson: Veps oja 'stream'; the lake Yu- κapb : Veps $-a\dot{r} < -j\ddot{a}rv$ 'lake'). This factor is vital for understanding the mechanism of adaptation of ancient toponymic forms The results of research into Finnic-Russian contacts demonstrate that direct adaptation with an unchanged determinant is possible if a) the determinant cannot be translated adequately b) there is not an equivalent structural model in the receiving system c) the model is rare. It seems obvious that the absence of reliable traces of substratum hydroformants in our case can be explained by their having been consistently translated or, to be more precise by the adjustment of the basic elements of disyllabic substratum hydroformants to the Veps system of names, this being so on account of the kinship between the toponymic system to be perceived and the original. As a result of this, semicalques emerged in which pre-Veps attributes were supplied by a Veps determinant.

Structural adaptation is even more manifest in suffixed models, as for instance with the formation of a foreign base with the Veps diminutive suffix -ine (lake $\ddot{A}nine$) or with the suffix -nd ~ -n \ddot{z} , which expresses similarity to what is named by the deriving base (river $Cynah\partial a$, river Yxmuh cap a).

There may be a good reason to claim that the genetic relationship reflected in the closeness of the material form of "native" and "foreign", that is, those



⁵ i.e. formants (editor).

adapted from the previous toponymy, could have led to an adaptation of specific Early Proto-Finnic toponyms to become a number of Finnic place names. In fact, there may be earlier (conditionally, "Proto-Saami") primary forms behind Veps and Karelian toponyms, especially behind those which belong to the hydronym category. These were totally adapted into the Finnic system of names. Judging by the toponymic evidence in the Onega area, the process of "direct" adaptation was accompanied by the translation of the attributive element of the name. This type of calquing is represented by the names of two adjacent rapids: Рынь/порог and Лись/порог (or Лисий порог 'fox's rapids'). It stands to reason to suppose that 1) Рыньпорог comes from Saami, compare Kildin Saami rīmn'e 'fox', and 2) Лисьпорог is the Russian calque of the Veps *Reboi/kosk (reboi 'fox'). The emergence of the Veps toponym could also have been supported by the name Рыньпорог nearby. Analogically, the Veps primary forms *Enä/järv (Veps enä 'big') and *Ändem < *Änemä (with the "river" suffix -mä) can be reconstructed on the basis of the Russian hydronyms Вонозеро and Яндема (the name of the river flowing out of Вонозеро). The name of the river can evidently be traced back to Proto-Saami *ene 'big', which leads to the conclusion that the lake name *Enä/järv is a loan translation. Similar links, even when the material collected is of high quality, are difficult to establish. The few examples available are, one is led to think, just the tip of an iceberg. The reality is that semantic adaptation must have been widespread, especially if two genetically related systems were in contact.

References

- GUSEĽNIKOVA, M. L. (1996) Гусельникова, М. Л. Полукальки русского Севера как заимствованный словообразовательный тип топонимов. In: Ономастика и диалектная лексика. Екатеринбург.
- JOALAID, MARJE (1999) -la-sufiksiliste külanimede levik Vepsas. In: Läänemeresoome periferiad. Võro, p. 230–237.
- MULLONEN, I. I. (1994) Муллонен, И. И. *Очерки вепсской топонимии*. Санкт-Петербург.
- MULLONEN, I. I. (2002) Муллонен, И. И. Топонимия Присвирья: проблемы этноязыкового контактирования. Петрозаводск.
- МULLONEN, І. І.—АZAROVA, І. V.—GERD, А. S. (1997) МУЛЛОНЕН, И. И.—Азарова, И. В.—Герд, А. С. Словарь гидронимов Юго-Восточного Приладожья. Бассейн реки Свирь. Ed. by ГЕРД, А. С. Санкт-Петербург.

1. Research history

Since the emergence of the historical sciences the generally accepted view on the ethnic history of Finland has been a theory of immigration, that is, that the Saami (or Lapps, as they were formerly called) earlier inhabited most parts of Finland, and that the Finns and Karelians only later expanded to their present territories, displacing the original Saami settlement. This view was originally based mainly on the interpretation of the Finnish and Saami oral tradition (SCHEFFER 1704: 37–52, see also PORTHAN 1873: 31–42), but later research into historical records brought to light numerous references related to the Saami, especially in eastern Finland and Karelia (see e.g. KOSKINEN 1882, T. I. ITKONEN 1947, 1948 I, 92–97).

In the twentieth century comparative linguistics developed rapidly and linguistic evidence of a widespread earlier Saami inhabitation in the south of Finland started to emerge. The first noteworthy study of Finnish and Russian place names of Saami origin was K. B. WIKLUND's paper Lapparnas forna utbredning i Finland och Ryssland, belyst af ortnamnen (1911–1912). The question of place names of Saami origin had occasionally been touched upon even earlier, but WIKLUND's study was the first one to employ systematic and reasonably strict scientific methods to the subject. However, at that time the material available on Finnish place names was so limited that an entirely systematic search for Saami substrate place names could not be performed. Because of this, WIKLUND's results in central Finland and Karelia remained on the level of sporadic observations, and his conclusions on the earlier distribution of Saami settlement were partly erroneous due to the limitations of his material. Nevertheless, as outdated and incomplete as WIK-LUND's paper today is in many respects, it was still the first to apply solid methods and can be considered as pioneering. (See also KALIMA's [1912] comment paper on WIKLUND's study.)

The next scholar to study the dialect geography of Saami substrate place names in Finland was T. I. ITKONEN, an eminent scholar in Saami ethnogra-

^{*} I wish to thank Petri Kallio, Jorma Koivulehto, Ritva Liisa Pitkänen, Janne Saarikivi and Pekka Sammallahti for comments and inspiring discussion on the topic of this paper.



phy. In a short paper in 1920 and an addendum to it in 1926, he presented a substantial number of Saami etymologies for Finnish place names. Later in his classic two-volume handbook on Saami ethnography, *Suomen lappalaiset vuoteen 1945* (1948 I, 99–107), he both critically re-evaluated and expanded his material to 167 borrowed name types (according to their Saami appellative parts), and showed the distribution of the names on a map. Itkonen's study was the first attempt to systematically map the distribution of Saami substrate place names in Finland, and because it is still the only one, it has remained the standard reference on the subject since its publication.

Despite the obvious merits of T. I. ITKONEN's toponymic studies, it is now impossible to view them uncritically. While ITKONEN's approach to the material can in general be considered critical, it is still evident that in the case of many individual etymologies his criteria for acceptability were not strict enough. Suspicions are raised, for example, in those cases in which a Finnish toponymic element is compared to a scarcely attested and etymologically opaque Saami personal name, such as the equation of the unclear Finnish place name elements *Saija*- and *Surnu*- with the Inari Saami pre-Christian personal names *Caijâ* and *Curnâž*. Nevertheless, the fact that some of Itkonen's etymologies must now be considered questionable or even implausible does not greatly diminish the value of his study as a whole. Many of the etymologies still bear critical scrutiny and can, combined with further evidence from oral tradition and historical record, be accepted as proof of an earlier widespread Saami inhabitation in inland southern Finland.

There are, nevertheless, certain factors in Itkonen's study that reduce its usability as a reference work to a significant degree. Firstly, the presented corpus of names of Saami origin is, in fact, not much more than a list. In most cases no detailed etymological argumentation is provided and occasionally even the assumed loan original is left unmentioned. The reader unacquainted with Saami historical linguistics will thus find it impossible to judge the plausibility of the etymologies. Secondly, ITKONEN's results are based on quite limited toponymic material because extensive collections of Finnish place names were not yet available in the 1940s. According to ITKONEN's map (ibidem 107) very few, if any, place names of certain Saami origin occur in a wide stretch covering the coast of the Gulf of Finland and the immediately adjacent inland areas (i.e., Finland Proper, southern and southeastern Häme, Uusimaa, southern Kymi and the Karelian Isthmus). It appears that this blank in T. I. ITKONEN's map was echoed later in TERHO ITKONEN's famous map of Proto-Finnic dialects at the beginning of the Common Era (originally presented at the symposium in Tvärminne in 1980 and first published in T. ITKONEN 1983: 378), which has since been repub-

lished in several reference works (recently CARPELAN—PARPOLA 2001: 91). According to TERHO ITKONEN, a 'northern dialect' of Proto-Finnic was spoken approximately in the blank area on T. I. ITKONEN's map and the Proto-Saami territory was located north of it. It must be noted though, that TERHO ITKONEN did not mean his map to be geographically exact, but merely a rough approximation. In any case, there is no proof that the absence of known Saami substrate place names in any region in southern Finland would not merely result from insufficient research (see section 3). Since T. I. ITKONEN published the results of his onomastic studies, comprehensive toponymic material has become available and the conditions for substrate research have thus been greatly improved. On the other hand, theoretical and methodological advances have also been achieved in toponymic typology, loanword research and language contact studies. These developments have yielded appropriate tools and material for a thorough mapping of the Saami place name stratum in Finland. But while the theoretical and material situation has substantially improved, the amount of research published on the topic has diminished. Few competent researchers treated Saami substrate toponyms in the latter half of the 20th century and there have not been many significant advances in the field.

The subject of Saami substrate place names in Finland has, however, been touched upon since T. I. ITKONEN in a couple of interesting but narrow case studies. AILA RÖNNBERG (1980) provides a thorough analysis of Finnish place names of the shape Kuukas-, Kukas-, Kukka(s)- and their connection with Proto-Saami *kukkē(-s) 'long' (> SaaN guhkki, guhkes¹) in her unpublished graduate thesis. She concludes that all the hydronyms and also several other names of this shape are of Saami origin, but they have frequently become folk-etymologically contaminated with the Finnish word kukka 'flower'. TERHO ITKONEN has examined the linguistic traces of Saami settlement in central southern Finland, especially in the surroundings of the northern part of Lake Päijänne, in a noteworthy paper Lapin perua Sisä-Suomen sanastossa ja paikannimissä (1993b) and in a short popular newspaper article published in the same year (1993a). ALPO RÄISÄNEN discusses place names of Saami origin in the province of Kainuu in two papers (1990, 1995). His recent monograph (2003) provides a detailed discussion of the etymologies of Finnish place names with the formants -nkV and -ua, several of which he analyses as borrowings from Saami. EEVA-MARIA NÄRHI (2002) has recently presented detailed argumentation for the Saami origin of two Finnish

¹ Saami adjectives have separate predicative and attribute forms which in this article as elsewhere in lexicological literature are both given. The predicative form is mentioned first (editor).



hydronyms of the shape Outamo(-). Also VAHTOLA's (1999) summary of Saami substrate place names and the historical records of the Saami in Finland is worth noting, as it includes useful maps on the distribution of a couple of the more common substrate name types, such as names containing reflexes of Proto-Saami * $kukk\bar{e}(-s)$ 'long' and * $l\bar{a}tt\bar{e}s$ 'even, gently sloping (terrain)'. However, the maps are not exhaustive because the author has not included all the phonological variants in which the words appear in Finnish toponyms.

Finally, the archaeologist UNTO SALO must be mentioned. He has recently presented a thorough synthesis of the prehistory of the provinces of Häme and Satakunta, drawing evidence from archaeology, linguistics and oral tradition (SALO 2000). According to SALO, the earliest Iron Age settlement in the valley of the River Kokemäki that practiced slash-and-burn agriculture as a subsidiary means of livelihood, was Saami-speaking. This prehistoric Saami culture and its language were displaced by a wave of Finnic settlers practicing slash-and-burn agriculture that expanded from the coastal area in the Pre-Roman Iron Age. SALO's analysis is convincing, and the proof of Saami inhabitation ultimately rests on the borrowed place names he has compiled from various references to his study. While the toponymic evidence summarised by SALO regrettably also contains a number of unlikely etymologies, its core must be considered convincing enough to validate his analysis. A more detailed assessment of the etymologies included in SALO (2000) is provided in A. AIKIO (2003).

To sum up, the research history of Saami substrate place names in Finland can be characterised as long and lean. The first substantial study of the subject by K. B. WIKLUND was published over 90 years ago and its results were significantly extended by T. I. ITKONEN's later studies. However, in the latter half of the 20th century active research on the subject almost completely ceased. After T. I. ITKONEN, SALO's analysis on the settlement history of Häme and Satakunta is the only major result in the ethnic history of southern Finland that was based, among other sources, also on the interpretation of Saami substrate place names. The other studies mentioned above have only added details (which are, naturally, interesting and important in themselves, too) to the overall knowledge of place names of Saami origin. The situation

² Saami substrate toponyms have also been discussed in numerous local and provincial histories, but most of these treatments can be characterised as methodologically inadequate: opaque Finnish place names have been arbitrarily compared to phonologically similar Saami words, taking no heed of historical phonology or onomastic typology. Symptomatically, the Saami words cited in such references are frequently wrongly spelled, and which Saami language they belong to is often



is currently changing though: a comparative analysis of several geographically widespread Saami substrate name types in Finland and northern Russia is provided in SAARIKIVI (2004), and a detailed examination of the Saami substrate nomenclature in central and souhern Finland is being prepared by the present author (A. AIKIO, in preparation).

Loanwords of Saami origin in the Finnish dialects have been subject to more thorough study than loan names, especially during recent decades. As this paper concentrates on questions of toponymy, only references to the relevant publications are given here. The reader interested in the subject will find further information in ÄIMÄ 1908, T. ITKONEN 1957: 16–23, 52–59, 77–84, 1993a, 1993b, WICKMAN 1968, E. ITKONEN 1970, VALONEN 1971, O. KORHONEN 1979, 1982: 61–81, KOPONEN 1988, 1996, KOIVULEHTO 1989: 47–48, SÖDERHOLM 1991, A. AIKIO 2001. A summary and assessment of previous research on Saami loanwords, as well as several new etymologies, is provided in A. AIKIO 2002 (in North Saami). For a literary survey and a bibliography of the research on Saami place names in general the reader is referred to RYDVING 1995.

During the last three decades, the debate on the origin of the Finns and the Saami and on Uralic prehistory in general has become very lively and some significant advances in linguistics and archaeology have been achieved (see GALLÉN 1984, FOGELBERG 1999, CARPELAN—PARPOLA—KOSKIKALLIO 2001 for papers from the most important congresses on these themes). One could even say that there has been an influx of theories on the origin of the Finns and the Saami, especially compared to the sixties, when there was little discussion on the subject and indeed very few researchers actively working on questions related to ethnic history. But in spite of this progress, the current trends in research must be criticised for being too heavily oriented towards geographically and temporally far-reaching models. There are still considerable gaps to be filled in basic linguistic research, especially in substrate studies. As VAHTOLA (1999) and S. AIKIO (1999) point out, our knowledge of place names of Saami origin is still in many areas almost entirely lacking. SALO's recent paper (2000) should be seen as an indication that new studies in this field may cause many questions to be reassessed.

2. Methodology

The purpose of this article is to develop a critical methodological framework for the future study of Saami substrate toponyms in Finland. The place

left unmentioned. As an example of such a haphazard treatment one can mention VAHTOLA (1996: 135–137), wherein numerous such badly substantiated Saami etymologies are presented for place names in the municipality of Rovaniemi.



names treated in the subsections below are merely meant to serve as examples of each methodological issue discussed; the intention is to apply the presented framework in a more detailed analysis of Saami substrate nomenclature in central and southern Finland in a forthcoming publication (A. AI-KIO, in preparation). The presented examples include both well-known comparisons established by previous research and new etymologies. The new cases have been discovered during research in the data in the Archive of Names (Fi. *Nimiarkisto*, containing approximately 2,250,000 file cards on Finnish place names) at the Research Institute for the Languages of Finland, and by conducting various computer searches in the nomenclature included in the NLS Topographic Database (containing approximately 800,000 place names) published by the National Land Survey of Finland. In connection with each name, the municipality in which the name occurs is mentioned in parentheses. For exact localisation and further information the reader is referred to the primary data in the archive and the database.

2.1. Sound correspondences and phonological nativisation

A basic phonological criterion is that place names in central and southern Finland must be compared to reconstructed Proto-Saami. Comparisons to present-day forms which have become phonologically divergent during the independent development of the Saami languages can obviously lead to erroneous results. On the other hand, operating with hypothetical divergent developments in unattested donating idioms would allow ad hoc creation of sound laws, which would make it too easy to construe "Saami" etymologies for obscure Finnish place names. Of course, the Saami languages of southern Finland underwent various divergent courses of development, but because there are no direct attestations of these extinct idioms, reconstructed Proto-Saami is the best approximation to them that we have. Thus, Proto-Saami reconstructions are given as loan originals below, but this is not meant to imply that the place names in question were actually borrowed from Proto-Saami; instead, Proto-Saami (hence forward PS) is used as a meta-language representing the extinct and unattested Saami idioms of central and southern Finland.

The phonological correspondence between the Finnish place name and the reconstructed (Proto-)Saami loan original must agree with systematic and natural patterns of phonological nativisation. The patterns need not only be phonetically motivated, as several other factors also influence sound substitution in loanwords. When dealing with borrowings between Saami and Finnic, particular attention must be paid to the occurrence of a special method of sound substitution, referred to here as 'etymological nativisation'. In Finnic-Saami language contact situations speakers do not always substi-



tute the phonetically closest native equivalents for foreign sounds in the donating language. Instead, there is a tendency to conform borrowings to the patterns of regular sound correspondence that occur in cognate words. This is due to the large amount of Finnic-Saami cognate vocabulary which, combined with widespread bilingualism among the Saami, has led the speakers to recognise the regular correspondences. As a result, new loanwords are frequently adapted to these (probably subconsciously) observed patterns.³

For example, the sound correspondence Finnish $i \sim PS *\ddot{e}$ can be observed in numerous cognate pairs such as Finnish nimi 'name' ~ PS *nëmë 'id.' (> Northern Saami [hereafter SaaN] namma), Finnish silmä 'eye' ~ PS *čëlmē 'id.' (> SaaN čalbmi), Finnish pilvi 'cloud' ~ PS *pëlvë 'id.' (> SaaN balva), Finnish rinta 'chest, breast' ~ PS *rëntē 'id.' (> SaaN raddi). This situation gave rise to the pattern of substituting PS *ë for Finnic *i in old borrowings, such as SaaN vašši 'hatred' (< PS *vëšē < Pre-Finnic *viša 'id.' > Finn. viha), SaaN šaldi 'bridge' (< PS *šëltē < Proto-Finnic *silta 'id.' > Finn. silta), SaaN šallat 'smooth' (< PS *šëlëtē < Proto-Finnic *siletä 'id.' > Finn. sileä). As borrowed words conformed to this correspondence, the resulting new instances served as new models, upholding and strengthening the pattern. Eventually PS *ë was opened to become a in many Saami languages, including North Saami, and this resulted in the substitution pattern Finnish i > Saami a in borrowings, despite the fact that the vowels i and aoccupy opposite corners of the vowel space. Examples of late loanwords displaying this substitution include SaaN haddi 'price' < Finnish hinta 'id.', SaaN hapmu 'craving (for a certain food)' < Finnish himo 'lust, desire, craving', SaaN barta 'cabin' < Finnish pirtti 'id.' (< Russian). These borrowings must have been adopted after the break-up of Proto-Saami, as shown by the preserved h- (Proto-Saami had no phoneme h) or be of Russian origin.

