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Inhalt

Band 64 – Heft 1–3

Jussi Ylikoski (University of Oulu & Sámi University of Applied Sciences)
The so-called relation forms of nouns in South Saami:
A byproduct or remnant of Uralic *-*mpV*? ..... 6 – 71
Santeri Junttila (University of Helsinki)
Altlettgallische Lehnwörter in den mordwinischen Sprachen?..... 72 – 91
Denis Kuzmin (University of Helsinki & Karelian Research
Centre, Petrozavodsk)
From the Middle Ages to modern times: the Karelian
female name system ..... 92 – 117
Minerva Piha (University of Turku)
Combining Proto-Scandinavian loanword strata in South
Saami with the Early Iron Age archaeological material of
Jämtland and Dalarna, Sweden..... 118 – 233
Elena Vedernikova (Eötvös Loránd University)
Language choice among rural Mari families and their
motives..... 234 – 254
Konstantin Zamyatin (Durham University)
Evaluating language revival policies of Russia's
Finno-Ugric republics: policy impact and its limits ..... 255 – 333

Besprechungen

Riho Grünthal Ein bedeutender Fortschritt in der
Erforschung der Frühgeschichte des Ostseefinnischen
(Valter Lang: *Läänemeresoome tulemised*) ..... 334 – 342

Ulla-Maija Forsberg Ein neues Handbuch über die ungarische Sprachgeschichte (Kiss Jenő & Pusztai Ferenc: *A magyar nyelvtörténet kézikönyve*) ..... 343 – 348
Sirkka Saarinen Von Sprachkontakten zum Sprachtod oder zur Superdiversität? (Reetta Toivanen & Janne Saarikivi (eds): *Linguistic Genocide or Superdiversity? New and Old Language Diversities*) ..... 348 – 353
Sirkka Saarinen Etymologische Erörterung ungarischer Wörter (László Honti: *A magyar* és *a nyugati ótörök szókészleti kapcsolatairól*) ..... 353 – 356
Mariann Bernhardt Detachment constructions in European languages and beyond (M. M. Jocelyne Fernandez-Vest: *Detachments for Cohesion. Toward an Information Grammar of Oral Languages*) ..... 356 – 359
Nobufumi Inaba Sprachmaterial und Grammatik zum livländischen Livisch (Eberhard Winkler & Karl Pajusalu (eds): *Salis-Livisch I. J. A. Sjögrens Manuskript / Salis-Livisch II. Grammatik und Wörterverzeichnis*) ..... 360 – 367

Kurzrezensionen

Lars-Gunnar Larsson: *Per Holmberger och sockenlapparnas språk*
– Rez. von Sirkka Saarinen ..... 368 – 369
Johanna Laakso, Anneli Sarhimaa, Sia Spiliopoulou Åkermark & Reetta Toivanen: *Towards openly multilingual policies and practices. Assessing minority language maintenance across Europe.*
– Rez. von Sirkka Saarinen ..... 369 – 370
В. К. Кельмаков: *Острые углы удмуртской филологии*
– Rez. von Esa-Jussi Salminen ..... 371 – 372
Arto Moisio & Okan Daher: *Tataarilais-suomalainen sanakirja. Татарча-финча сүзлек. Tatarça-fınçä süzlek.*
– Rez. von Esa-Jussi Salminen ..... 372 – 373
Hans-Hermann Bartens (ed.): *Sagen aus Lappland.*
– Rez. von Sirkka Saarinen ..... 374 – 375
Shibanov A. A.: *Подражательные слова в удмуртском языке.*
– Rez. von Dmitriy Efremov ..... 375 – 377

Berichte und Nekrologe

Ildikó Lehtinen Tamás Hofer 1929–2016 ..... 378 – 381
Sirkka Saarinen Evdokija Rombandeeva 1928–2017 ..... 382 – 383
Sirkka Saarinen János Gulya 1933–2017 ..... 384 – 385
Sirkka Saarinen László Vikár 1929–2017 ..... 386 – 387
Ildikó Lehtinen Galina Nikitina 1951–2017 ..... 388 – 391
Ildikó Lehtinen Aleksei Peterson 1931–2017 ..... 392 – 393

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The so-called relation forms of nouns in South Saami: A byproduct or remnant of Uralic *-*mpV*?

The paper describes a previously little-known grammatical category in South Saami. Termed here as "relation forms", the phenomenon in question is etymologically related to the comparative and superlative marking of adjectives, but synchronically quite distinct from it. The suffix *-be/-åbpoe* can be attached not only to adjectives (e.g., *nuerebe* 'younger', *båarasåbpoe* 'older'), but also to nouns and kinship terms in particular (e.g., *tjidtjebe* '(the) mother', *vuanavåbpoe* '(the) mother-in-law'), and the superlative marker *-mes/-ommes* can be used similarly, albeit to a lesser extent. The paper discusses the position of such forms in South Saami morphology, syntax and sentential semantics, especially in relation to markers of definiteness and possession. From a diachronic perspective, South Saami sheds new light on the origin of the Saami-Finnic (and Hungarian) comparative marker **-mpV*, and from a typological point of view, it is proposed that the closest analogues to the Saami phenomenon can be found in Tungusic, which also adds to our understanding of the development of **-mpV* comparatives – possibly from a more original contrastive function of the suffix.

1. Introduction
2. Background: comparatives, superlatives, possessive suffixes and definite articles in South Saami
3. Relation forms: a synchronic description
    3.1. History of research
    3.2. Morphology
    3.3. Syntax
    3.4. Semantics
    3.5. Interim conclusion
4. Relation forms: diachronic and comparative observations
    4.1. On the origins of the Saami comparatives and superlatives
    4.2. Typological perspectives – from the Russian Far East
5. Discussion and conclusion

1. Introduction

One of the received wisdoms within Uralic historical morphology is that even though no Proto-Uralic comparative or superlative forms can be reconstructed – and many Uralic languages do without any such forms – the Saami-Finnic comparative degree marker **-mpV* appears to correspond to its functional Hungarian equivalent *-bb*, as shown by, for example, South Saami *orrebe* 'newer', Finnish *uudempi* (: *uudempa-*) id. and Hungarian *újabb* id. Superlative forms such as South Saami *orremes*, Finnish *uusin* (: *uusimpa-*) and Hungarian *legújabb* 'newest', however, have clearly different origins. On the other hand, the Saami-Finnic comparative in **-mpV* and the Hungarian one in *-bb* are not obviously of common origin either, as there seems to be no full consensus on the possible cognates of these suffixes in other branches of the family, and the original function as well as the material origin of the potentially Proto-Uralic **-mpV* has also been debated. However, perhaps the most important thing to note is that the discussion on the origins and history of **-mpV* came to standstill more than two generations ago; it appears that the question has not been addressed in detail since Fuchs (1949) and Raun (1949a). A remarkable exception, however, are the most recent remarks by Pystynen (2015) and Janhunen (2018), to be discussed further below (Section 4.1).

The purpose of the present paper is twofold: an autonomous synchronic description of a little-known comparative- and superlative-related phenomenon in South Saami (Section 3), followed by an attempt to understand it from a diachronic-cum-typological perspective (Section 4). In spite of the introductory remarks on the adjectival comparative degree markers in Saami, Finnic and Hungarian, the primary foci of the following sections are very different. After a brief introduction to the comparative, superlative and certain other grammatical morphemes in South Saami (Section 2), the major part of the paper (Section 3) provides a synchronic description of a heretofore little-known grammatical category – termed here as "relation forms", corresponding to the Norwegian term *forholdsformer* (Bergsland 1982/1994, Magga & Magga 2012). The relation forms in question are evidently materially related to the Saami-Finnic comparative and the Saami superlative, but they appear to have gone completely unnoticed in all general descriptions of the synchrony and diachrony of Saami-Finnic comparative and superlative markers.