The etymological substitutions observed in the Finnish loanwords in Saami are relevant also for the analysis of Saami substrate toponyms in Finland,

³ Etymological nativisation has been little discussed in linguistic literature. R. L. TRASK's *Dictionary of historical and comparative linguistics* (2000, s.v. *loan nativisation*), however, recognises the phenomenon and defines it as follows: "When there is widespread bilingualism between speakers of two closely related languages, speakers will often be keenly aware of the phonological and morphological correspondences holding between the two languages. In such circumstances, a loanword may be nativised by replacing each of its segments with the regularly corresponding segment in the borrowing language... As a result, the borrowed items may be indistinguishable from native formations". According to TRASK, the names 'loan nativisation', 'loan adaptation' and 'correspondence mimicry' have been applied to the phenomenon. The term 'etymological nativisation' which stems from H. H. HOCK (1986: 393–394) seems particularly apt.



because the substitution patterns are mirrored in borrowings in the opposite direction. Thus, even the relatively late Saami loanwords in the Far-Northern dialects of Finnish usually show Finnish i in the place of PS * \ddot{e} / SaaN a: compare, for example, Finnish kika 'lump of frozen snow' < PS * $\ddot{c}\ddot{e}k\bar{e}$ (> SaaN $\check{c}ahki$), Finnish kivalo 'mountain ridge; wilds, wilderness' < PS * $\ddot{c}\ddot{e}v\bar{e}lk\bar{e}$ 'mountain ridge; spine' (> SaaN dial. $\check{c}avil$), Finnish nili 'small storage house built on one pillar' < PS * $\dot{n}\ddot{e}l\ddot{e}$ (> SaaN njalla).

Even though etymological substitution patterns are very frequent in borrowings between Finnic and Saami, in most cases their application is not predictable. The substitution models provided by cognate vocabulary compete with a principle of phonetic nearness and thus there often exist two substitutes for a given vowel. For example, cognate words display the correspondence Finnish $u \sim PS *o (> SaaN o)$, compare, for instance, Finnish muna 'egg' ~ SaaN monni id., Finnish suku 'family, kin' ~ SaaN sohka id., Finnish tuli 'fire' ~ SaaN dolla id. The same correspondence is attested in relatively late loanwords: cf. Finnish hupa 'scanty, short-lasting' > SaaN hohpi id., Finnish ruma 'ugly' > SaaN ropmi id., Finnish tapaturma 'accident, mishap' > SaaN dáhpedorbmi id. However, there are also loanwords which on distributional grounds are clearly older, but which show the substitution Finnic *u > PS *u: compare Finnish tulva 'flood' > SaaN dulvi 'id.', Finnish uksi 'door' > SaaN uksa 'id.', Finnish kuru 'gorge' > SaaN gurra 'id.', Finnish muista- 'to remember' > SaaN muiti- 'id.'.

The existence of two alternative methods of sound substitution has important implications for the chronological interpretation of loanwords. When one phoneme in the source language shows two environmentally unconditioned substitutes in the target language, the situation is normally interpreted as implying either two different phases of borrowing or the former existence of two distinct source idioms. Thus, WIKLUND (1911-1912: 112) and KALIMA (1912: 117), in accordance with the Neogrammarian framework of their time, saw the correspondence Finnish $i \sim \text{Saami } *\ddot{e} \text{ in loanwords as evidence}$ of a very early borrowing that had taken place before the development of Pre-Saami $*i > PS *\ddot{e}$. The latter interpretation is chosen by SALMINEN (1999: 15). He notes that Finnish place names of the shape Pisa-, which have been compared to the Saami word for 'sacred', seem to point to a donating idiom exhibiting an archaic form *pisa instead of the PS form *pësē (> SaaN bassi 'sacred'). On these grounds, he suggests that the languages spoken by the medieval 'Lapps' in southern Finland were not necessarily Saami, but rather transitional idioms that could not properly be classified either as Finnic or as Saami.

Nevertheless, a single example suffices to illustrate the problem involved in both of these interpretations. PS *ë developed in certain positions into Inari

Saami a(a), and there are examples of the substitution rule SaaI a(a) > Finnish i in the borrowed place names of the Inari Saami area: compare, for example, SaaI Aanaar > Finnish Inari, SaaI $Avveel/juuh\hat{a}$ > Finnish Ivalo/joki, SaaI $Kaareeh/juuh\hat{a}$ > Finnish Kirakka/joki. These borrowings must be quite recent because the Finnish settlement in Inari only dates back to the 18th century. It would be equally impossible to use such names as evidence of archaic 'transitional' idioms because they are known to derive from Inari Saami. Etymological nativisation offers the only realistic explanation for such data.

A similar example is involved in the dual substitution of Finnish $uu \sim u$ for PS *u in substrate toponyms reflecting PS *kukkē(-s) 'long' (< Pre-Saami *kūkka[-s]). Here, too, lake names such as Kuukas/järvi (Ranua), Kuukkainen (Jyväskylä) and Kuukka (Uurainen) deceptively seem to point to an archaic Pre-Saami form *kūkka(-s), as opposed to forms such as Kukas/järvi (Mäntyharju / Savitaipale) and Kukkanen (Pihtipudas) which show a short vowel in the first syllable. Thus, RÖNNBERG (1980) analyses these substitutions as reflecting two chronologically distinct phases of borrowing. However, the variant reflexes merely seem to mirror the competition between two methods of phonological nativisation. This interpretation is supported by the fact that the geographical distributions of the two variants do not show any pattern; forms with both short and long vowels are attested in northern and southern Finland alike.

Due to etymological nativisation it is often difficult to determine the age of individual borrowings between Saami and Finnic, at least on purely phonological grounds. Moreover, the existence of etymological nativisation does not of course in itself eliminate the possibility of Pre-Saami borrowings or transitional idioms. However, it implies that the exact chronological phase or genetic identity of the source language cannot be determined by simply looking at a single substrate name type such as Pisa- or Kuukas-. Instead, it is necessary to examine whether the different reflexes of one phoneme show geographical distribution pattern. If such search only reveals inconsistent variation, as is the case with the names reflecting PS $*kukk\bar{e}(-s)$ 'long', competition between two strategies of sound substitution provides the most plausible explanation.

⁴ For the sake of clarity, in this paper the border of the specific and the generic is indicated with a slash and inflectional endings are separated with a hyphen. Derivativational suffixes and formants (see chapter 2.3.) are not indicated. A list of the Finnish and Saami topographic nouns that occur as generics in the place names discussed is provided as an appendix.



2.2. Lexical structure

The majority of Saami and Finnish topographic place names fall into one structural type, a compound consisting of a specific and a topographic noun functioning as a generic. Other types also occur, mainly monomorphemic or derivative names based on a single lexical root, but they are not as frequent. It is important to note a general typological feature of the compound place names borrowed from Saami into Finnish: instead of borrowing the entire name directly, the components of the name have nearly always been treated separately. The following three main structural types can be distinguished.

a) The specific is borrowed but the generic is replaced with a corresponding Finnish topographic noun: for example, *Kukkas/järvi* (Kuhmoinen) < PS *kukkē-s 'long (attributive form)' (> SaaN guhkes) + Finnish järvi 'lake'; Elli/vuori (Karkku) < PS *ëlë 'high (attributive form)' (> SaaN alla) + Finnish vuori 'hill, mountain' (this comparison derives from R. L. Pitkänen, p.c.); Sapsa/lampi (Alavus) < PS *šāpšë 'whitefish' (> SaaI šapšâ) + Finnish *lampi* 'pond, small lake'. This is the most common type. A secondary genitive suffix is also often added in Finnish, for example, Konta-n/järvi (Pihtipudas) < PS *kontē 'wild reindeer' (> SaaN goddi) + Finnish -n GenSg suffix + Finnish järvi 'lake'; Raasi-n/järvi, -joki (Yläne) < PS *rāsē 'grass' (> SaaN rássi) + Finnish -n GenSg suffix + Finnish järvi 'lake'. In Saami the genitive normally occurs only in place names indicating ownership or usufruct or in derived names with another place name in the specific position. The genitive suffix in substrate toponyms appears to be a hypercorrect addition which serves to make the opaque borrowed name appear structurally more native-like or natural in Finnish.

b) The specific is borrowed but the generic is dropped: for example, (Iso-, Pieni-, Salmi-)Kuukka (three lakes; Uurainen) < PS *kukkē(-s) 'long' (> SaaN guhkki, attributive form guhkes); Änkää (a forest area; Nummi) < PS *āŋkēs 'hunting fence with nooses or pit traps placed in the gaps (for trapping wild reindeer)' (> SaaN ákkis, I äägis); Naakkima (a lake; Haukivuori / Virtasalmi) < PS *ńākë-mē 'sneaking, covertly approaching (e.g. game)' (> SaaN njáhka-n); Jänky (a lake surrounded by bogs; Savitaipale) < PS *jeaŋkē 'bog' (> SaaN jeaggi). The Saami loan originals of these names must have had a topographic noun as a generic, because the present-day Saami place name system does not allow monolexical names of the type SaaN *Guhkki 'long', *Ákkis 'hunting fence', *Njáhkan 'sneaking', etc. A monolexical name consisting of a topographic noun with a wrong denotation (e.g., *Jeaggi 'bog' as the name of a lake) would presumably be unacceptable in any language. The ellipsis of the generic may also have occurred later in Finnish and not during the borrowing process itself.

c) A Finnic topographic noun is attached to a borrowed element which must have functioned as the generic in the donating language: for example, <code>Jaura/järvi</code> (Kuhmo) < PS *<code>jāvrē</code> 'lake' (> SaaN <code>jávri</code>) + Finnish <code>järvi</code> 'lake'; <code>Kotkuu-n/niemi</code> (Enonkoski) < PS *<code>kuotkōj</code> 'isthmus; promontory' (> SaaN <code>guotkku</code>) + Finnish -n GenSg + Finnish <code>niemi</code> 'headland'; <code>Jängä-n/suo</code> (Uukuniemi) < PS *<code>jeaŋkē</code> 'bog' (> SaaN <code>jeaggi</code>) + Finnish -n GenSg + Finnish <code>suo</code> 'bog'; <code>Vuonamo-n/lahti</code> (Keitele; Kivijärvi) < PS *<code>vuonë</code> 'fjord; large, narrow bay' (> SaaN <code>vuotna</code>) + -mo, a formant of unclear background + Finnish -n GenSg + <code>lahti</code> 'bay'. In some cases the loan original may have been a monolexical name in Saami, but this can hardly account for all cases of this type.

The structural adaptation that the Saami substrate toponyms have undergone in Finnish contrasts starkly with many other cases of substrate influence. The great majority of Saami substrate names are hybrids consisting of a borrowed specific and a Finnish generic. Nevertheless, the borrowing of compounded names in their entirety is very common elsewhere, for example, in Finnic substrate toponyms in the northern dialects of Russian (see e.g. SAARIKIVI, this volume). PITKÄNEN (this volume) reports that nearly 60 per cent of Finnish substrate toponyms in Finland Swedish belong to this type. In contrast, I have failed to find a single clear example of this type of Saami loan name in southern and central Finland.

Whatever the reason for this typologically unusual pattern of structural nativisation may be, it has a crucial methodological implication. The analysis of toponym formants and pseudolexemes which reflect source language generics has yielded highly informative results in Russian research (see e.g. MATVEEV 2001). However, this method appears to lead to a dead end in the study of Saami substrate toponyms in Finland because the Saami generics have either been dropped or Finnish ones have been substituted for them. Thus, in the analysis of compound names one must concentrate on the identification of the lexical elements which occur as specifics.

2.3. Suffixal morphology and toponymic formants

A 'toponymic formant' can be defined as any place name element which structurally resembles a derivational suffix, regardless of whether it has any application in word formation outside the nomenclature (cf. PODOL'SKAYA 1988 s.v. *toponimnyj formant*). In etymological onomastics it is crucial to make a distinction between formants and derivational suffixes, for two reasons. Firstly, in addition to unambiguous cases of derivational suffixes, place names frequently contain suffix-like elements whose status in the morphological system of the language is less clear. A well-known example of a widespread and productive Finnish toponymic formant is *-nkV*, whose



role in appellative formation is so marginal that it is questionable whether it can be called a true derivational suffix at all. Secondly, etymological analysis of place names reveals that formants are often heterogeneous in origin. Thus, the term 'formant' refers to synchronic name structure and implies nothing with respect to the diachronic background, whereas the term 'suffix' also has an etymological dimension via the process of word formation.

Occasionally formants in substrate names can be quite reliably identified as reflexes of certain Saami derivativational suffixes. An example is provided by names of uppermost lakes such as *Elimys/järvi* (Kuhmo) and *Elämyö* ~ *Elämyö-n/järvi* (Kuhmalahti) (< analogically from NomSg **Elämys*: oblique stem **Elämye-*, or the like) which can be matched with PS **ëlē-mus(s)ë* 'uppermost' (> SaaN *alimus*), showing reflexes of the Saami superlative suffix *-*mus(s)ë*. However, other examples of this substrate name type demonstrate that suffixal morphology has often been adopted in a phonologically distorted form. Thus, no trace of *-*s(s)ë* occurs in the lake names *Elimo* (Lieksa) and *Elimo-n/järvi* (Ilomantsi). The lake name *Ilmii-n/järvi* (Köyliö) shows a morphophonological trace of the **s* in its long vowel (**Ilmis: Ilmii-*), but the suffixal vowel is curiously illabial and the vowel preceding the suffix has been syncopated. A parallel for the syncope occurs in the pond name *Ilmus/lampi* (Suomenniemi), with an otherwise expected reflex of the Saami superlative suffix.

These slight phonetic inconsistencies may in part reflect phonological innovations in the donating Saami languages. It is entirely possible that vowels had been illabialised and syncopated or final sibilants lost in extinct varieties of Saami, even though this can never be known for certain. (As for syncope and illabialisation, cf. e.g. PS $*\ddot{e}l\ddot{e}mus(s)\ddot{e} > \text{SaaSk } \hat{a}\hat{a} \ lm\tilde{o}s; \langle \tilde{o} \rangle$ indicates a central unrounded vowel in the Skolt Saami orthography.) However, later irregular developments in Finnish must also have played a role. For instance, the name of lake $El\ddot{a}my\ddot{o}(-n/j\ddot{a}rvi)$ in Kuhmalahti mentioned above is also attested in the form $Elamo-n/j\ddot{a}rvi$, which no longer shows any trace of the sibilant *s in the Saami superlative suffix. The irregular development

⁵ Some names of this type can also reflect another PS superlative suffix *-māńčë (? ~ *-muńčë) which combines only with spatial noun roots. In present day Saami the suffix has an irregular labial vowel (e.g. SaaN -muš) which has developed due to the analogy of the more common superlative suffix *-mus(s)ë. The PS form *ëlē-māńčë 'uppermost' accounts at least for the names of the town *Ilomantsi* and the adjacent lake *Ilomantsi-n/järvi* (Ilomantsi). The -a- in the third syllable suggests that the extinct Saami language spoken in the area did not possess the analogical labial vowel. The Saami etymology of *Ilomantsi* is discussed in more detail in A. AIKIO (2003).

Elämyön- > Elamon- was probably motivated by a transition towards a less marked phonotactic structure. On the other hand, factors such as folk etymology may also cause secondary developments. For instance, the present forms of the name of lake $Elämä/järvi \sim Elämäinen$ (Pihtipudas) are quite clearly the result of contamination with Finnish elämä 'life' ($\leftarrow el\ddot{a}$ - 'to live'). The transcriptions of this name in historical records from the 16th to the 18th century point to an original form * $El\ddot{a}mys$ (NISSILÄ 1964: 78–79), which accords perfectly with the Saami superlative suffix. (Note that NISSILÄ [o.c.] actually derives the lake names of the type El- from the word family based on Finnish $el\ddot{a}$ - 'to live'; this etymology is, however, clearly erroneous.)

Folk etymology can also lead to lexical restructuring, as in the name of the town *Eli/mäki* in southeastern Finland (this etymology derives from JOHAN-NA HALONEN, p.c.). In its present form the name contains the generic *mäki* 'hill' (oblique stem *mäe-*). Historically, however, the original form is *Elimä*, and the current form resulted from a reinterpretation of the formant *-mä*. The name of the village is originally a retrograde formation, and the primary name belonged to the adjacent lake *Elimä/järvi*, which is now drained, but once was the uppermost in its water system. A similar reinterpretation of the formant *-mä* has also occurred in a few other opaque Finnish place names as well, e.g. *Mynä/mäki* < *Mynämä*, *Längel/mäki* < *Längelmä*.

Formants, unlike derivational suffixes, are often heterogeneous in origin. A group of names containing a given formant often includes both native formations and loans, and in individual cases it may be difficult to determine the diachronic background of the formant. For instance, the Finnish toponymic formant -mo combines rather freely with Finnish noun bases: compare, for example, Aittamo (aitta 'storehouse; granary'), Honkamo (honka 'old pine tree'), Huhtamo (huhta 'burn-beaten area'), Kaitamo (kaita 'narrow'), Laitamo (laita 'border, fringe'), Rantamo (ranta 'shore'), Sorsamo (sorsa 'wild duck'), Sotkamo (sotka 'scaup, pochard'). On the other hand, in substrate names -mo (~-mV) may reflect several Saami suffixes. (Note that it is usually not useful to distinguish formants in substrate names on the basis of their vowels, as unstressed vowels have been rather unstably substituted for in loan names.) In names such as Elimo, Elimo-n/järvi, Elamo-

⁶ The element -mo attached to noun bases in Finnish place names must be analysed as a 'formant' and not a 'derivativational suffix' (cf. HAKULINEN 1979: 169–170) because its role in appellative formation is negligible. Denominal nouns of the type -mo are extremely rare and even this group includes topographic nouns (e.g. ojamo 'ditch-side' \leftarrow oja 'ditch') which may have been influenced by toponyms.



n/järvi, Elimä/järvi, etc. the formant -mV represents a reduced relic of the Saami superlative suffix. However, -mV can also reflect the Saami action noun suffix *-mē in deverbal names. An example is provided by lake names such as Kiesimä (Rautalampi), Kiesimä/järvi (Leppävirta), Kiesimen/järvi (Pylkönmäki) < PS *keasē-mē(-jāvrē), based on *keasē- 'to pull, drag (e.g. a fishing net)' (> SaaN geassi-). Another case occurs in the lake name Kuolimo (Savitaipale/Suomenniemi), which probably reflects PS *kuolējē-mē, based on PS *kuolējē- 'fish (verb)' (> SaaN gulle-), itself a derivative of *kuolē 'fish (noun)' (> guolli); this large lake is known for its rich stock of fish.

Nonetheless, in substrate names the formant -mo (-mV) also combines with Saami noun bases: cf.compare Vuonamo-n/lahti (Kivijärvi; Keitele), two large and narrow bays (< PS *vuonë 'fjord; large, narrow bay' > SaaN vuotna); Kukkamo (Keuruu), a longish lake (< PS *kukkē(-s) 'long' > SaaN guhkki, guhkes); Piskamo/järvi (Kuusamo), a longish and rather narrow lake (< PS *pëskē 'narrow' > SaaN baski); Ilamo-n/vuori (Hattula), a hill (< PS *ëlë 'high [attrib. form]' > SaaN alla); Pisamo (Kuusamo), a lake (< PS *pësē 'sacred' > SaaN bassi); Tuljamo (Lempäälä), a lake (? < PS *tuoljē 'skin, hide' > SaaN duollji); Siitama (Orivesi), a village (either < PS *sijtë 'Saami village' > SaaN siida, or < PS *siejtē 'rock or stone idol' > SaaN sieidi). What is puzzling about these cases is that in present-day Saami there is no suffix of the shape PS *-mV which forms denominal nouns. It is true, there are a couple of denominal place names formed with a toponymic formant *-mē, for example, the North Saami lake name Stuorgoahtin (Enontekiö) < stuor(ra) 'big' + goahti 'tent' + formant *- $m\bar{e}$, but such cases are very rare. Thus, the extinct Saami languages once spoken in central and southern Finland may have possessed patterns of word or name formation that are only marginally retained in their surviving sister languages in the north. On the other hand, these formants can also reflect secondary processes of suffixation which took place either during the borrowing phase or later in Finnish. In any case, the Saami etymologies of many such names can hardly be doubted, as they often accord well with the nature of the places in question (see 2.4.): the bays called Vuonamonlahti are narrow and fjord-like, the lakes Kukkamo and Piskamojärvi are long and rather narrow, and the hill *Ilamonvuori* is the highest point in the area.

Many formants with labial vowels also lack counterparts in Saami. The formant *-iO* is attested in a number of substrate name types. *Siitiö-n/vuori* (Luumäki Miehikkälä), a hill with a cliff on one side, quite evidently reflects PS *siejtē 'rock or stone idol'. The river name *Köyliö-n/joki* might derive from PS *keavlē 'bow, curve; circle, halo' (> SaaN geavli), as suggested by SALO (2000: 38) on the basis of JAAKKOLA (1911). The meandering course

of the river would provide a naming motive, and parallels are provided by two similar rivers called *Köyli-n/joki* in southeastern Finland (Orimattila; Artjärvi). The lake names *Ala-Kesiö*, *Ylä-Kesiö* (Heinola) might reflect PS *keasē- 'pull, drag' in one way or the other (cf. Kiesimä, etc. above). A formant -oi (~ > -oo) occurs in, for example, Siitoi-n/mäki ~ Siitoo-n/mäki (Nummi-Pusula), a rocky hill with cliffs on several sides, and Siitoi-n/mäki (Ypäjä), a small rock (< PS *siejtē 'rock or stone idol').

There are several explanations for the occurrence of etymologically opaque formants in Saami substrate toponyms. Firstly, as suggested above, the names can reflect types of derivatives which are not attested in present-day Saami. Secondly, it is likely that various processes of restructuring, secondary suffixation, and phonological reduction that are now beyond reconstruction have altered the shape of many individual names. Thirdly there is also one feature in the Saami place name system itself which has probably contributed to the emergence of obscure toponym formants. In Saami it is not rare for a place name to contain more than two lexical elements. Names including three lexical roots are frequent, and even names containing four or five lexical roots are attested. The following North Saami examples have been taken from the municipality of Utsjoki:

- Buoiddesguolle/jávri < buoiddes 'fat (attrib. form)' + guolli 'fish' + jávri 'lake', that is, 'fat fish lake'
- Baikabollo/čohkka < baika 'shit' + bollu 'wooden bowl' + čohkka 'mountain top', that is, 'shit-bowl mountain'
- $-\acute{A}v \check{z}egea\check{s}/oaivi < \acute{a}v \check{z}i$ 'gorge, ravine' + $gea\check{z}i$ 'end (GenSg)' + oaivi 'roundish mountain',that is, 'the mountain at the end of a gorge'
- Leakšagoađ/oaivi < leakšá 'bogland in the uplands' + goađi 'tent; peat hut (GenSg)' + oaivi 'roundish mountain', that is, 'the mountain near the peat hut Leakšagoahti ('bogland hut')'
- Gaskaniitojohkageaš/oaivi < gaska 'middle' + niitu 'meadow' + johka 'river' + geaži 'end (GenSg)' + oaivi 'roundish mountain', that is, 'the mountain top near the sources of the river Gaskaniitojohka ('middle meadow river')'</p>
- Njállabiedjojohkageaš/oaivi < njálla 'arctic fox' + biedju 'den' + johka 'river' + geaži 'end (GenSg)' + oaivi 'roundish mountain', that is, 'the mountain top near the sources of the river Njállabiedjojohka ('arctic fox's den river')'</p>

Because Finnish does not permit name structure of this kind, such names tend to become more or less irregularly shortened when they are borrowed into Finnish. What is more, the middle lexemes of long names tend to become phonologically reduced even in Saami, especially in derived names where the middle lexeme is a topographic noun. The following North Saami



place names in the municipality of Utsjoki serve as examples of such reduction:

- Áhkojár/gielas < áhku 'grandmother (GenSg)' + jávrri 'lake (GenSg)' + gielas 'longish mountain ridge', that is, 'the mountain ridge near lake Áhkojávri ('grandmother's lake')'</p>
- Aškkasjoh/jávri < aškkas 'sheet ice' + joga 'river (GenSg)' + jávri 'lake', that is, 'the lake along the river Aškkasjohka ('sheet ice river')'
- Goahppelaš/johka < goahppil 'wood grouse' + ávžži 'gorge, ravine' GenSg
 + johka 'river', that is, 'the river that flows through the gorge Goahppelávži ('wood grouse gorge')'
- Fiellogah/skáidi ~ Fiellodah/skáidi < fiellu 'board' + geaðggi 'rock, stone' GenSg + skáidi 'area between two joining rivers', that is, 'a skáidi where a board-shaped boulder is situated'
- Beahcel/johka ~ Beahcelah/johka < beahci 'pine' + leagi 'river valley'
 GenSg + johka 'river', that is, 'the river that flows in the valley Beahceleahki ('pine valley')'.

The synchronic status of the reduced components varies from a transparent shortened form (e.g. $j\acute{a}r$ - < $j\acute{a}vrri$ 'lake', joh- < joga 'river') to complete opacity (e.g. -l- << leagi, -dah- << geadggi). The truncation of certain central topographic terms (e.g. $j\acute{a}vri$ 'lake', johka 'river', $nj\acute{a}rga$ 'headland', $v\acute{a}rri$ 'mountain') is actually obligatory, but in other cases the process is unsystematic and affects only individual names. Of course, irregular phonological reduction of toponyms is not in itself a particularity of Saami, as lexemes become converted into opaque toponymic formants in much the same way in many other languages, too. However, the details of such processes are language-specific. For instance, in Estonian, generics are highly susceptible to reduction (KALLASMAA 2000: 28–62), but in Saami, generics almost never become reduced—in contrast, reduction and truncation affect almost exclusively the specifics of derived names.

It is evident that when such reduced forms are borrowed into Finnish they produce etymologically opaque forms that can at best only be partially explained, if the Saami name is not attested. For example, the name *Goahppelaš/johka* has been borrowed into Finnish in the form *Kuoppilas/joki*. If an identical toponym was encountered in central or southern Finland, it would be quite reasonable to assume that it contained the PS word *koappēlē 'wood grouse', but it could no longer be deduced that the formant -(a)s is a reduced relic of the PS noun *āvčē 'gorge, ravine'—it might, in fact, appear more plausible to mistakenly analyse the -s as a reflex of the Saami deminutive suffix: cf.compare the homonymous deminutive form goahppelaš 'little wood grouse'. Thus, a southern Finland substrate name such as Siitoin/mäki might ultimately reflect, for instance, PS *siejtē-oajvē (*siejtē 'rock or stone

idol' + $*oajv\bar{e}$ 'head; roundish mountain'), but there is no way to verify or falsify exact reconstructions of this kind.

Thus, it is necessary to reckon with various processes of suffixation, restructuring and reduction both in the source and the target language when analysing Saami substrate toponyms in Finland. Because of such processes it is a common situation that the Saami origin of a given toponym (or strictly speaking, the Saami origin of one of its lexical components) can be verified, but the inner structure of the original name can no longer be reconstructed. Consequently, the morphological and structural criteria for acceptability cannot be set as strictly as the phonological ones; the 'total accountability principle' of etymological research cannot be strictly applied in the case of substrate toponyms. The approach to the material must be predominantly lexical: the identification of the Saami lexemes that occur in the substrate names is most crucial.

Then again, while it is to be expected that many Saami substrate toponyms contain the kind of obscured morphological material discussed above, this does not mean that one may accept any kind of morphological arbitrariness in the etymologies. At least the segmentation between the root and the suffixes or formants must be based clear on phonotactic arguments. On the basis of Saami root structure a root must contain at least 1) an optional consonant initium, 2) a vowel centre, 3) a consonant or consonant cluster following the vowel (the so-called 'consonant centre'), and 4) a second syllable vowel, unless deleted before a vowel-initial suffix or via syncope. Thus, one can accept such segmentations of place names as *Siita-ma*, *Seitt-ye*, *Siit-iö-n/vuori*, but arbitrary morphological segmentations would easily lead to haphazard root etymologising.

2.4. Denotative and systemic criteria

No semantic correspondence in the true sense of the term can exist between a proper name and its assumed loan original. Because etymologically linked words are normally identified on the basis of both their form and their meaning, this "lack of semantics" produces a methodological problem. It is naturally not sufficient merely to compare place names to formally similar Saami lexical items. This problem can be avoided by applying two substitutive criteria, which can be called the 'denotative' and the 'systemic' criteria.

The denotative criterion means that the lexical content of the reconstructed loan original must be compared with the characteristics of the place the name denotes; in some cases the naming motive can be reliably identified. In an ideal case a mere look at a detailed map, such as The Basic Map of Finland on a scale of 1:20 000, suffices to reveal the motive. A couple of examples can be given. Finnish lake names of the shape *Kukas/järvi*, *Kuk-*



kas/ järvi, Kukkanen, etc. all denote lakes of oblong form and thus match perfectly with PS *kukkē(-s) 'long' (see Illustration 1 for examples). PS *kuotkōj 'isthmus; narrow promontory' is reflected in names connected with promontories (Illustration 2). There are two large and narrow bays called Vuonamo-n/lahti in central Finland, which match well with PS *vuonë 'fjord; large, narrow bay' (Illustration 3). Lake names of the shape El-, Ildiscussed above (see 2.3.) typically denote lakes that are the uppermost in their water systems (Illustration 4), which matches perfectly with the semantics of the PS spatial noun root *ëlē- 'high, up, above'.

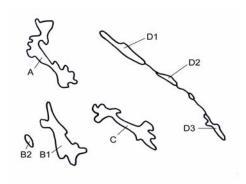


Illustration 1.

Lake names reflecting PS
*kukkē(-s) 'long'.
A) Lake Kukasjärvi
(Mäntyharju).
B) Lakes Iso-Kukkamo (1) and
Vähä-Kukkamo (2) (Keuruu).
C) Lake Kukkasjärvi
(Kuhmoinen).
D) Lakes Iso-Kuukka (1),
Pikku-Kuukka (2) and Salmi-

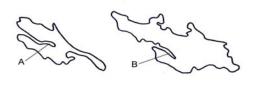


Illustration 2.

Kuukka (3) (Uurainen).

Names reflecting PS *kuotkōj 'isthmus; promontory'.

A) Kotkuunniemi Headland in the lake Saarijärvi (Enonkoski).

B) Kotkonniemi Headland in the lake Pyhäjärvi (Hauho).

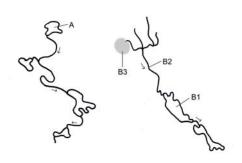


Illustration 3.

Names reflecting PS * $\ddot{e}l\bar{e}$ - 'up, above', * $\ddot{e}l\bar{e}mus(s)\ddot{e}$ 'uppermost'.

A) Lake *Elimysjärvi* (Kuhmo). B) Lake *Ilajanjärvi* (1), the river *Ilajanjoki* (2) and the bog *Ilajansuo* (3) (Ilomantsi).

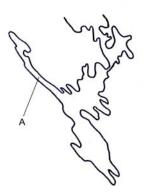


Illustration 4.

A name reflecting PS *vuonë 'fjord; large and narrow bay'.
A) The bay *Vuonamonlahti* in lake Nilakka (Keitele).

Also cliffs, rocks and screes are well indicated on The Basic Map, and this allows the verification of such etymologies as <code>Kelk/järvi</code> (a large lake with rocky shores; Luumäki) < PS *keaδkē 'stone, rock' (> SaaN geađgi), Päht/saari (a rocky islet; Haukivuori) < PS *pāktē 'cliff, rock' (> SaaN bákti), and <code>Rappaat/vuori</code> (a rocky hill surrounded by rough and rocky terrain; Konnevesi) < PS *rāppēs 'rough and rocky (of terrain)' (> SaaN ráhpis). Occasionally, useful information on the surrounding terrain can also be retrieved from the Archive of Names. For instance, the connection between the hill name <code>Vuontee-n/mäki</code> (Karkkila) and PS *vuontës 'sand' (> SaaI <code>vuodâs</code>) is verified, as a file card in the archive happens to state that the soil of the hill is sandy. However, information of this sort has only rarely been registered during the gathering of place names.

It is much more difficult to deduce the soil type from the basic map, but occasionally this can be done. For example, the connection between the name <code>Mellis/niemi</code> (a promontory in lake Nilakka; Pielavesi) and PS *miellē 'sandbank, steep bank of a river or lake' (> SaaN mielli) can be verified on the basis of the patches of open sand indicated on the shore of the adjacent lake. The etymology is also supported by the nearby Finnish place name <code>Santa/harju</code> ('sand-ridge'), which demonstrates that the soil in the area is sandy.

The Map of Quaternary Deposits (Fi. *Maaperäkartta*, published by The Geological Survey of Finland [Fi. *Maanmittaushallitus*]) occasionally provides useful information on soil type, even though the maps published at present systematically cover only the southernmost part of the country. For instance, the name of the strait *Vuontee-n/salmi* (Laukaa) can be safely derived from PS *vuontës 'sand' (> SaaI vuodâs), since according to the map the strait has silty terrain on both sides. However, the information is often not detailed enough to allow the verification (or the rejection) of an etymology, because soil maps naturally provide no description of what the earth's surface looks like. For example, the place names *Mello-n/mäki* (Imatra) and

Mella-n/niemi (Jyväskylä rural municipality) may well reflect PS *miellē 'sandbank, steep bank of a river or lake', but it is not possible to deduce whether there is any open sand or gravel on the ground in these places. On the Map of Quaternary Deposits the soil in the former place is classified as "ridges and other glacial deposits" and in the latter as "moraine".

There are also other types of etymologies where concerning which the naming motive could in principle be verified, but maps and other easily accessible sources are of little help. This is often the case when the etymology involves a word pertaining to vegetation; examples include Supa/vuori (a hill; Luopioinen) ? < PS *supē 'aspen' (> SaaN suhpi), Visu/lahti (a bay; Mikkeli) ? < PS *vëšō 'thicket' (> SaaSk vââšš), Listo-n/niemi (a headland; Konginkangas/Sumiainen) ? < PS *lëstō 'grove' (> SaaSk lâstt, SaaN *lastu in place names), Suuri-Läänä, Pieni-Läänä (two lakes; Pieksämäki/Virtasalmi) ? < PS *lāńā 'young birch; dense forest' (> SaaN látnjá), Poska-n/lähteet (springs; Teuva) ? < PS *pockë 'Angelica plant, used as food and medicine by the Saami' (> SaaN boska). Furthermore, one must also take into account that vegetation is liable to change over time, especially due to human activity. In any case, on typological grounds these etymologies are quite promising as they presuppose naming motives which are banal and unmarked. The last example seems likely also because Angelica plants typically grow near springs.

The verification of some etymologies might be possible on the basis of aerial photographs, but this could not be attempted for the purposes of this paper. However, in many cases the only solution may be to examine the place on site. Conducting field work of this sort might turn out to be interesting from other perspectives, too. For instance, rock formations with names reflecting PS *siejtē 'rock or stone idol' (> SaaN sieidi) most probably involve ancient Saami sacrificial sites, and it would at least be worthwhile documenting these places in photographs.

The application of the denotative criterion can naturally yield a positive or a negative result only in those cases in which the original naming motive involves a permanent characteristic of the place in question. Because only a minority of place names in any language are of this type, it would be excessive to require this level of exactness from an acceptable substrate etymology. Thus, it is necessary to find another way to sort out the probable cases in the remaining material to which the denotative criterion does not apply.

This sorting out is possible because place names form a model-based system, and a stratum of substrate names can thus be analysed as a set of fragmentary remains of a lost name system. The number of productive patterns of naming in any language is always rather limited, and thus only a small



fraction of a language's vocabulary frequently occurs in toponyms; the nomenclature has a basic vocabulary of its own which is not universal but language-specific. A thorough analysis of a sufficiently wide sample of material can reveal widespread substrate name types which reflect the toponymic basic vocabulary of the source language. Reliable results can be achieved by searching for substrate counterparts for those name types which are both common and archaic in the present-day Saami languages. Thus, the uncertainty caused by lack of semantic constraints on the level of individual etymologies is compensated for by the lexical and typological constraints that apply to the material as a whole.

Of course, it is not necessary to extend this requirement to every single borrowed name type that occurs in the material. All naming patterns are not locationally and temporally stable; the place name system is affected by both internally and externally motivated innovations like every other subsystem of language, and thus "dialectal differences" inevitably emerge through time also in the nomenclature if the language is spread over a sufficiently wide area (see e.g. KIVINIEMI 1977). An example of such a difference is provided by the names of the uppermost lakes of the shape El-, Il- discussed above. In present-day Saami the spatial noun root $*\ddot{e}l\bar{e}$ - 'up, above' is no longer used to denote the relative position of bodies of water, as it has been replaced in this function by the root $*p\ddot{e}j\bar{e}$ - 'up, above' (> SaaN badji-). However, the former root derives even from Proto-Uralic $*\ddot{u}li$ - 'up, above' and is thus clearly an archaism, whereas PS $*p\ddot{e}j\bar{e}$ - is of unknown origin. The Finnic cognate of PS $*\ddot{e}l\bar{e}$ -, Finnish $yl\ddot{a}$ - 'up, above', is still entirely productive in hydronymic formation.

The 'systemic criterion' thus determines that substrate names must be analysed as members of the place name system to which they once belonged. Instead of employing an atomistic approach which concentrates on the explanation of individual names, attention must be paid both to recurring name types and to the overall semantic and lexical coherence of the material. The corpus of loan names should show evidence of systematic naming patterns in the donating language which, in addition to individual name types, also involve wider semantic fields. The demonstration of such typologically natural patterns of naming is a fundamental methodological requirement in research on substrate toponyms.

The most fruitful results can probably be obtained via a two-way approach to the material. On the one hand, widespread Finnish name types of unclear origin are compared to the vocabulary and place name systems of the living Saami languages; on the other, substrate counterparts for name types that are widespread in Saami are sought for in the Finnish nomenclature. Once systematic correspondences between Finnish place name elements and the



Saami 'toponymic basic vocabulary' are established, it is possible to add also etymologies involving rarer name types, if they accord with the general patterns of naming that manifest themselves in the substrate nomenclature. A good example of such a general-level semantic pattern in Saami substrate toponyms is the frequent occurrence of terminology connected with wild reindeer. It is well-established that hunting wild reindeer was formerly an important means of livelihood for the Saami, and this correlation between the results of linguistics, ethnography and history thus lends support to the etymologies in question. Some examples from southern Finland can be given; this list is far from exhaustive.

- PS *kontē 'wild reindeer' (SaaN goddi) > Konta-n/kallio (Hollola), Kontan/järvi (Pihtipudas), Konne/vesi (Konnevesi/Rautalampi/Vesanto), Konni/vesi (Heinola), Konni-n/mäki (Leppävirta); der. *kont-ëjë- 'to hunt wild reindeer' ? > Konttima/lakso (Isojoki).
- PS *livë- 'rest of (wild) reindeer' (SaaN livva-) > Liva-n/niemi (Korpilahti), Liives/järvi (Längelmäki), Livo-n/saari (Askainen), Livu-n/niemi (Puumala).
- PS *toalvē 'trot of wild reindeer' (SaaN doalvi) > Tolva-n/selkä (Puumala), Tolvas/lahti, -niemi (Joutsa), Tolva-n/niemi (Savonlinna).
- PS *muojõē 'hunting of wild reindeer in winter' (SaaI myejði) > Moitus/maa (Vammala), Moijas/järvi (Keuruu), Moit/järvi (Luumäki), Moitan/oja (Kuusjoki).
- PS *āŋkēs 'hunting fence with nooses or pit traps placed in the gaps (for trapping wild reindeer)' (SaaN ákkis) > Änkäs/vuori (Hattula), Angas/lahti, -niemi (Ruoholahti), Änkää (Nummi-Pusula), Anges/selkä (Hartola).
- PS *čuolō 'hunting fence which leads wild reindeer into a trap or to hunters in wait; barrier which leads salmon into the a weir' (SaaN čuollu) > Juolunka/järvi (Kuhmo), Juolu (Ullava), Juolu/harju (Kälviä), Juolu/mäki (Sulkava) (see RÄISÄNEN 1995: 538–539).
- PS *pearttō- 'stalk game (especially wild reindeer?; verb)' (SaaS bearhtoe- 'hunt', SaaI perttu- 'stalk game', SaaN [der.] bearttuš 'a trap between two trees [for trapping a wild reindeer]') > Pertoma/niemi (Luumäki).
- PS *orēkkē 'reindeer bull in its second year' (SaaL årek, SaaN varit) > Urika-n/järvi (Hyvinkää).
- PS *ronō 'female reindeer which has not calved' (SaaN rotnu) > Runo/ vuori (Jämsä).
- PS *kolkōkkē 'exhausted male reindeer after the rutting season' (SaaN golggot) > Kolkut/niemi (Uukuniemi).
- PS *kërēkkē 'male wild reindeer ?' (SaaS girrehke 'three or four-year-old male reindeer', SaaI kaareeh 'male wild reindeer with long hair on the neck') > Kiraka-n/järvi (Perniö).

Many potential substrate toponyms are not as easily analysed from the systemic point of view, because also rare and semantically extraordinary types of place names exist in all languages. When such names have been borrowed into a new language during language shift the methods of etymological research are usually too limited to analyze them reliably for reliable analysis. To take an example, place names with verbal specifics are quite a productive category in Saami. Such names are typically based on unique or extraordinary events, and because of this they may contain action forms (with the SaaN suffix -(a)n) of a very diverse array of verbs. Compare, for example, the following North Saami place names:

- Deavkkih-an/johka < deavkkihit 'appear dimly for a brief moment' + johka 'river'
- Gávnnastadda-n/cahca < gávnnastaddat 'keep on laughing' + cahca 'narrow pass (e.g. between fjells)'.
- Hoigad-an/oaivi < hoigadit 'push, shove (once or suddenly)' + oaivi 'roundish mountain'
- Nollá-n/savu < nollát 'squat with one's clothes hanging down' + savu 'smooth waters in a river'
- Oađaš-an/jávrri-t < oađašit 'keep on sleeping' + jávrri-t 'lakes (NomPl)'
- Vanad-an/maras < vanadit 'laze, idle' + maras 'birch forest surrounded by bogs'.

A subject or an object can also be incorporated into a deverbal name:

- Bisso-čuolla-n/várri < bissu 'gun' + čuollat 'chop, hew to pieces' + várri 'mountain'
- Gádjá-riegád-an/jávri < Gádjá 'a woman's name (GenSg)' + riegádit 'be born' + jávri 'lake'
- Hearge-dušša-n/láttu < heargi 'reindeer bull' + duššat 'drown' + láttu 'pond'
- Hiitta-luhčče-n/várri < hiitta 'hind of trousers' + luhččet 'shit (verb) (when one has a loose stomach), mess up with diarrhoea' + várri 'mountain'
- Likse-biđđi-n/várri < liksi 'fish oil' + biđđit 'to fry' + várri 'mountain'
- Olmmoš-čuohppa-n/johka < olmmoš 'human' + čuohppat 'cut (up)' + johka 'river'
- Ruito-cuvke-n/čopma < ruitu 'cauldron' + cuvket 'break (transitive verb)'
 + čopma 'hill'</pre>
- Váibmo-bávččag-an/jávri < váibmu 'heart' + bávččagit 'hurt' + jávri 'lake'.

Evidently, when place names of this kind are borrowed into Finnish they become rather difficult to reliably etymologise, because there are hardly any semantic constraints on what verb roots the name can be compared to. Thus,

one can only speculate that such opaque Finnish place names as, for example, *Kieruma-n/lahti* (Hämeenkyrö) and *Viesimo-n/joki* (Kiihtelysvaara) might originally be Saami deverbal names based on PS *čierō- 'cry' (> SaaN čierrut) and *viesë- 'become tired, exhausted' (> SaaN viessat), respectively. However, there should be no obstacle to accepting substrate etymologies involving deverbal names in those cases in which the motive perfectly accords with the broader-level semantic patterns that are attested in the material, such as the abundance of names based on hunting and fishing. Thus, etymologies such as *Pertoma/niemi* (< PS *pearttō- 'hunt, stalk game' > SaaI perttu-, SaaS bearhtoe-), Konttima/lakso (< PS *konti-j- 'hunt wild reindeer' > SaaN godde-), Naakkima (< PS *ńākë- 'sneak, approach covertly [e.g. game]' > SaaN njáhka-), Kuolimo (< PS *kuol-ëjë- 'fish (verb)' > SaaN gulle-) and Kiesimä (< PS *keasē- 'pull, drag [e.g. a fishing net]' > SaaN geassi-) appear quite plausible.

Special caution should also be exercised in comparing place name elements with other proper names. In general, comparisons with an element that is only attested as a component of Saami place names should be discarded. In such a case the comparison would be restricted by no semantic constraints on either the receiving or the donating side and the number of possible etymological combinations would accordingly rise exponentially. For the same reason, one should treat with suspicion comparisons between Finnish place names and Saami pre-Christian personal names which are unattested as appellatives (see section 1). Such etymologies can be considered plausible only if it can be demonstrated that the personal name in question is very old and has been widely used among the Saami. Moreover, there regrettably exists no detailed study of old Saami personal names, which makes research in this direction all the more difficult.

2.5. Criteria of age

At least in southern Finland, where Saami habitation has in many areas receded quite early, postulating loan originals that may themselves be of quite recent origin in Saami should be avoided. The Saami loan original should

⁷ This methodological criticism applies *mutatis mutandis* to comparisons with other languages, too. For instance, it is well-established that many old settlement names in Finland are based on Germanic personal names. However, during recent decades this line of research has been taken to excesses by freely comparing Finnish place names to any vaguely similar Germanic personal name (VAHTOLA 1983 serves as an example of such a study). It is evident, though, that a method which recognises hardly any typological and phonological constraints will produce a large number of erroneous etymologies.

preferably have a wide distribution in the present-day Saami languages so that the etymon can be assigned at least a Proto-Saami status. If the word has a restricted distribution, there should be no signs of late origin: it should not be sound symbolic or show the kind of irregular sound correspondences that may point to inter-dialectal borrowing. If possible, some additional evidence ahowing the great age of the word should be presented. This may include etymological cognates outside Saami.

In some cases the word can also be traced in Saami place names even though it has disappeared from use in many areas. For example, the Saami words *kuomčë 'bear' (> SaaN guovža), *muojδē 'hunting of wild reindeer in winter' (> SaaI myejđi) and *vuontës 'sand' (> SaaI vuodâs) have not qualified for LEHTIRANTA's common Saami vocabulary (1989) due to their restricted attestation in dictionaries, but they nevertheless occur in place names over a wide area in both western and eastern Saami and can thus be safely assigned Proto-Saami status. Sometimes the word may have disappeared almost completely before attestation. The Saami cognate of Finnish taival 'isthmus; journey' has been only rudimentarily recorded as an appellative in Skolt and Akkala Saami: obsolete Skolt Saami tuibal (? = *tuuibâl) 'area between lakes, etc.' (T. I. ITKONEN 1958: 612). Nevertheless, the word has been preserved in many place names over a wider area: compare, for example, Duoibal and Duoibala-t (NomPl), two ranges of fells surrounded by lakes on the border of northern Sweden and Norway, and Duoibbel/johka, a river in the municipality of Karasjok, Norway. (The cognation of Finnish taival and Saami *tuojpëlē was tentatively suggested by T. I. ITKONEN [1958: 1023], but this suggestion has mostly gone unnoticed; cf. SSA s.v. taival.)

If the assumed loan original itself is a Germanic or Scandinavian borrowing in Saami, the loanword should display a wide or uniform distribution in Saami. Proto-Scandinavian borrowings were also adopted by the Saami languages once spoken further south in Finland and Karelia, as shown by the fact that some of them have been further borrowed via Saami into the Finnish dialects. Examples of such words include for example the southeastern dialect words *sunta* 'mild weather in spring, etc.' < PS **suntē* 'unfrozen; opening in ice; sound' (> SaaN *suddi*) < Proto-Scand. **sunda-* 'sound'; *ume* 'mist', *umea* 'misty, murky' < PS *(h)umV- ~*(h)omV- (> SaaI omo 'mist', SaaS hovme 'snowfall with poor visibility') < Proto-Scand. **hūma-* (cf. Old Norse húm 'dusky, half-dark'); äimä 'fool', äimistyä 'be stunned, amazed' < PS **eajmē* 'fool', *eajmëskës* 'foolish, stupid; one who likes to keep him/ herself' (> SaaN *eaibmi*, *eaimmaskas*) < Proto-Scand. **haimiskaz* 'stupid, foolish'. In these cases Saami mediation is proved by a shared semantic innovation ('sound' > 'opening in ice' > 'unfrozen') or by the absence of a



substitute for the Scandinavian h; because Proto-Saami had no phoneme h, this foreign sound was dropped in borrowings.

Thus, one can assume that the extinct Saami languages in southern Finland and Karelia possessed a number of Proto-Scandinavian loanwords. One can accept such Saami loan etymologies for place names similar to *Raasa-n/suo* (a bog; Harjavalta) < PS *rāsē 'grass' (> SaaN rássi) < Proto-Scand. *grasa- id., and *Mella-n/niemi* (a promontory; Jyväskylä) < PS *miellē 'steep bank, sandbank' (> SaaN mielli) < Proto-Scand. *melha- 'sandbank, heap of sand'. The words in question show a wide distribution in present-day Saami (LEHTIRANTA 1989 no. 668, 1025), and thus appear to have been adopted before the breaking up of Proto-Saami. However, it would be hazardous to include Scandinavian borrowings which are only attested in western Saami in the comparative material.

2.6. Alternative etymologies

It is not rare that one synchronic name type is heterogeneous in origin. The plausibility of the alternative etymologies should be determined in each individual case separately, and the denotative criterion often helps in choosing between alternatives. An example is provided by the numerous place names in Finland with the form Soin- and Suin-, which can be compared at least both to PS *suojnē 'grass, hay' (> SaaN suoidni) and to the obsolete personal name Soini ~ Suini (cf. RÄISÄNEN 2003: 127–128), formerly possibly also an appellative meaning 'squire', which is of Germanic origin (SKES s.v. soini). If the primary name denotes a topographic object which accords with the putative 'grass' motive, Saami origin is probable (it is in principle possible to examine the vegetation in every place, even though in practice this may be difficult). On the other hand, as regards habitative names, comparison to a personal name is in general more likely. An example of the former kind of etymology is the bay Suina-n/lahti in lake Iso-Jälä (Siilinjärvi), which on The Basic Map is indicated as having paludifying, rushy shores. Examples of the latter are the village names Soini (Soini) and Suinula (Kangasala and Kuorevesi). It goes without saying that in some individual cases it is difficult to choose between possible alternatives.

Sound substitutions occasionally lead to situations in which a borrowed name element either by chance coincides with a Finnish word or is adopted in such a close form that it becomes folk-etymologically contaminated. While it is in some cases difficult to make a decision between the various alternative etymologies, the folk-etymologically distorted cases can usually be sorted out on the basis of denotative and typological criteria. A well-known example is provided by the numerous lake names reflecting PS *kukkē(-s) 'long' (> SaaN guhkki, guhkes), which were already discussed above. Such

names as Kukkas/järvi, Kukkanen are formally identical with Finnish kukkanen, (casus componens) kukkas- 'flower (deminutive)', but this kind of etymology could not be accepted on semantic grounds, as concluded by RÖNNBERG (1980) in her thorough analysis of this substrate name type. Firstly, a word meaning 'flower' (not to even mention a deminutive of such a word) provides no natural naming motive for any larger body of water. As expected, the non-diminutive form kukka is almost unattested in Finnish lake names; the only existing case, Kukka/järvi (Heinola), is a mere folketymologically contaminated name of identical Saami origin. Secondly, it would remain a mystery why an appellative for 'flower' had been used exclusively in names of lakes of oblong form. On similar grounds it is likely that Iso Kukko/järvi (Längelmäki), the name of a long and narrow lake, is also of Saami origin and has secondarily become contaminated by the Finnish kukko 'rooster'. It appears most unlikely that the name of a lake over two kilometers in lenght could have been motivated by 'roosters'; this hypothesis is supported by the typological observation that there are no other lake names of the shape *Kukko/järvi* 'rooster-lake' in Finland.

Another example is provided by PS *kontē 'wild reindeer' (SaaN goddi). It is highly probable that this word is reflected in place names of the shape Kontta-, Konta-n-, such as Konta-n/räme (Kälviä), Konta-n/järvi, -joki, -neva (Pihtipudas), Konta-n/kallio (Hollola), and Kontta/neva (Ylivieska). There exists, though, a Finnish verb kontata: konttaa- 'crawl on all fours' and a noun *kontta showing a defective paradigm (cf. e.g. konta-lla-an 'on all [his/her] fours', AdessSg + 3SgPx). It would be semantically most unnatural to assume that these words occurred in place names. By contrast, the Saami word for 'wild reindeer' provides a typologically unmarked motive for the names, as the hunting of wild reindeer was an important means of livelihood for the medieval Saami of southern Finland. On the other hand, there are numerous Finnish place names containing the words kontti 'birch bark knapsack' or 'bone; shin, shinbone', kontu 'farm, dwelling, homestead', konto 'sphagnum bog', and kontio 'bear' as their qualifier. These name types presumably also include folk-etymologically reinterpreted reflexes of PS *kontē 'wild reindeer', but this can probably never be proved.

An example of a rather tangled etymological skein is provided by names of the shape Lump- ~ Lumm- and their relation to both the Finnish lumme: lumpee- 'water lily' and PS *luompë 'pond, small lake'. In present-day Saami this word has only been preserved in the derivative *luompël 'small lake along a river' (> SaaN luoppal), but it has an underived cognate in Finnish (lampi 'pond, small lake'), and the substrate toponyms in southern Finland apparently also reflect this basic root and various parallel derivatives. However, in many individual cases it is difficult to determine whether



the name in question is a substrate item or an autochthonous formation. There are unambiguous examples of both Saami substrate names (e.g. the lake names *Lumperoinen* (Saarijärvi) and *Lummene* (Kuhmoinen) discussed by T. ITKONEN, 1993b) and of Finnish formations (e.g. the numerous pond names of the shape *Lumme/lampi* 'water lily pond').

Nevertheless, there remain a number of borderline cases, and it seems evident that substrate names of Saami origin have become folk-etymologically mixed with names based on the Finnish word lumme 'water lily'. For instance, one can surmise the former existence of a Saami diminutive derivative *luompë-kkē(-s) 'pond, small lake' on the basis of such names as Lummukas ~ Lumpukka (a small lake; Vihti), Lummakko (a field name, formerly a paludified pond; Lieto), Lum(m)ukas/suo ~ Lumpukas/suo (a bog with two ponds in it; Suomusjärvi), Lummukka (a lake; Konnevesi), and Iso, Vähä Lummukka/järvi (two now paludified small lakes; Kauhava). However, some of these names may be based on the Finnish appellative *lumme* 'water lily' (dialectally also lumpukka, etc.). Nevertheless, water lilies do not typically grow in swampy lakes. Lake Lummukka in Konnevesi, on the other hand, is over two kilometres long and thus too large to accord with the 'water lily' motive. This case is probably best interpreted as a substrate name with an ironical motive: the lake has been named PS *luompëkke in contrast to the adjacent major lake Konnevesi, which is over 20 km long.

In addition to the type *Lummukka* there are also a number of ponds and small lakes with names such as *Lumpunen*, *Lumpeinen*, etc. Formally, there would be no obstacle to analysing these as substrate names consisting of PS *luompë 'pond' and the Finnish diminutive suffix -nen. However, the file cards on some of these names in the Archive of Names explicitly state that water lilies grow in the lake in question. Thus, in many cases an autochthonous etymology provides a more likely alternative. However, it is impossible to conclusively solve the origin of each individual name of this name type. What can be said, though, is that the lake and pond names of the shape *Lump*- ~ *Lumm*- are heterogeneous in origin, containing both autochthonous Finnish formations and Saami substrate names. This overall opacity should, nevertheless, not obscure the fact that in many individual cases it is possible to quite reliably determine the origin of a name of this type.

Finally, one must take into account a special kind of folk etymology, the *ad hoc* coinage of appellatives to account for place names. During the gathering of place names, field workers often ask whether there is any information on the meaning or the origin of an opaque place name. In such situations it can occur that the informant, possibly subconsciously, makes up an appellative that "explains" the name in question. Thus, in the data gathered in the Archive of Names, one occasionally encounters hapax legomena, the existence

of which receives no support from the over eight million file cards in the Lexical Archive of the Finnish Dialects. A couple of examples can be given.

The name of a bay Livu-n/lahti in lake Lake Päijänne (Korpilahti) can be compared to PS *livë 'rest of (wild) reindeer' (> SaaN livva-), on which also many other names of similar shape in Finland appear to be based. According to the file card in AN, in Korpilahti the word livu denotes 'shallows in a lake' ("tarkoittaa paikkakunnalla matalaa kohtaa, matalikkoa järvessä"), but this information receives no support from LAFD, so its reliability can be reasonably suspected. A somewhat similar case is involved in the name Paahta-n/kallio (Äetsä), a cliff, and Paahta, a field or meadow located under the cliff, which evidently reflect PS *pāktē 'cliff, rock' (> SaaN bákti); the latter name is clearly a retrograde formation typical of field names. According to one file card in AN, this unique name element is also known as an appellative with the meaning 'a field situated in a forest' (Finnish "pelto, joka sijaitsee metsässä [metsämoisio]"). However, no such word is attested in LAFD. The word was probably invented by the informant to explain the name; another possibility is that the informant's description of the place was mistakenly interpreted as the meaning of an appellative by the field worker. The non-existence of this appellative is also suggested by another file card on the same name by a different gatherer. In this case there is no mention of an appellative paahta; instead, the informant suggested a connection with Finnish. dialectal paahtain 'buckthorn (Rhamnus catharticus)', which corresponds to the literary language paatsama. This is evidently a folk etymology, as the cited form actually belongs to an entirely different dialect area.

While the actual existence of *hapax legomena* can often be doubted, this sort of information should not be categorically dismissed. The substrate lexicon often contains both semantically and distributionally marginal dialectal words, which in an extreme case may have been attested only once. T. ITKONEN (1993b) discusses an illuminating example, the word *vuolanne* 'low-lying land', attested solely from one informant in the municipality of Jämsänkoski in central southern Finland. The word is a borrowing from PS **vuolā(n)tëk* 'low-lying land' (> SaaN *vuolládat*). A similar case is involved in the word *ripeikkö* 'damp, boggy terrain' (Kesälahti), which is only attested in one file card in AN. This word is apparently a borrowing from PS **ripëkkē* 'boghole, mudhole' (> SaaN *rivot* ~ dial. *ribat*, SaaL *ribák*); compare also Karelian (northern dialects) *riivikkö* 'wet, boggy terrain', which due to the irregular sound correspondence is best analysed as separately borrowed. Distributional criteria can also be employed in the evaluation of

⁸ PS **ripëkkē* is originally a derivative of PS **ripë* 'litter; mud' (> SaaN *rihpa*). Note also Finnish (Far-Northern dialects) *riipi* 'boghole' and Karel. *riivi* 'id.',



etymologies. For instance, in an earlier paper (A. AIKIO 2003: 104–105), I compared the river name *Pöyli/joki* (Pöytyä) in southwestern Finland to PS *pievlë 'snowless patch of ground (in spring)' (> SaaN bievla). However, the name more likely derives from the Finnish dialectal word pyöli ~ (rarely also) pöyli 'detached land', which is a borrowing from Swedish böle (I am obliged to ALPO RÄISÄNEN for this remark). Nevertheless, formally similar names are also attested in other parts of Finland, for example, *Pöylä-n/mäki* (Joutsa), and there is even a surname *Pöyliö* in Finnish Lapland. These names can more plausibly be compared to PS *pievlë; the appellative pyöli ~ pöyli 'detached land' is only attested in a narrow area in the southwestern coastal dialects, and it can thus on distributional grounds hardly account for any place names in central inland Finland. In any case, the connection between Swedish böle and the surname Pöyliö in Lapland is certainly illusory, even though the etymological dictionary of Finnish surnames (MIKKONEN—PAIKKALA 2000 s.v. Pöyliö) maintains the opposite.

It is also necessary to distinguish carefully between true substrate names that are direct borrowings from Saami and place names based on a Saami loanword. For example, there are a couple of names with the element Julku- in Finland, for example. lake Julku/järvi (Ylöjärvi) and Julku/lampi, -mäki (Keuruu). These names contain the dialectal word julku 'long pole, rod' attested in the areas of Satakunta and central Ostrobothnia, which is a borrowing from PS *čuolkōj 'long pole or rod, used, for example as a lever or for pushing nets under the ice' (> SaaN čuolggu); the sound substitution PS *č-> Finnish *j*- before back vowels is well-established in Saami loanwords. On the other hand, some names of this type, especially those showing the genitive form Jul(k)u-n-, are no doubt based on the eastern Finnish surname Julku ~ Julkunen, which is probably of different origin. None of these names need to be direct borrowings from Saami, as they may have been independently formed in Finnish. A similar case is involved in the name of the rather high and wide hill Alkkia-n/vuori (Karvia). The name contains the dialectal word alkkia 'easy; open, wide', which is a borrowing from PS *ālkkējē 'easy' (> SaaN álki, ÄIMÄ 1908: 8). In the present-day Saami languages, the word is only attested in the meaning 'easy' and it hardly occurs in place names, but the semantics of the Finnish loan item suggests that in the now extinct Saami languages of Ostrobothnia and Satakunta it may also have had the meaning 'wide; open'.

which are loans from the underived noun root. SSA (s.v. *rimpi*) suggests that Finnish *riipi* may be related to Finnish *rimpi* 'quagmire, etc.', but this suggestion must be rejected on phonological grounds. Compare also SKES (s.v. *riipi*), where the connection with the primary root **ripë* is not acknowledged; instead, SaaN *rivot* is erroneously analysed as a Finnic loanword.



In cases of this kind one must carefully examine the dialect distribution of the relevant words. Because hundreds of recent Saami loanwords have been adopted into the Far-Northern dialects of Finnish, it is not rare for a Saami lexeme that is reflected in a substrate place name in southern Finland to be also attested as a borrowing in the northernmost dialects. For instance, Aut/joki (Hollola), a small river that flows through a gorge, would formally compare very well to the northern dialect word autti 'gorge'. However, the appellative itself is a very recent loan from Saami (cf. PS * $\bar{a}v\check{c}\bar{e}$ 'gorge' > SaaN $\hat{a}v\check{z}i$) and hence it cannot account for any place names in southern Finland; thus, the name Aut/joki must be a direct borrowing from Saami. On similar grounds one may analyse, for example, the lake name $Moit/j\ddot{a}rvi$ (Luumäki) as a substrate name (cf. PS * $muoj\delta\bar{e}$ 'hunting of wild reindeer in winter' > SaaI myejdi) even though a Saami loanword moita 'id.' is also attested in northernmost Finland.

Then again, merely looking at present-day dialectal distributions may occasionally lead one astray. In some cases it appears that a word has formerly been widely known even though the dialect attestations gathered in the 20th century reveal a restricted distribution. This is the case when a name element occurs widely uniformly, and the assumption of direct borrowing consequently becomes uncertain because of an excess of parallel cases. Place names of the shape *Tunturi(-n)*- may be taken as an example. The word *tun*turi 'mountain, fell (used especially of the fells in Lapland)', a borrowing from PS *tuontër 'highlands, uplands, tundra' (> SaaN duottar), is now a part of the standard Finnish lexicon (note also the internationalism tundra, which derives from the same Saami word via Russian). However, the word has spread to standard Finnish quite recently via the literary language, and reliable dialect attestations in LAFD are confined to the Far-Northern dialects. Nevertheless, the word occurs as a specific in over 50 place names in central and southern Finland, which typically denote either hills or other topographical formations located on higher ground. Thus, the word must have been widely known earlier. It would not be natural to assume that all these names were direct borrowings from Saami, especially as the name element in question occurs in a phonologically stable form. On the other hand, there is a single occurrence of the form tontere in south-western Finland (Tonteree-n/mäki, Pöytyä) which, due to its deviant form, is best analysed as a direct toponymic loan.

There is another word, too, the history of which may have been similar to that of the word *tunturi*. The appellative *pieska* 'heath between bogs or hills; shallows that dry up during a dry season', a loan from PS **peackē* 'shallows (in a strait); depression, hollow; precipice' (> SaaN *beaski*), is attested in the Far-Northern dialects. In addition to this, it occurs in a dozen place names in the regions of Ostrobothnia and Satakunta. Thus, the word must once have



been known over a wider area. This is also confirmed by the fact that in two Ostrobothnian names it occurs as a generic: compare *Hieta/pieska* (< hieta 'sand', Veteli) and *Linta/pieska* (< *linta '?', Merijärvi).

Phonological instability thus emerges as an important criterion in the identification of true substrate toponyms. If an opaque name element occurs widely in a stable form, there is reason to suspect that the names are based on a lost appellative that was once productive in place name formation. An unstable and varying form of the same name element is, in contrast, an indicator of separate borrowings. An example is provided by names based on PS *jeankē 'bog, swamp' (> SaaN jeaggi) in southern Finland, such as Jänkkä/ lampi (Sysmä), Suuri, Pieni Jänkä/salo (Taipalsaari), Jänky (a lake; Savitaipale), Jänge-n/salmi (Parikkala). Even though there is a Saami loanword jänkä ~ jänkkä 'swamp, bog' in the Far-Northern dialects, which is highly productive in toponym formation, similar names in southern Finland are best analysed as direct borrowings due to their slight phonological variation. A similar example is involved in names such as Seit/niemi (Padasjoki), Seitto/ kallio (Loppi), Siitoi-n/mäki (Nummi-Pusula; Ypäjä), Siitiö-n/vuori (Miehikkälä), Siiti-n/vaha (Kisko), Siitti/kivi (Suomussalmi), which reflect PS *siejtē 'rock or stone idol' (> SaaN sieidi). While there is a Saami loanword seita 'Saami rock idol' in the Far-Northern dialects, this appellative does not account for the varying forms in which the Saami word is reflected in the place names of southern Finland.

3. Present results and future perspectives

The methods outlined above will leave the majority of Saami substratum toponyms in Finland unetymologised, as the criteria set for an acceptable etymology are rather strict. However, the presented framework has been designed to yield reliable evidence of the former distribution of the Saami languages, not to serve as a tool for etymologising individual place names. But regardless of what the ultimate aims of the research are, the application of strict methods to large sets of data is in any case the only fruitful approach in substratum toponymy. The study of loan names involves so many methodological limitations that the prospects of reliably explaining the origins of individual opaque names are on average quite bleak. Thus, the primary aim of etymological onomastics must be to distinguish the signal from the noise, not try to explain every piece of data.

From this point of view one may take a critical look at the results obtained by previous research. Even according to the revised criteria presented in this paper it can be considered conclusively proven that a stratum of Saami substratum toponyms covers most of inland Finland. However, the material pre-

sented by previous research (see esp. T. I. ITKONEN 1948 I, 99–107) does not contain many substrate names on the southern and south-western coast and in the immediately adjacent inland areas, and nearly all of the few previously suggested Saami etymologies for place names in this region can be considered uncertain or doubtful. Thus, it might seem that a significant ethno-linguistic boundary in prehistoric southern Finland has been located.

Notably, though, under closer onomastic scrutiny this result turns out to be only apparent. It is not difficult to point out plausible cases of Saami substrate toponyms in areas that were almost blank on T. I. ITKONEN's map, such as western Uusimaa and even Finland Proper. While no detailed analysis can be presented here, the following rather evident examples can be given (some of these names were already mentioned earlier in this paper):

- Eli/järvi, a lake (Yläne); Elimo/träsk-et, a lake (a Swedish name; Pohja); Iloittu, a lake (Nummi-Pusula) < PS *ëlē- 'up, above (spatial noun)' (> SaaN alli-). The lakes are the uppermost in their water systems. The last name has clearly been folk-etymologically influenced, compare Finnish iloittu, past participle passive of iloitse- 'rejoice'.
- *Eli/mäki*, a hill (Vihti) < PS **ëlë* 'high (attrib. form)' (> SaaN *alla*). The hill is the highest in the region.
- Kuukkaa-n/mäki, a hill (Lohja) < PS *kukkē-s 'long (attrib. form)' (> SaaN guhkes). This hill is situated on the shore of a long lake called Lehmijärvi ('cow-lake').
- -Moita-n/oja, a small river (Kuusjoki) < PS * $muoj\delta\bar{e}$ 'hunt of wild reindeer in the winter' (> SaaI $myejd\bar{i}$).
- Outamo, a lake (Lohja) < PS *ëvtë- ~ *ovtë- 'place in front of' (> SaaN ovda-). The etymology is treated in detail in NÄRHI 2002.
- Siitoi-n/mäki, a rocky hill (Nummi-Pusula), Siitoi-n/mäki, a small rock which according to the information in AN has "peculiar holes" (Yläne), Siiti-n/vaha, a large boulder (Kisko) < PS *siejtē 'rock or stone idol' (> SaaN sieidi).
- Tonteree-n/mäki, a hill (Pöytyä) < PS *tuontër 'highlands, uplands' (> SaaN duottar).
- Vuontee-n/mäki, a hill with sandy soil (Karkkila) < PS *vuontës 'sand' (> SaaI vuodâs).
- Änkää, a forest area (Nummi-Pusula) < PS *āŋkēs 'a fence and trap structure for trapping wild reindeer' (> SaaN ákkis, I äägis).

The cases listed above are merely meant to serve as examples of the fact that there are place names of Saami origin in southwestern Finland which correspond exactly to the substrate name types attested further north. The systematic analysis and classification of this stratum of loan names remains a task for future research. There is a need to thoroughly re-examine the distribution



of Saami substrate toponyms on the basis of both more critical methods and more comprehensive materials. The distribution of the most plausible Saami elements in the Finnish nomenclature should be mapped, in addition to which the perspective should also turn to outside Finland. Various criteria suggest that the ultimate origin of the Saami language branch lies somewhere in present-day western Russia (see e.g. SAARIKIVI, 2004), and in order to clarify the prehistory of the Saami, it would be important to establish also consequences the southern Finland substrate toponymy has for uncovering the speaking areas of now extinct languages. When conducted in a critical framework, this line of study provides historical linguistics with a possibility for placing prehistoric languages on the map. Place names provide a rich source of evidence of ethnic history which has nevertheless remained largely unused in Finnish research, and etymological onomastics may thus yet have much to contribute to the ongoing discussion on the origin of the Saami and the Finns.

4. Appendix

Finnish and Saami generics that occur in place names discussed in this paper.

Finnish

harju 'ridge' niemi 'promontory; headland' joki 'river' pudas 'side channel of a river' järvi 'lake' räme 'pine swamp' saari 'island' kallio 'rock, cliff' kivi 'stone, rock' salo 'woodland; (dial.) large island' selkä 'back (= Rücken); open water lahti 'bay' lakso, dialectal form of laakso 'valley' in a lake' lampi 'pond, small lake' suo 'bog, swamp' lähteet, pl. of lähde 'spring' vaha (dial.) 'boulder' maa 'land' vesi 'water; (in place names) major mäki 'hill' lake' neva 'open, treeless bog' vuori 'hill (often larger than mäki)'

Saami (North Saami unindicated)

cahca 'narrow pass'
jávri 'lake'
johka 'river'
SaaI juuhâ 'river'
skáidi 'area between two adjoining rivers'



njárga 'promontory, point of land'

várri 'mountain'

5. Abbreviations

PS = Proto-Saami

SaaI = Inari Saami

SaaL = Lule Saami

SaaN = North Saami

SaaS = South Saami

SaaSk = Skolt Saami

References

Maps

Maps of Quaternary Deposits on scale 1:100 000. Geological Survey of Finland.

The Basic Map of Finland on scale 1:20 000. The National Land Survey of Finland.

Archives

AN = *Archive of Names*. The Research Institute for the Languages of Finland, Helsinki.

LAFD = *The Lexical Archive of Finnish Dialects*. The Research Institute for the Languages of Finland, Helsinki.

Databases

The NLS Topographic Database. The National Land Survey of Finland.

Literature

- AIKIO, ANTE (2001) Early Samic lexical influence on Northern Finnic. In: Congressus internationalis fenno-ugristarum IX. Pars IV. Tartu, p. 40–47.
- AIKIO, ANTE (2002) Sápmelaš loatnasánit suopmelaš gielaid davvejoavkkus. Unpublished Master's thesis, University of Oulu.
- AIKIO, ANTE (2003) Suomen saamelaisperäisistä paikannimistä. In: Virittäjä 107, p. 99–106.
- AIKIO, ANTE The Saami substrate in Finnish and Karelian. (In preparation.) AIKIO, SAMULI (1999) Nimistä ja asiakirjoista saamelaisten entisillä asuinalueilla. In: Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mu-

Ante Aikio

- *kaan.* Ed. by PAUL FOGELBERG. Bidrag till kännedom av Finlands natur och folk 153, p. 117–120.
- ÄIMÄ, FRANS (1908) Lappalaisia lainasanoja suomen murteissa. In: Journal de la Société Finno-Ougrienne 25.
- CARPELAN, CHRISTIAN—PARPOLA, ASKO—KOSKIKALLIO, PETTERI (eds.) (2001) Early Contacts between Uralic and Indo-European: Linguistic and Archaeological Considerations. Mémoires de la Société Finno-Ougrienne 242.
- CARPELAN, CHRISTIAN—PARPOLA, ASKO (2001) Emergence, contacts and dispersal of Proto-Indo-European, Proto-Uralic and Proto-Aryan in archaeological perspective. In: Early Contacts between Uralic and Indo-European: Linguistic and Archaeological Considerations. Ed. by CARPELAN, CHRISTIAN—PARPOLA, ASKO—KOSKIKALLIO, PETTERI. Mémoires de la Société Finno-Ougrienne 242, p. 55–150.
- FOGELBERG, PAUL (ed.) (1999) Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan. Bidrag till kännedom av Finlands natur och folk 153.
- GALLÉN, JARL (ed.) (1984) Suomen väestön esihistorialliset juuret. Bidrag till kännedom av finlands natur och folk 131.
- HAKULINEN, LAURI (1979) Suomen kielen rakenne ja kehitys. 4th revised and expanded edition. Otava, Helsinki.
- HOCK, HANS HEINRICH (1986) *Principles of Historical Linguistics*. Trends in Linguistics: Studies and Monographs 34. Mouton de Gruyter, Berlin—New York—Amsterdam.
- ITKONEN, T. I. (1920) Lappalaisperäisiä paikannimiä suomenkielen alueella. In: Virittäjä 24, p. 1–57.
- ITKONEN, T. I. (1926) Lisiä Keski- ja Etelä-Suomen lappalaisperäiseen paikannimistöön. In: Virittäjä 30, p. 33–35.
- ITKONEN, T. I. (1947) *Lapparnas förekomst i Finland*. In: *Ymer* 43–57. Stockholm.
- ITKONEN, T. I. (1948) Suomen lappalaiset vuoteen 1945. WSOY, Porvoo—Helsinki.
- ITKONEN, T. I. (1958) Koltan- ja kuolanlapin sanakirja. Lexica Societatis Finno-Ugricae XV.
- ITKONEN, TERHO (1957) Suomen kielen suksisanastoa. Suomalaisen Kirjalisuuden Seura, Helsinki.
- ITKONEN, TERHO (1983) Välikatsaus suomen kielen juuriin. In: Virittäjä 87, p. 190–229, 349–386.
- ITKONEN, TERHO (1993a) Mistä Korpilahden Vaaru on saanut nimensä? In: Keskisuomalainen 18.4.1993.
- ITKONEN, TERHO (1993b) Lapin perua Sisä-Suomen sanastossa ja paikannimissä. In: Festschrift für Raija Bartens zum 25. 10. 1993. Ed. by UL-

- LA-MAIJA KULONEN. Mémoires de la Société Finno-Ougrienne 215, p. 159–168
- JAAKKOLA, JALMARI (1911) Köyliön nimestä. In: Satakunta kotiseututut-kimuksia II, p. 97–101.
- KALIMA, JALO (1912) Lappalaisten muinainen levintä Venäjällä ja Suomessa paikannimistön valossa. In: Virittäjä 16, p. 115–121.
- KALLASMAA, MARJA (2000) Saaremaa kohanimed II. Eesti Keele Instituut, Tallinn.
- KIVINIEMI, EERO (1977) Väärät vedet. Tutkimus mallien osuudesta nimenmuodostuksessa. Suomalaisen Kirjallisuuden Seura, Helsinki.
- KOIVULEHTO, JORMA (1989) Etymologioinnin periaatteita: suomen keto, saamen gied'de. In: Sananjalka 31, p. 39–52.
- KOPONEN, EINO (1988) *Ovatko suomen* longota *ja* lonsota *lappalaisia lainoja?* In: *Virittäjä* 92, p. 92–99.
- KOPONEN, EINO (1996) Lappische Lehnwörter im Finnischen und Karelischen. In: Lapponica et Uralica. 100 Jahre finnisch-ugrischer Unterricht an der Universität Uppsala. Vorträge am Jubiläumssymposium 20.–23. April 1994. Ed. by LARS-GUNNAR LARSSON. Studia Uralica Upsaliensia 23, p. 83–98.
- KORHONEN, OLAVI (1979) Lappische Lehnwörter im ältesten Einödgebiet Finnlands. In: Finnisch-ugrische Forschungen 43, p. 175–206.
- KORHONEN, OLAVI (1982) Samisk-finska båttermer och deras slaviska bakgrund. Skrifter utgivna av dialekt-, ortnamns- och folkminnesarkivet i Umeå, Serie A: dialekter, nr 3.
- KOSKINEN, YRJÖ (1882) Millä aloilla Suomenmaata ovat Lappalaiset historiallisten tutkimusten mukaan asuneet? In: Suomi. Kirjoituksia isänmaallisista aineista. Toinen jakso, 15. osa, p. 345–351.
- LEHTIRANTA, JUHANI (1989) *Yhteissaamelainen sanasto*. Mémoires de la Société Finno-Ougrienne 200.
- МАТУЕЕУ, А. К. (2001) Матвеев, А. К. *Субстратная топонимия Русс-кого Севера*. Издательство Уральского Университета. Екатеринбург.
- MIKKONEN, PIRJO—PAIKKALA, SIRPA 2000. *Sukunimet*. Uudistettu laitos. Otava, Helsinki.
- МULLONEN, І. І. (2002) Муллонен, И. И. *Топонимия Присвирья: проблемы этноязыкового контактирования*. Петрозаводск.
- NISSILÄ, VILJO (1964) *Pihtiputaan vanhaa nimistöä*. In: *Pihtiputaan kirja*. Ed. by JUSSI T. LAPPALAINEN. JKKY:n kotiseutusarja 2, p. 71–100.
- NÄRHI, EEVA-MARIA (2002) *Pari harvinaista vesistönimeä*. In: *Virittäjä* 106, p. 252–258.
- PODOL'SKAYA, N. V. (1988) Подольская, Н. В. *Словарь русской оно-мастической терминологии*. 2-е издание, переработанное и дополненное. Москва, Наука.

Ante Aikio

- PORTHAN, HENRIK GABRIEL (1873) Henrici Gabrielis Porthan opera selecta. Pars Qvinta. Finska Litteratur-Sällskapets tryckeri, Helsingfors.
- RYDVING, HÅKAN (1995) Samiska ortnamn. En litteraturöversikt och bibliografi. In: Ortnamnsällskapets i Uppsala årskrift, p. 36–62.
- RÄISÄNEN, ALPO (1990) Zur entstehung des Namengutes in der Einöde Kainuus. In: Finnish onomastics Namenkunde in Finnland. Ed. by HEIKKI LESKINEN—EERO KIVINIEMI. Studia Fennica 34, p. 91–108.
- RÄISÄNEN, ALPO (1995) Kainuun saamelaisperäisiä paikannimiä. In: Virittäjä 99, p. 532–544.
- RÄISÄNEN, ALPO (2003) *Nimet mieltä kiehtovat. Etymologista nimistöntut-kimusta.* Suomalaisen Kirjallisuuden Seura, Helsinki.
- RÖNNBERG, AILA (1980) *Suomen Ku(u)kas- ja Kukka-nimet*. Unpublished Master's thesis, University of Helsinki.
- SAARIKIVI, JANNE (2002) Саамская субстратная топонимия Русского Севера с точки зрения сравнительной финно-угристики. In: Финно-угорское наследие в русском языке 2. Сборники научных трудов. Екатеринбург, р. 94–112.
- SAARIKIVI, JANNE (2004), Über das saamische Substratnamengut in Nordrussland und Finnland. In: Finnisch-Ugrische Forschungen 58, p. 162– 234.
- SALMINEN, TAPANI (1999) Euroopan kielet muinoin ja nykyisin. In: Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan. Ed. by PAUL FOGELBERG. Bidrag till kännedom av Finlands natur och folk 153, p. 13–26. (Available online at: http://www.helsinki.fi/~tasalmin/lammi.html)
- SALO, UNTO (2000) *Suomi ja Häme, Häme ja Satakunta.* In: *Hämeen käräjät I.* Ed. by JUKKA PELTOVIRTA. Hämeenlinna, p. 18–231.
- SCHEFFER, JOHN (= Joannis Schefferus) (1704) The History of Lapland, Containing a Geographical Description, and a Natural History of that Country; with an Account of the Inhabitants, their Original, Religion, Customs, Habits, Marriages, Conjurations, Employment, & c. Tho. Newborough, London. (Latin original published in 1673.)
- SKES = Suomen kielen etymologinen sanakirja. Lexica Societatis Fenno-Ugricae XII. 1955–1981. Helsinki.
- SSA = *Suomen sanojen alkuperä*. *Etymologinen sanakirja*. Kotimaisten kielten tutkimuskeskus / Suomalaisen kirjallisuuden seura, Helsinki. 1992–2000.
- SÖDERHOLM, EIRA (1991) Skandinaviske lånord i finsk med samisk som formidler. In: Heiderskrift til Nils Hallan på 65-årsdagen 13. desember 1991. Ed. by GULBRAND ALHAUG—KRISTOFFER KRUKEN—HELGE SALVESSEN. Novus Forlag, Oslo, p. 472–486.
- TRASK, R. L. (2000) *The dictionary of historical and comparative linguistics*. Edinburgh University Press, Edinburgh.

- VAHTOLA, JOUKO (1983) En gammal germansk invandring till västra Finland i bynamnens belysning. In: Historisk tidskrift för Finland 1983: 3, p. 252–279.
- VAHTOLA, JOUKO (1996) Kiinteän asutuksen synnystä kappeliseurakunnan perustamiseen. In: Kotatulilta savupirtin suojaan Rovaniemen historia vuoteen 1721. Ed. by MATTI SAARNISTO—HANNU KOTIVUORI—JOUKO VAHTOLA—MATTI ENBUSKE. Gummerus, Jyväskylä, p. 129–207.
- VAHTOLA, JOUKO (1999) Saamelaisten esiintyminen Suomessa varhaishistoriallisten lähteiden ja paikannimien valossa. In: Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan. Ed. by PAUL FOGELBERG. Bidrag till kännedom av Finlands natur och folk 153, p. 109–116.
- VALONEN, NIILO (1971) *Lappalaismuistoista Parkanossa ja Kihniössä*. In: *Parkanon ja Kihniön kirja*. Ed. by HEIKKI RANTATUPA. JYY:n kotiseutusarja 8. Jyväskylä.
- WICKMAN, BO (1968) Finnish kahlata. In: Fenno-Ugrica. Juhlakirja Lauri Postin kuusikymmenvuotispäiväksi 17. 3. 1968. Mémoires de la Société Finno-Ougrienne 145, p. 238–240.
- WIKLUND, K. B. (1911–1912) Lapparnas forna utbredning i Finland och Ryssland, belyst af ortnamnen. In: Le Monde Oriental 5, p. 101–136, 175–196.

The Place Name Jokkmokk, Jåhkåmåhkke

1. Introduction

Situated in the interior of Norrbotten county, northern Sweden, is the small market town of Jokkmokk, one of the best-known central communities in the area populated by the Saami. In the early 17th century Karl IX initiated the establishment of official marketplaces and churches in order to strengthen the power of the state in the north, and, among others things, a suitable site for a meeting place was needed in Lule Lapland. The site that was chosen lay at a confluence of the great River Lule, *Julevuädno*, which meanders its way down to the coast from the high mountains in the west of Lapland. One of the region's Saami communities, Jokkmokk's Forest Saami *siida*, used this place as a winter settlement (Sw. 'vinterviste'), and during the summer there were good connections to the surrounding lakes and to the mountain region in the west. The Saami word for 'vinterviste', that is, the place where Saami families gathered together during the coldest part of the winter, is *dálvvadis*. This is a derivative of *dálvve*, winter', and became the early name of the place where Jokkmokk now stands. It was probably at

¹ Jokkmokk was proclaimed by royal decree a market and magistrature centre in 1605, but there had already been trade with Saami at points further down the River Lule (BERGLING 1964: 146–147).

² A Saami foraging area as well as a group of Saami people living in it were referred to by this term that was translated into Swedish as *sameby* ('Saami village'). Traditionally, the Saami area was divided between *siidas* which were the basic administrative units and also officially recognised by the authorities (editor).

³ Note that the words referred to as simply 'Saami' in this article are not North Saami but represent those Saami varieties spoken in the areas under consideration, mostly Lule and, in some cases, Ume and South Saami (editor).

⁴ The origin of *Dálvvadis* lies in the stem of the verb *dálvvadit* 'let something be somewhere during the winter' (HG 1070). Thus the name actually means 'the place where one lets something be during the winter', the object in this case being the reindeer herd.

⁵ Documents show that before the 17th century Sjokksjokk's Forest Saami winter settlement was used for markets (HOPPE 1944: 81–82, 84). A bog called Talwatisappi, *Dálvvadisáhpe* 'winter settlement bog', near Vuollerim is considered to indicate the place. The area lies on the southern stretch of land that passes the River Lule rapids at Vuollerim, and in 1732 LINNÉ wrote that following this route "we had to walk 50 km to Jokkmokk" (1913: 100). He was thus taking the southern road past Vuollerim. *Dálvvadis* (with varying spellings according to dialect) is

a later stage that the name *Jåhkåmåhkke* 'Jokkmokk' appeared in the language of a population that used the area differently from the Saami community. But what is the meaning of the latter name? The Lule Saami⁶ *jåhkå* is the usual word for 'stream, river', and *måhkke* means a very pronounced bend or curve in the landscape (stream, shoreline) or a loop in something (rope, lasso, etc.; HG 127, 547). Thus the place name could most easily be translated as 'stream bend' or 'bend in a river' but it is difficult to find any section of the river close to Jokkmokk that could be the reason for such a naming motivation. For an interpretation of this toponym it would be appear necessary to turn to other landscape names with the same last element.

2. 'Mocka' and 'mårka' along northern rivers

The earliest known instances of the name *Jokkmokk* agree well with today's modern Swedish form. From the mid-16th century onwards we know of the forms *Iockemock, Iockmuck, Iockemuck, Jockmuck* and *Iockmåck* (WIKLUND 1928: 343), so the original Saami form *Jåhkåmåhkke* must have been changed very early on. WIKLUND has on a number of occasions put forward his interpretation of the name, but this has been based solely on the meanings of the name parts in modern Saami. OLAUS GRAAN's interpretation, in a text concerning Lule Lapland from 1672, is closer to the correct one. At one point he mentions a sacrificial site about 5 km from the Jokkmokk church, and adds in a parenthesis that Jokkmokk means 'inlet in a river' (GRAAN 1899: 84). *Måhkke* can indeed mean 'inlet (in a lake or river)', but only in a connection related to travelling by boat. It is not the frequently-

found in many places in the Saami region, and several of them might have been temporary winter settlements (BERGLING 1964: 147).

⁶ Lule Saami is spoken in Lule Lapland. The written language now developing is used in the municipality of Jokkmokk and also in southern Gällivare and Arjeplog, as well as at the same latitude in Norway, principally in Tysfjord.

⁷ WIKLUND thought that the Saami village might have been named after the mountain *Jåhkåmåhkvárre* or the swamp *Jågåmåhkáhpe*, which lies a few dozen kilometres from the present-day Jokkmokk (UUB, WIKLUND 48, cf. ULMA, GRUNDSTRÖM 1956, DAUM, PELLIJEFF 1936, 1961). The name could later have become that of the winter settlement, *Jåhkåmåhkke*. But the two first-named places are insignificant natural areas, and in any case there was already the name *Dálvvadis* that was used to refer to the winter settlement. WIKLUND presented his interpretation in HOLMBÄCK's book on the Saami tax collection districts (1922: 8), and later in an article of his own (1928: 343–344). HULTBLAD also gives an account of it (1968: 76).

⁸ In context: '1 1/2 mijhl ifrån Jockmockz (:wijk i een Elf:) kyrkia som rätta Lapp-kyrkian är i Luhleå mark.' (1 1/2 Swedish miles [ie 15 km] from the Jokkmokk (:inlet in a river:) church, the Lule Lappmark church).

used topographical term for an inlet. Instead the word requires a context connected with boating; it is a place where a boat could not go any further by the water because of some obstacle. An essential factor in this particular interpretation is thus the navigability of the river and the nature of the land-scape around Jokkmokk. It is a fact that there were once long stretches of the River Lule that were used by boats (HOPPE 1945: 446). A late 16th-century description of the major rivers around the Gulf of Bothnia mentions that even then there were obstacles for boats quite near the coast in the Kalix, Pite, Skellefte and Ume rivers (AHNLUND 1928: 21). In the River Lule, on the other hand, there were predominantly long stretches with a weak current, and even when land had to be crossed, this does not seem to have constituted a major obstacle for travel.

Early travel accounts tell us how a boat journey could be made from the coast up to Jokkmokk, and from there to Kvikkjokk (Saami *Huhttán*) or other places in the fell region. Two such accounts deal with the river close to the coast. When Olof Swartz¹⁰ was in Lule Lapland in 1780, he first went by boat up the River Lule and passed Sävastön near Boden. Just beyond this point the rapids made it impossible to continue by boat, and he was obliged to cross a well-known tract of land on foot.¹¹ Swartz calls this part of the route 'Hedmockan' (roughly 'strip of heathland') after the nearby village of Heden.¹² An alternative route would have been that investigated by C. M. Robsahm¹³ in 1797. He had been given the task of finding out how the ore from the Gällivare mines could most easily be transported to the ironworks at Selet. One possibility was to follow a route making use of the lake *Mockträsket*, ¹⁴ which is a direct connection to the coast via the River Ale.¹⁵ The fact that there was a chapel and a market-place in Heden village (HÜLPHERS

⁹ The usual word for 'inlet' is *luokta* (HG 440).

¹⁰ OLOF SWARTZ (1760–1818), well-known botanist, undertook lengthy journeys both in Sweden and abroad.

¹¹ In this tract of land a famous burial ground was unearthed, called the Brotjärn find. It consisted of tools, clothing decoration and jewellery whose closest equivalents are thought to be from the later Viking period in southwest Finland (ODENCRANTS 1944: 96, SERNING 1960). Similar finds were made at a grave excavation at Vaikejaur, Vájgávrre.

¹² Swartz KB, M. 205: 5.

¹³ Carl Magnus Robsahm (1776–1840), knighted in 1819 with the name Robson, was a widely-travelled mine supervisor and cartographer.

¹⁴ In his account from the autumn of 1797 we learn that Robsahm travelled through Mockträsket and Mjödsjön (at present, Lake Mjösjön), and walked about 4 km on two stretches of land. The first was wet and difficult to walk on, but the second was a fine sandy heath (KB, M 200: 157–158).

¹⁵ The River Ale was easily navigable up as far as Mockträsket even in the 18th century (HÜLPHERS 1789: 153).

1922: 83, HACKZELL [1731] 1928: 50, BERGLING 1964: 146–147) indicate that this area of land has been important for a very long time. Thus we have a lake with the specific *Mock*- close to the lowest reaches of the river, and a traveller in Norrland uses the word *mocka* (in Hedmockan) for the stretch of land he had to cross to pass the lowest rapids of the River Lule near the place where the town of Boden is located today (map 1).

A westerly boat journey on the River Lule from Heden could be continued on long stretches of calm water. SAMUEL RHEEN's survey from the 17th century contains some of the oldest pieces of detailed information about these waterways. 16 The river was, quite naturally, also used by Saami travelling to the coast, 17 and the portages they crossed are characterised with the Saami term muorkke, Swedish 'ed', that is, 'stretch of land (between navigable waters)'. This became a loanword in the northern Swedish vocabulary in the form mårka, and this word achieved even wider distribution through travelogues and Norrland tourism-related literature. 18 Among the Saami of Lule Lapland the village of Heden was called Vuollemuorkke 'the lower plain', 19 a name also recorded by J. A. NENSÉN, a well-known local historian and a clergyman in the early 19th century. 20 About 80 km to the west those travelling by boat would encounter the next obstacle, the plain at Edefors, called *Badjemuorkke* 'the upper plain' in Saami. The next major obstruction was the great rapids at Porsi (Porsiforsen) near Vuollerim, Vuolleriebme, now dammed up. The name Murkisträsket, that is, "the lake by the the plain" may be found on the oldest topographical maps, north of the river. There is also a path marked out showing where to pass the rap-

¹⁶ It describes how one could travel from 'Luleå Kyrckia' (Luleå Church, present-day Gammelstad) through 'heeden till Hedeby (Heden)' (the heath to Hedeby) and then across eighteen portages, which he enumerates, to reach the fell region (RHEEN 1897: 50).

¹⁷ In the north-western part of the Mockträsket the name *Lappberget* (lit. 'Saami Fell') can be found, which may be a reminder of Saami journeys to the coast. Those who chose the route through Mockträsket had to cross a tract of land here.

¹⁸ See NU 3: 173 and DAHLSTEDT 1950 I, 202, and maps 1 and 13, which show that the word *mårka*, a borrowing from Saami *muorkke*, Swedish 'ed', is found in dialects as far south as northern Jämtland.

¹⁹ Notes made by Grundström (ULMA, 1932) and Wiklund (UUB, Wiklund 40). This name is mentioned in connection with the Saami transportation of goods to the Jokkmokk market (PIRAK 1937: 21).

NENSÉN's example is the oldest and occurs in the form Wuollemurrke 'Heden' (Heath). He also gives two words known to him for Swedish 'ed', namely murrke and måkke, from Saami muorkke and måkke respectively (UUB, R 649: 530). Regarding J. A. NENSÉN (1791–1881), see DRAKE 1918: XII–XIII. His remarks on Saami culture are of great value today.

ids, ²¹ and Nensén calls this area *Pårsemåkke* (map 2). ²² It is impossible to determine whether this name form is an approximation of the Saami -*måhkke* or a Swedish generic which can be considered a borrowing from Saami. In the South Saami region, where Nensén worked, the Swedish name-element *måcke* can, in fact, be found.

We can see how the two Swedish terms mårka and mocka²³ occur variously in the names of tracts of land that interrupt navigable waterways. There are further examples of these terms along the rivers in the area north of the River Lule but I shall restrict myself to an illuminating group of names in the River Lule valley, where it is also obvious that the terms are used synonymously. As Robsahm, at the end of the 18th century, is travelling towards the fell region he comes to a place about 10 km east of Jokkmokk, up river from the village of Nelkerim, where he finds forceful rapids over which the baggage must be carried through a 'morka', which is 1/8 of a (Swedish) mile.²⁴ These rapids are *Måkkforsen* (map 3). When I interviewed local inhabitants in 1982, I was given valuable information about the watercourse just here. Ecke Ek in Mattisudden declared that Måkkforsen was the only place in the course of the river with a significant current in the stretch between Nelkerim, Nielggeriebme, and Jokkmokk. Bertil Andersson in Skällarim recalled that in that stretch there were weak currents that a good oarsman could negotiate, but in Måkkforsen 'you couldn't row there, but you could make your way up it with a 3-horsepower outboard motor'. Around these strong rapids there is a group of names with the same specific. A nearby stream is called Måkkbäcken; it passes through the mere Måkktjärnen, 25 and people would moor their boats in the inlet of Måkkviken. 26 There is common mooring place both above and below the rapids (Bertil Andersson, Skällarim) and this demonstrates how important these places were. The highest fell north of the river is called Måkkberget and the Måkkheden, heath, lies just north of the river. Here a path can be found that was used during journeys in either direction. Thus the place name element

²¹ Gn. Harads 1892. One notation says that 'the lake is the first in a long series of lakes one passes when travelling overland past the Porsi Rapids' (DAUM, PELLIJEFF 1936).

²² The informant stated that *Pårsemåkke* is 20 km long, and lies in the place where the Greater and the Lesser Lule rivers meet (UUB, R 649: 222). He also used the word *måkke* of the stretch of land one crosses when making one's way from the greater to the lesser river (UUB, R 649: 614).

Whether the spelling is with -å- or -o- is immaterial; I follow the usage most frequent in the sources. The vowels are identical in pronunciation.

²⁴ Robsahm KB, M 200: 163.

²⁵ cf. Swedish *tjärn* 'small lake' (editor).

²⁶ Names recorded in 1961 by Pellijeff (DAUM).

måhkke, found in many names in this district, has a clear connection with the stretch of land that travellers had to cross on foot to get past the rapids not only during the summer, but also during much of the winter when the ice was unsafe. It has now been found, from accounts given by Saami informants, that these natural locations have names containing the other of the two terms for Swedish 'ed', that is, 'stretch of land (between waters)'. ²⁷ The most recently attested toponym that is related to Måkkheden is Muorkásjvárre, literally 'little plain fell', the first element of which is a diminutive of muorkke, Swedish 'ed, mårka'. There is a supplementary note in which the informant explains how they would row on the calm water between the rapids and walk past the rapids over the land.²⁸

When Swartz and Robsahm approached Jokkmokk in the 18th century, they left their boats at Kyrkogårdsviken (lit. 'Churchyard inlet') in the River Lesser Lule east of Jokkmokk (map 4).²⁹ They describe how they crossed a plain, or heath, past the place where Jokkmokk is located (1), and via lakes and stretches of land (2-8) continued towards the fells in the west. In Robsahm's text we find the word mårka, and in one of the first places west of Jokkmokk there still is habitation named *Mårkan* today (between 3 and 4).³⁰ Swartz, on the other hand, in his account of his journey, uses the term *mocka* for those places in which he was forced to walk.³¹ But why choose that particular route? The answer lies in the physical features of the area. One important factor was that the most difficult places for a traveller to negotiate were in the River Lule north of Jokkmokk, and they were best to avoid. Here were two great rapids Áhkásj- and Gájddomgårttje (the Akkatj and Kaitum rapids) which are now dammed up. They were impassable by boat and the shores were stony. Salmon were able to make their way up as far as these rapids, something that SAMUEL RHEEN implied as early as the 17th century; he mentions a number of salmon-fishing spots from Áhkásigårttje (Wackiak)

²⁷ Note that Swedish *ed* also translates as 'oath' (editor).

²⁸ ULMA, GRUNDSTRÖM 1955.

²⁹ ROBSAHM arrived at an inlet in the river near Jokkmokk, at a point where the river was called Vahtjadis (Vatjates, Gn. 21 Jokkmokk, 1890), probably a derivative of sivahtiat 'to be in motion' (HG 1385). The word swattjatet 'to set in motion' (LÖ 445) is accompanied by examples mentioning water being set in motion. ROBSAHM says that 'Wid Notudden var Elfven strömmande' (KB, M 200: 165; 'At Notudden the river flowed strongly'), which would seem to confirm my interpretation of the name.

³⁰ Ek. 26J 8–9 c–d Purkijaur.

³¹ He rested in the village of Randijaur, *Ráddnávrre*, west of Jokkmokk, and then came 'til en liten Mocka eller Hed' ('to a small plain or heath') where the baggage had to be carried 'öfver mockan' ('across the heath'). The boat was hauled up the rapids with ropes (KB, M 205: 12).

down the river (RHEEN 1897: 65). Ernst Westerlund (b. 1886) had lived in Jokkmokk since childhood, and told me in an interview in 1982 that he had often seen big salmon trying in vain to ascend the steep Akkatj rapids. Large quantities of salmon could be speared in the backwaters below the rapids, where the exhausted fish would gather.

Up to this point I have only dealt with examples of place names in the River Lule valley, but the Saami term *måhkke* can also be found in other Saami areas. Some of the clearest instances can be seen in the network of lakes from which the River Skellefte, Syöldate, flows. The first is from the Ume Saami region in the Maskaur Saami village in southern Arjeplog, a part of Pite Lapland. Here, between Laisälven, Lájsso, and the lake called Ájsjávrre, there is a hill marked on the map as *Muörkienåjvvie* (map 5).³² The first element is the genitive form of the Ume Saami muörkkie, Swedish 'ed, mårka'. NENSÉN, on the other hand, in describing the best crossing places between the waters here, uses the word *måkke* (with the Ume Saami spelling *måhkkie*).³³ We have already seen that NENSÉN prefers this topographical term, but it is obvious that *måhkkie* and *muörkkie* were used in parallel by the local population. This is shown by an example from the south-eastern part of Lake Uddjaur, where according to a recent notation a particular area of land was called *Måckan*, Swedish 'edet' (roughly 'the land between the waters'). ³⁴ In that particular part of the lake, the waves could be so high in a strong wind that people preferred to walk rather than row along the shore. According to PETRUS LÆSTADIUS many people paled at the sight of the 'rolling ridges of the waves' (LÆSTADIUS 1977: 335). In this case the land passage made it possible to avoid a difficult part of Lake Uddjaur, Ujják. Most other examples are concerned with getting over the rapids.

A traveller going southeast of Lake Storavan, *Buovđđahávva*, also one of the source lakes of the river Skellefte, could choose to use either the southwestern or south-eastern route. The latter went in the direction of Arvidsjaur, *Árviesjávrrie*, and passed the village of Avaviken, *Luokttamåhkkie*, the name still used today by the Saami living in Arvidsjaur. From Avaviken a well-known road running along ridges led right down to the Västerbotten

³⁵ NENSÉN's notation refers to both the deep inlet *Luoktmåkke*, which 'is like a flood', and the settlement 'Storafvanwiken', *Luoktmåkke* (UUB, R 649: 508 and 475). COLLINDER also gives examples of the name (ULMA, 1937). HÜLPHERS attested the same name in the 1790s, in the form *Lockt-mocki* (1922: 57, note 4).



³² The oldest map has *Muorkenåive* (Gn. 26 Lövmokk, 1893), which is the same as *Muörkienåjvvie* on modern maps (Blå kartan [Blue Map] 25H Arjeplog).

³³ He writes that one crosses 'Aisjarmåkke' in order to reach *Ájsjávrre* (UUB, R 649: 222).

³⁴ DAUM, Pellijeff 1958, cf Blå kartan 251 Storavan.

coastal area (HOPPE 1945: 97, 122; LASSILA 1972: 52). However, we are concerned here with NENSÉN's account of the easterly route to Arvidsjaur via smaller lakes where one could row, and stretches of land where one could walk (map 6). He says that from Avaviken there is a måkka, that is, a tract of land, and it is five kilometers to the Dönfjället fjell, *Dålggievárrie*. 36 If we then look at the western part of Lake Storavan, where there is an outlet to the River Skellefte via the smaller Lake Naustajaure, Návstajávrrie, we find another important portage (map 7). The area between the lakes is dominated by the fell Muörkienåjvvie. On the earliest topographical map this name is spelt *Muotkenåive*, ³⁷ indicating a pronunciation with a preserved voiceless dental spirant, that is, the Ume Saami Muötkienåjvvie, which has also been heard from a Saami informant.³⁸ Both voiced and voiceless dental spirants have been preserved in certain villages within Arjeplog and Arvidsjaur. According to a later informant, on the other hand, the same fell is called Måkkenåjve, which he says means 'the fell between lakes'. 39 We can see that the two topographical terms muörkkie (muötkkie) and måhkkie exist side by side in the drainage area of the River Skellefte, just as in the River Lule region.

Within the area in which South Saami is spoken—Åsele Lapland in southern Västerbotten—there are many names containing the Swedish element *mocka* (often spelt *måcka* or pronounced *måcke*). The vocalism with -å- is unexpected, since the northerly *måhkke* is pronounced *mehkie* in South Saami ⁴⁰ (earlier orthography *mahkie*). Let me present some examples from Vilhelmina. ⁴¹ In the lake system west of Vilhelmina, *Voeltjere*, which led to the Saami summer habitation and meeting-place Fatmomakke, there are several such names on maps and in the literature. Close to Vilhelmina we find *Måckemyran* ⁴² on the spit to Maksjön, *Maakerenjaevrie*, ⁴³ and there are fur-

³⁶ Here the noun *måkke* is unambiguous; it is the stretch of land from the village to 'Dönfjället', now *Dunberget* on modern maps (R 649: 475, cf. Blå kartan 241 Storavan).

³⁷ Gn. 34 Storavan 1894, cf. Blå kartan 241 Storavan.

³⁸ Example from COLLINDER (ULMA 1930s).

³⁹ DAUM, PELLIJEFF 1958.

⁴⁰ See in BMM 1993: 186.

⁴¹ See also account of names in DAHLSTEDT 1950: 201–206 and map 13.

⁴² Blå kartan 22G Vilhelmina, DAUM, PELLIJEFF 1957.

⁴³ This pronunciation of the name comes from a Saami informant (ULMA, COLLIN-DER 1935). It is a word borrowed back from Swedish to Saami with a long *a* in the first syllable that reverts to its pronunciation in the Swedish name *Maksjön*. The name element -*re(n)*- is a reduction of the South Saami -*jaevrie* with the addition of Swedish -*n* (definite form). This borrowing was possible because South Saami has the word *maake* 'son-in-law' (even other meanings; BMM 181), which

ther examples in the upper reaches of the long Lake Malgomaj, Jetneme. An instance of Swedish name-forms in the literature is Vackemacksmyran (PET-TERSSON 1982 I, 109, 187), where the South Saami word vaegkie 'valley, stretch of valley' forms the specific. A tract of land named Gäddbäcksmocken⁴⁴ (also Gäddbäcksmorkan, PETTERSSON 1982 I, 206, 258) represents the same dualism in naming that we have already encountered several times. A neighbouring farmhouse is called *Mocken*, ⁴⁵ and continuing towards Lake Kultsjön, Gålhtoe, we finally see the mere Mocktjärn (PET-TERSSON 1982 II, 115). On the map, the name given to the important summer site Fatmomakke, Faepmie, contains the word final -makke, that is -makkie (in modern South Saami orthography -mehkie). This is situated close to the inner part of an inlet from which a tract of land leads to the next navigable water; this was the start of the route to the Vilhelmina Saami summer habitation in the fells (map 8). The incidence of mocka is not restricted to the extreme west of Vilhelmina parish, but it is also found in the woodland areas. In Gafsele, for instance, we find the names Stenvattenmockan, Valvogsmockan and Måcken, meaning tongues of land between various stretches of water. 46 This is not an exhaustive collection of names from various parts of Lapland, but my examples will suffice to give an idea of the function of these name types in local descriptions of the landscape.

3. The noun 'måhkke': distribution and etymology

It can thus be seen that in names from Saami regions in the valleys of the River Lule, the River Skellefte and—as regards Vilhelmina—the River Ångerman, Swedish 'ed', that is, 'stretch of land between waters', two different name elements are represented, corresponding to Saami nouns. One is simple: names with *mårka* 'ed', from Lule Saami *muorkke*, originate from contact between Saami and Swedish populations. In the case of other names, there is more uncertainty about the source language and the direction of borrowing. From the point of view of language history, Saami *måhkke* is a loan from West Finnish *mukka*, which corresponds to the standard *mutka*, ⁴⁷ and the Finnish meanings are essentially the same as the Saami. A question may

was thus not an original part of the name. The reconstructed Saami form should therefore be *Mahkiejaevrie (with short a), that is synonymous with the Swedish Maksjön, often shown on maps as Måcksjön. O. P. Pettersson states quite correctly that the name of the lake is connected with mahkie 'strip of land that blocks a navigable waterway' (Pettersson 1941 I, 7).

⁴⁴ DAUM, PELLIJEFF 1957.

⁴⁵ DAUM, PELLIJEFF 1957.

 $^{^{46}}$ DAUM, BERTIL FLEMSTRÖM 1958.

⁴⁷ Saami *måhkke* comes from West Finnish *mukka* (SKES 354, SSA II, 184).

arise as to whether Swedish *mocka* can be considered a loan from Saami *måhkke*, but this is not plausible since the meaning 'ed' is not present in the Saami word. The Saami themselves used the word *muorkke* for 'stretch of land (between navigable waters)'. Turning to the Finnish word, we may ask whether it could have had any effect on those terms used in early times, even though Finnish is used today only in the vicinity of northernmost Sweden. And how are we to explain the vocalism in Swedish *mocka* (with variants) in the South Saami region, where the vocalism of the Saami word *mehkie* (with the earlier orthography *mahkie*)? These and other questions require a survey of the relevant nouns in all three languages.

An examination of the meanings conveyed by måhkke (Ume Saami måhkkie, South Saami mehkie) reveals that in the north it signifies 'bend, curve or loop (in a tangible object, stream, shore, road, etc.)' or 'inlet (in a river, lake), 'cove; nook' (in a room, building)'. These concrete meanings have yielded metaphoric use, namely meanings such as 'destination, end, finish; purpose'. These are based on the idea of a journey as a way of getting "there and back"—that is, the journey itself is a kind of 'loop'. Most of these meanings are found as far as South Saami, but a few more appear in the region under investigation. The concrete meanings are the same as in the north, that is, 'bend, curve (of a stream, valley, etc.)', ⁴⁸ and the metaphoric meanings are also similar: 'inner part, end (of a lake, valley, etc.); nook; (farthest) horizon'. A connection with movement and travel can be clearly seen in the South Saami 'destination, purpose' and in '(reconnoitring) round trip'. From these meanings a development into 'travel, journey, (stretch of) road' can be considered natural. The latter meanings of the Saami word are not found in the more northerly dialects. The word måhkke (with varying pronunciations) occurs in all major Saami languages from the Kola Peninsula to South Saami, however.⁴⁹

⁴⁸ BMM 186, GH I, 21–22.

⁴⁹ DAHLSTEDT (1950: 203–206) regards Swedish *mock(e)* 'stretch of land between lakes', and corresponding place name elements within Vilhelmina as loans from South Saami *muerhkie* (cf. Lule Saami *muorkke*) 'mårka'. He considers that, just as *þ* (voiceless dental spirant) in Old Swedish *maþker* 'mask' (HELLQUIST 1948 I, 634) was in certain dialects replaced by *k* (*makk* 'mask'), so could an earlier Saami **muetkie* have become *mock(e)* in the Vilhelmina dialect. This possibility is, however, inconsistent with the fact that the pronunciation *makk* 'mask' is found on Öland and Gotland, in Uppland, Västmanland, Gästrikland and Dalarna (except in Särna and Idre), and also occurs in a transitional area in southernmost Hälsingland. South of *kk*, *rk* occurs in many places and *rk* is the predominant pronunciation in the whole of northern Sweden starting from Hälsingland and Härjedalen (OSD). In the area of Norway that is closest, namely, Tröndelagen and the greater part of Helgeland, the pronunciation *mark* is found except for Vega, Brönnöysund and Korgen

The main distribution area of Swedish *mårka* is in northern Lapland, while as DAHLSTEDT has shown, mocka is most common in the south (Asele Lapland), where it carries a clear sense of the Swedish 'ed' in the dialects. O. P. PETTERSSON, who in his study of Swedish dialects in Vilhelmina, explains mocka (pronounced in the Vilhelmina dialect as mökk and mökke) as being 'a strip of land between two calm waters in a larger watercourse, very narrow or miles wide'. 50 For the River Lule we find only the appellative meaning in early travel accounts, but as far south as Bodum in northwest Ångermanland, where the Swedish ed is principally used, there are also examples of mocka (pronounced mökk). One could say, dä ä barre n litn mökk, 'it is only a short distance' (DAHLSTEDT 1950: 205-206). Compare this with the South Saami *mäkkie sjäddaa duj goådiej raajaan* 'it will be a long journey to those huts'. ⁵¹ Does *mocka* (with variants) along the northern rivers, in for example Swartz's and Nensén's writings, have its origin in Åsele Lapland, where it occurs as a noun? Whatever the case, Nensén knew the term from his period of work in Dorotea in Asele Lapland (DRAKE 1918: XII). In recent accounts from informants in the parishes of Dorotea and Fredrika, mocka signifies 'firmer ground between two waters', and is found in a number of nature names. 52 However, the place names I have cited from Lule and Pite Lapland indicate that here too in earlier times the word was part of the everyday vocabulary of the Forest Saami. It is quite conceivable that the terms mocka and måhkke were kept alive among the non-Saami and Forest Saami populations of that period, for whom trafficking on the rivers was a mutual concern. Later on, however, the Saami måhkke (måhkkie) no longer retained the meaning 'ed' in everyday speech. This may, however, only reflect deficiencies in the source material, since the Forest Saami were assimilated early on. We lack reliable sources regarding their vocabulary and the ways in which their speech may have differed from the more westerly Fell Saami varieties. It is primarily their vocabulary that is now to be found in dictionaries and texts.

Because the dialect collections in DAUM in Umeå⁵³ contained no examples of *mocka* as a topographical term in the northernmost Swedish dialects, I tried interviewing a few elderly people in 1983 in villages close to the lakes Uddjaur and Storavan in Arjeplog, *Árjepluovve*. Around this area there are,

in the far north (Norwegian Dialect Archives, Oslo). Vilhelmina is thus surrounded by a large *rk*- area.

⁵⁰ ULMA, VILHELMINA, PETTERSSON.

⁵¹ GH II, 899.

⁵² DAUM, parish collection for Dorotea, Lisa Lidberg 1937.

⁵³ DAUM = Dialect, Place name and Folklore Archives in Umeå, containing Swedish, Finnish and Saami material from northernmost Sweden.

as we have seen, stretches of land with names containing both Saami måhkkie and Swedish mocka. In the village of Mellanström I met Sven Granström, 79, and Wilma Holmgren, 75, who both knew the word mocka in the sense 'land between two stretches of navigable water'. Differing usage among Saami and the settlers is also indicated in a leaf from Arjeplog, where a place named in a map Kuorpamuotke, Guorbbamuötkkie, is called Måcka by an informant who has also added that this is 'what the Swedes called it'. 54 More interviews could perhaps have extended the geographical range of examples of the Swedish mocka. In any case, one way of finding out more about its background is to examine its function in fishing terminology in the coastal dialects of Norrland. Mocka is used by the fishermen to mean the bent-over outermost part of a net, particularly a salmon net, and the angular space thus formed. The term is also used of the rim of a hoop net.⁵⁵ SAOB (the Swedish Academy Dictionary) has examples from 1751 (mock-) and 1772 (måck-) onwards, but does not risk any etymological speculation.⁵⁶ Word sheets in the language archives show the word occurring, with some variation of meaning, in the coastal areas of Norrbotten and Västerbotten, for example, måcka: 'some kind of fishing-tackle, some kind of hoop net'. It has now been established that the etymology of the term is Finnish. It is a borrowing from West Finnish mukka, which along with a number of other words made its way into rural dialects on the Swedish side of the Gulf of Bothnia.⁵⁷ Similarly, in northern Finland a salmon net called a mukkaverkko (verkko 'net') was used, the name referring to the looping over of the outer end of the net in order to get a better catch (MATTILA 1966: 5). The next question to be answered is whether the Finnish word with its linguistic variants and its background in Finnish dialects can help us to understand the place name elements mocka and måhkke.

⁵⁴ Gn. 34a3, ULMA, GRUNDSTRÖM 1935.

⁵⁵ OSVALD HÖGBERG describes the appearance of herring nets, salmon nets and hoop nets that had a so-called *mocka*. The term referred to the outermost bent or angled parts of the net rim, which increased the efficiency of the net (HÖGBERG 1927: 24, 34, 35).

⁵⁶ See the word *mocka* in SAOB 17: 1201 and *laxmocka* 15: 372.

One notation says that *mocka* is a 'salmon net with the outer edge bent back over (meaning that the salmon were more efficiently caught)', which is essential; it seems to have been an innovation in net and seine fishing, and considering the etymology, it must have been a Finnish-speaking population that introduced it. ÅKE HANSSON reports in a paper (off-print, no publication date) having found ten similar obvious borrowings related to coastal livelihoods in Norrland. I have previously written a paper on one of them, *håp* from Finnish *haapio* 'small boat made of an aspen trunk' (KORHONEN 1982).

4. Finnish mukka and mutka, occurrence and meanings

The Saami *måhkke* is presented in etymological dictionaries as a loan word from Finnish mukka, which in most meanings is identical to the literary mutka. 58 The consonant combination -kk- in mukka, which is the result of an assimilation from -tk-, has a West Finnish distribution.⁵⁹ Like many other elements of the oldest Finnish settlement area in southern and central Finland, the geminate consonant cluster of this word has spread to the colonised regions in the north of the country and is now the form of the Far Northern dialects. 60 Mutka on the other hand has East Finnish representation in the dialects and is part of the standard language. Irrespective of pronunciation, the meaning of the word is 'curve, bend; winding', and from these, such meanings as 'detour', 'complication' and 'trick' have developed. In older written Finnish *mutka* has approximately the same meanings⁶¹ as those shown in later dialects material related to mutka ~ mukka. There are a few deviations, which are the names of certain curved objects (among others 'a sort of flail', distribution northwest of Lake Ladoga; 'harness-bow', according to scattered examples and 'salmon net with bent-in outermost part', in northwest Finland). 62 Mutka and mukka, in the meanings 'bend, curve (in road, waterway, etc.)', are also common place name elements in most parts of Finland. Of particular interest in this context is the meaning 'inlet' (noun and place name element) within a restricted area near Lake Päijänne in Tavastia (in Finnish dialectology this area is called Päijänne-Tavastia [Fi. Päijät-Häme]), and in northern Finland (map 9).⁶³ In the former area there is also the meaning 'fringe, secluded spot, (remote) corner (of a field, etc.)'.64 Of the great number of toponymic instances with this meaning, most constitute the names of fields and meadows, or areas of forest or land, for example, marchland and hollows.

The two distribution pictures of *mutka* in Tavastia and *mutka* in northern Satakunta and southern Ostrobothnia as noun and place name elements are interesting from the point of view of settlement history. They represent two well-known areas of expansion in a northerly direction of Finnish hunting and

⁵⁸ According to SKES II, 354 and SSA, these sources refer to ERKKI ITKONEN (1969: 144) who, nevertheless, has some doubts regarding this etymology.

⁵⁹ MATTILA 1966, KETTUNEN 1940, map 7. This is a recurring phenomenon characteristic of south-western Finnish. Similar features are also found in northern Finland (VIRTARANTA 1980: 175–186).

 $^{^{60}}$ Virtaranta 1980: 175–178, Paunonen 1987: 216–223.

⁶¹ MATTILA 1966: 2–4, LÖNNR II, 1097.

⁶² SMS, MATTILA 1966: 5 and map 1.

⁶³ MATTILA 1966: 39 and map 8.

⁶⁴ MATTILA 1966: 6 and map 9.

fishing activities (Finnish eränkäynti). 65 Apart from the difference in the phonetic form of the noun in the two areas, it is worth observing that the original mutka from Tavastia has the meaning 'inlet' in both its core and in its expansion area in northern Finland (as the latter may well be considered). 66 This extended meaning may be connected with a more frequent use of the word in contexts related to journeys via waterways to and from distant fishing and hunting grounds. The word obviously signified a place that could be reached by boat, but from where something in the natural environment prevented further travel by water. The area in the west where mukka occurs is also a region with an ancient culture, which in historical presentations and linguistic studies has been described as an area of early expansion to the north (map 10). In Tavastia, inland lakes and rivers were used for journeys north, while the terrain in northern Satakunta and southern Ostrobothnia made it possible to start a journey by following the rivers towards the coast near the Kvarken straits, then to travel further in the Gulf of Bothnia region and along the surrounding rivers.⁶⁷ Here we find no special development in name-elements or nouns, which agree with the main meanings of the word in Finnish. In this case also, in the whole of northern Finland the word stem is used in its dual function both as a place name element and a noun meaning 'bend, curve or loop', referring to the geographical features.

Mukka also made its way to northern Sweden, Finnish dialects in Finnmark and the North Karelian region. We may speculate that this dissemination, which at various points reached the Saami areas, was behind the borrowing that became Saami måhkke. In the North, the West Finnish word with its assimilated form completely replaced the Tavastian term. On the other hand the meaning 'inlet' in many names and as an appellative has survived in the north, a sign of an earlier form having its origin in Tavastia. In point of fact all toponyms referring to inlets in rivers are found in northern Finland. Meaning, frequency and the geographical characteristics of mutka both as a toponym element and a Tavastian appellative indicate quite clearly its close connection with a region frequently demonstrated in Finnish studies to be the earliest and most active, as far as the spread of the population northwards is concerned. This has been demonstrated not least by studies of Tavastian place names with equivalents in the north. ⁶⁸ In the course of time the traces of Tavastian Finnish were overlaid not only with West Finnish lin-

⁶⁵ Vahtola 1980a: 120–126, Vahtola 1991: 196–197.

⁶⁸ VAHTOLA 1980b: 102–190.

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⁶⁶ MATTILA 1966: 39, 155 instances with the meaning 'inlet', c. 20 in Tavastia and the remainder in northern Finland.

⁶⁷ LUUKKO 1954: 93–94, VAHTOLA 1980b: 292–308.

guistic and cultural elements, but also with Savonian, usually known in northern Sweden as 'Forest Finnish'.

Modern research into the history of colonisation has shown the reciprocity between the Tavastian and Satakunta expansions to the north. At an early stage the two provinces formed a closely knit region both linguistically and culturally, but gradually a northerly migration from central Tavastia with its numerous lakes took place, many traces of which are still to be found in northern Finnish toponyms. Studies demonstrate that place names in the north indicate the areas where the settlers came from. From the distribution of toponyms, and other information related to the settlement history, one can also conclude in broad outline when the various name types spread northwards. Names of Tavastian origin are the earliest, probably from 1000-1150, that is, the latter part of the Viking era onwards, whereas names with parallels in the most south-westerly parts of the country are from a later period. Those showing some connection with the coast are assumed to be from the early medieval period, that is, the 1300-1400s. Since the hunting and fishing-related population movement from Satakunta inland took place sometime between these two periods, we can hazard a guess as to the time when mukka found its way north. The easterly mutka and its use as a place name element was chronologically older, and the assimilated form mukka would have taken considerable time to develop, ⁶⁹ but this latter form subsequently achieved a vigorous and widespread distribution, completely replacing mutka in the north. Judging by the meaning 'inlet' in nouns and place names in northern Finland, I, nevertheless, assume that the latter was there previously.

There was both fishing and hunting in the northern territories, and hunting terms with equivalents in name-elements occur several times in the material from Tavastia. Similarly, dialect words and toponyms can be found in the west which are shoreline topographical terms, connected with fishing or fishing equipment. If one compares the geographical distribution of Finnish *mukka* as a place name and an appellative, one finds that it corresponds well with certain other place names and nouns which are widespread in Satakunta. The Finnish toponyms that can still be traced in Norrbotten give grounds for believing that, here too, there was an early Finnish population, either residing here seasonally or living in small settlements, before the

⁶⁹ Distribution of words with assimilated *-kk-* from *-tk-* can be seen in KETTUNEN 1940, map 7.

⁷⁰ Vahtola 1991: 191–192.

⁷¹ VAHTOLA 1980b: 226, 248, 296–297, VILKUNA 1975: 398.

⁷² MATTILA 1966, map 10.

⁷³ Vahtola 1980b: 226, 248, 296–297, Vilkuna 1975: 398.

Swedish population became predominant. Several place names that can clearly be identified as Finnish extend south to the area between the Lule and Pite rivers, and indeed even further south. The name of the River Pite (Swedish *Piteå*) has been discussed in a number of contexts, and my interpretation is based on the Finnish dialect word *piitta* 'steep bank of stream or river, steep hill'. This is found with a narrow distribution in dialects that very closely corresponds to the distribution of the name-element and noun *mukka*. The northern hunting journeys described in detail by Jaakkola made use of the waterways in northern Satakunta to reach southern Ostrobothnia and from there the Gulf of Bothnia. His account has been criticised for being provincial and patriotic, but many others since then have written about the significance of this settlement route and substantially confirmed the historical development.

The next question is whether the circumstances I have described can explain why the place name element *måhkke* and the dialect word *mocka* in northern Sweden often mean Swedish 'ed', while Saami måhkke lacks this meaning in everyday speech. The less frequent meaning 'inlet' can be found in a number of instances, but the usual Saami word for 'ed' is muorkke (with variants). On the other hand, we have seen that Swedish *mocka*, which has particularly noticeable distribution among the Swedes of southern Västerbotten, referred to those stretches of land traversed on foot in the course of journeys on the water. I was able to determine the current use of the word near the Skellefte river. The Saami muorkke served as a designation for Swedish 'ed', and no synonyms were needed. Quite the contrary, the term was so expressive and so frequent that it became a loan word in Swedish dialects, and even became a part of the standard northern Swedish. Mocka, on the other hand, led a more secluded existence as a dialect word, with its greatest frequency in Asele Lapland in southern Västerbotten. Nevertheless, an analysis of Saami place names containing the element *måhkke* revealed the contextual meaning of Swedish 'ed', which ultimately must have stemmed from the complex multilingual situation of an earlier period. The borrowing of the Saami *måhkke* from Finnish *mukka* implies early and close contact between the populations over a large area for a long time. It has been established that the coastal population undertook fishing expeditions from the coast to the inland fishing lakes from as early as the 14th century, 77 and

⁷⁶ Jaakkola 1924, Vahtola 1980b: 284, 308.



⁷⁷ HULTBLAD 1968: 158.

Names with obvious or assumed Finnish origins are, for example, *Jörn, Kinnbäck, Hortlax, Rosvik, Kallax, Vittjärv, Niemisel, Ryssbält, Morjärv, Räktfors.* See ED-LUND 1988.

 $^{^{75}}$ Korhonen 1982: 87, cf. Mattila 1966, map 10.

traces of contacts from the coast up to the fells can still be seen in *mocka* and other terms in the Swedish coastal dialects. As long as there were contacts between Saami-speaking and Finnish-speaking populations, the two languages preserved the meanings of 'their own' words, but in language of the subsequently dominant Swedish population there was no longer the need for this. There was now scope for semantic change. It is only in such multilingual environments that we can find examples of words and concepts detached from their original meanings. The stronger position of Saami in the north meant that the Swedish dialectal *mocka* fell into disuse and was superseded by *mårka* in the meaning 'ed', but its influence from an earlier period can be traced today in a number of toponyms in the Lule river valley, as was demonstrated above.

One of these names is Jokkmokk, Jåhkåmåhkke, the tract of land where travellers were forced to break off their river journey and use the lakes instead to continue towards the fells. The name was not based on any Saami naming motivation; rather it reflected the world-view of a traveller. The Saami had their Dálvvadis, the place where they gathered together when the winter was coldest and the snow deepest. In the summer the families spread out in various directions to go fishing and hunting, and later to herd their reindeer. The travellers stopped here before continuing their journeys. Jåhkåmåhkke did not become a permanent settlement until the church, tollhouse and dwellings for the pastor, sexton and merchants were built. A 'church town' with huts also grew up, and soon the early character of the place was forgotten. But it is still possible, at certain places on the ridge that extends through the small market town of Jokkmokk, to observe the road that led from the river up to the first lake. One such place is the area just south of the old church. Excavations at the site of the present hospital revealed the remains of a building that had probably been the first church in Jokkmokk, dating from the 17th century (GRUNDSTRÖM 1930). The remains of bones in the ground indicated that the first churchyard lay here as well. All these places are located close to the stretch of land that travellers crossed on their journey to the west. Place names are much more than names; they are historical documents waiting to tell their story.

Abbreviations

BMM = Bergsland, Knut–Matsson, Magga 1993.

DAUM = Dialekt-, ortnamns- och folkminnesarkivet i Umeå.

Ek. = Ekonomisk karta över Sverige.

GH see Hasselbrink 1981-85.

Gn. = Generalstabskartan.



HG see Grundström 1946–54.

KB = Kungliga Biblioteket [The Swedish Royal Library], Stockholm.

LÖ see Lindahl-Öhrling 1780.

LÖNNR see Lönnrot (1874–80) 1958.

OSD = Språkprov i Ordbok över Sveriges dialekter. Uppsala.

R see UUB.

SMS = Suomen murteiden sanakirjan kokoelmat.

SSA = Suomen sanojen alkuperä.

ULMA = Dialekt- [earlier: Landsmåls-] och folkminnesarkivet i Uppsala [Institute of Dialect and Folklore Research, Uppsala].

UUB = Uppsala Universitetsbibliotek [Uppsala University Library].

References

- AHNLUND, NILS (ed.) (1928) Olof Tresk. Kartor över Kemi & Torne lapp-marker 1642 och 1643. Stockholm.
- BERGLING, RAGNAR (1964) Kyrkstaden i övre Norrland. Kyrkliga, merkantila och judiciella funktioner under 1600- och 1700-talen. Skytteanska Samfundets handlingar 3. Uppsala.
- BERGSLAND, KNUT—LAJLA MATSSON MAGGA (1993) Åarjelsaemien daaroen baakoegærja Sydsamisk-norsk ordbok. Alta.
- DAHLSTEDT, KARL-HAMPUS (1950) Det svenska Vilhelminamålet. Allmän inledning. Ord och betydelser. Skrifter utgivna genom Landsmåls- och Folkminnesarkivet i Uppsala. A: 7. Uppsala.
- DRAKE, SIGRID (1918) Västerbottenslapparna under förra hälften av 1800-talet. Lapparna och deras land. Skildringar och studier utgivna av Hjalmar Lundbohm VII. Uppsala.
- EDLUND, LARS-ERIK (1988) Några maritima perspektiv på det bottniska ortnamnsförrådet samt aspekter på kulturgränser inom det nordnorrländska området. Det maritima kulturlandskapet kring Bottenviken. Artiklar och studier från Bottenviksprojektet. Umeå.
- GRAAN, OLAUS (1899) *Relation, eller en fullkomblig beskrifning om lappar*nas vrsprung, lefwernes förehållande. Bidrag till kännedom om de svenska landsmålen ock svenskt folkliv XVII/2. Uppsala.
- GRUNDSTRÖM, HARALD (1930) Ett gammalt gravfält i Jokkmokk. Norrbotten 1930. Luleå.
- GRUNDSTRÖM, HARALD (1946–54) *Lulelapsk ordbok 1–4*. Skrifter utgivna genom Landsmåls- och folkminnesarkivet i Uppsala. Ser. C I: 1–4. Uppsala.
- HACKZELL, NILS (1731) (1928) Staden Luleå och dess grannsocknar. Norrbotten 1928. Luleå.

- HASSELBRINK, GUSTAV (1981–85) Südlappisches Wörterbuch Oårjelsaamien baaguogärjaa I–III. Skrifter utgivna genom Dialekt- och folkminnesarkivet i Uppsala. C: 4. Uppsala.
- HELLQUIST, ELOF (1948) Svensk etymologisk ordbok I–II. Tredje uppl. Malmö.
- HOLMBÄCK, ÅKE (1922) *Om lappskattelandsinstitutet och dess historiska utveckling*. Statens offentliga utredningar 1922: 10. Stockholm.
- HOPPE, GUNNAR (1945) Vägarna inom Norrbottens län. Geographica 16. Uppsala.
- HULTBLAD, FILIP (1968) Övergång från nomadism till agrar bosättning i Jokkmokks socken. Acta Lapponica XIV. Lund.
- HÜLPHERS, ABRAHAM ABRAHAMSSON (1789) Samlingar til en Beskrifning öfwer Norrland. Femte samlingen om Westerbotten. 1 Bandet. Westerås.
- HÜLPHERS, ABRAHAM ABRAHAMSSON (1922) Samlingar til en beskrifning öfwer Norrland. 5: 3. Lappland. Utgiven av G. Kallstadius. Stockholm.
- HÖGBERG, OSVALD (1927) Fiske i Lule skärgård. Svenska landsmål ock svenskt folkliv 1926. Uppsala.
- ITKONEN, ERKKI (1969) Lappische Chrestomatie mit Grammatikalischem Abriss und Wörterverzeichnis. Hilfsmittel für das Studium der finnischugrischen Sprachen VII. Helsinki.
- JAAKKOLA, JALMARI (1924) *Pirkkalaisliikkeen synty*. Turun Suomalaisen Yliopiston julkaisuja. Sarja B, osa II, n:o 1. Turku.
- KETTUNEN, LAURI (1940) Suomen murteet. III. A. Murrekartasto. Helsinki.
- KORHONEN, OLAVI (1982) Samisk–finska båttermer och ortnamnselement och deras slaviska bakgrund. En studie i mellanspråklig ordgeografi och mellanfolklig kulturhistoria. Skrifter utgivna av Dialekt-, ortnamns- och folkminnesarkivet i Umeå. Umeå.
- LASSILA, MAUNO (1972) Vägarna inom Västerbottens län. Kommunikationernas utveckling mot bakgrund av befolkning och näringsliv. Umeå.
- LINDAHL, E.—ÖHRLING, J. (1780) Lexikon Lapponicum. Holmiae.
- LINNÉ, CARL VON (1913) Iter Lapponicum. (Uppsala.) Stockholm.
- LUUKKO, ARMAS (1954) *Pohjois-Pohjanmaan ja Lapin keskiaika sekä 1500-luku*. Pohjois-Pohjanmaan ja Lapin historia II. Oulu.
- LÆSTADIUS, PETRUS (1831) (1977) Journal för första året af hans tjenstgöring såsom missionaire i Lappmarken. Petrus Læstadius Journaler. Faksimilietext och kommentar. Kungl Skytteanska Samfundets handlingar 15: 1. (Stockholm) Umeå.
- LÖNNROT, ELIAS (1874–80) (1958) Suomalais–Ruotsalainen Sanakirja I–II. Porvoo.
- MATTILA, RIITTA (1966) *Sana* mutka *ja sen synonyymeja Suomen paikannimissä*. Pro gradu-tutkielma. Helsingin yliopiston Suomen kielen laitos. Helsinki.

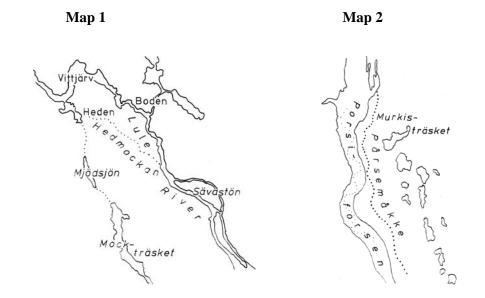
Olavi Korhonen

- NU = Norrländsk uppslagsbok 1–4. Red. LARS-ERIK EDLUND. Umeå, 1993–1996
- ODENCRANTS, R. (1944) Brotjärnsfyndet. Norrbotten 1943. Luleå.
- PAUNONEN, HEIKKI (1987) De finska dialekterna på Nordkalotten och deras förhållande till de andra finska dialekterna. Nordkalotten i en skiftande värld. Kulturer utan gränser och stater över gränser. Studia historica septentrionalia 14: 2. Rovaniemi.
- PETTERSSON, OLOF PETTER (1941–60) (1982) Gamla byar i Vilhelmina I–IV. Stockholm (I–III.), Uppsala (IV.). Kungl Skytteanska Samfundets handlingar 23: 1–2. Facsimilieupplaga. Umeå.
- PIRAK, ANTA (1937) *Jåhttee saamee viessoom*. Skrifter utgivna av K Humanistiska Vetenskaps-Samfundet i Uppsala 31: 2. Uppsala.
- RHEEN, SAMUEL (1897) En kortt relation om lapparnes lefwarne och sedher, wijd-skiepellsser, sampt i många stycken grofwe wildfarellsser. Bidrag till kännedom om de svenska landsmålen ock svenskt folkliv XVII, 1. Uppsala.
- OAB = Ordbok över svenska språket utgiven av Svenska akademien. Lund, 1898–.
- SERNING, INGA (1960) Övre Norrlands järnålder. Umeå.
- SKES = Suomen kielen etymologinen sanakirja I–VI. Red. Y. H. TOIVONEN—ERKKI ITKONEN—AULIS J. JOKI—REINO PELTOLA. Lexica Societatis Fenno-ugricæ XII, 1–6. Helsinki, 1955–78.
- SSA = Suomen sanojen alkuperä 1–3. Red. ERKKI ITKONEN—ULLA-MAIJA KULONEN. Helsinki, 1992.
- VAHTOLA, JOUKO (1980a) De finska ortnamnen i Nord-Skandinavien och deras nyttjande som historisk källa. Nord-Skandinaviens historia i tvärvetenskaplig belysning. Red. E. BAUDOU—K-H. DAHLSTEDT. Acta Universitatis Umensis. Umeå Studies in the Humanities 24. Umeå.
- VAHTOLA, JOUKO (1980b) *Tornionjoki- ja Kemijokilaakson asutuksen synty*. Nimistötieteellinen ja historiallinen tutkimus. Studia Historica Septentrionalia 3. Rovaniemi.
- VAHTOLA, JOUKO (1991) Folkens mångfald. Tornedalens historia I. Från istid till 1600-talet. Red. by YRJÖ ALAMÄKI—OLOF HEDERYD—MATTI KENTTÄ. Haparanda.
- WIKLUND, K. B. (1928) Norrbottniska socken- och kapellnamn av lapskt och finskt ursprung. Norrbotten. Läsebok för skola och hem II. Utg. av G. Bergfors och A. Neander. Stockholm.
- VILKUNA, KUSTAA (1975) Unternehmen Lachsfang. Die Geschichte der Lachsfischerei im Kemijoki. Studia Fennica 19. Helsinki.
- VIRTARANTA, PERTTI (1980) De finska dialekterna i Nord-Skandinavien och deras historiska bakgrund. In: Nord-Skandinaviens historia i tvärvetenskaplig belysning. Red. by E. BAUDOU—K-H. DAHLSTEDT. Acta universitatis Umensis 24. Umeå.

Unpublished sources

KB, M 200, Dagbok under resor i Vesterbotten och Lappland 1797–1800 av C. M. Robsahm.

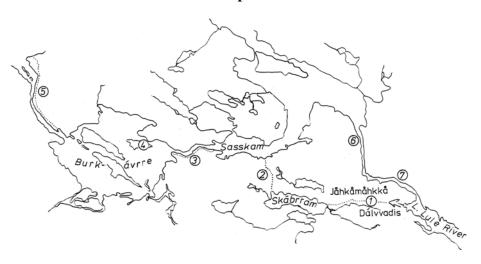
KB, M 205, Dagbok öfver min resa till Lappmarcken 1780 av Olof Swartz. UUB, R 649, 650 Samlingar om samisk kultur 1818–1841 av J. A. Nensén.



Map 3



Map 4



Map5

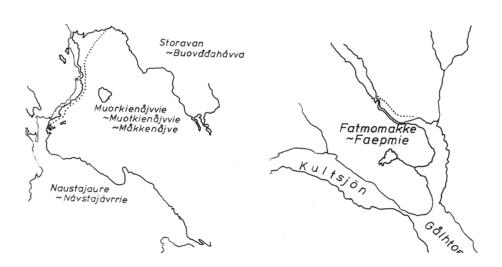


Map 6



Map 7

Map 8



Map 9

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Map 10