To provide a concise and straightforward introduction to the subject matter of this study, it is instructive to reproduce the three examples of the phenomenon as presented in the best-known grammatical description of South Saami by Bergsland (1982: 107; 1994: 110), who briefly states that when speaking of two persons or things, it is possible to refer to their distinct identities by using a morpheme that is formally identical to the comparative degree marker *-be/-åbpoe* (cf. *urre-be* 'new-er' and *båaras-åbpoe* 'old-er'). The same examples have been later repeated by Magga and Magga (2012: 50):

(1) ***Daktaråbpoe*** *darjoeji* *guktie* ***tjidtjebe*** *jeehti.*
daughter.*åbpoe* do.PST.3SG as mother.*be* say.PST.3SG
'The daughter$_i$ did as her$_i$ mother$_j$ said.'
(Bergsland 1982: 107; 1994: 110; Magga & Magga 2012: 50)[1]

(2) *Dellie* ***tjidtjiebasse*** *jeehti.*
then mother.*be*.ILL say.PST.3SG
'Then s/he$_i$ said to his/her$_{i/j}$ mother$_k$ (to his or her own mother or to the mother of someone else under discussion).'
(Bergsland 1982: 107; 1994: 110; Magga & Magga 2012: 50)

Further, Bergsland adds that when speaking of a relationship between many, it is possible to use the suffix *-mes*, otherwise the marker of superlative degree (cf. *orre-mes* 'new-est'):

(3) *Idtjin* *maanah* *seahkerh* *govledh* *maam*
NEG.PST.3PL child.PL care.CNG listen.INF what.ACC
tjidtjemes *jeehti.*
mother.*mes* say.PST.3SG
'The children did not care to listen to what the mother said.'
(Bergsland 1982: 108; 1994: 110; Magga & Magga 2012: 50)

As for the secondary yet logical consecutive aim of the study, a better understanding of the functional range of the Saami-Finnic comparative (**-mpV*) as well as that of the Saami superlative (**-moksi*) enables us to take a new look at the origin of **-mpV* in particular (Section 4). Most importantly, it appears that the Uralic phenomena discussed here have heretofore unnoticed parallels in Tungusic, suggesting that the so-called relation forms of South Saami may well reflect some of the most original functions of the comparative in **-mpV*: It is proposed that the recondite functions

of the relation forms in Saami do not go back to the Saami-Finnic comparative *per se*, but may instead be direct descendants of the original contrastive functions of **-mpV*. Another, less likely – but typologically all the more interesting – alternative would be to regard the relation forms as a phenomenon that has branched out from the originally comparative functions of **-mpV*. This said, the research history of the comparative marker **-mpV* will not be discussed in detail until Section 4.[2]

The description to be presented in Section 3 is based on nearly all written data and information available. In addition to earlier brief descriptions of the phenomena in question, most of my examples come from the multigenre texts of South Saami (nearly 1,100,000 words) made available by the SIKOR corpus at UiT The Arctic University of Norway, as well as from various other texts ranging from early language samples such as the earliest authentic stories in what can be termed South Saami (Halász 1886; 1887) to virtually all kinds of modern texts published in the language. Although much of the data comes from a comparatively large corpus with respect to the size of the language community – of less than one thousand speakers – this study is almost exclusively qualitative in nature. It has not been possible to extend and diversify the topic and methods of the present observational description of written language data to the study of spoken language or a pursuit of grammaticality judgments by native speakers within the confines of this study.[3]

2. Background: comparatives, superlatives, possessive suffixes and definite articles in South Saami[4]

Before delving into the core subject matter of this study, brief background information on some of the relevant parts of South Saami grammar is in order. To begin with the inflectional properties of adjectives, it may be noted that the adjectives in South Saami are a relatively noun-like part of speech and that most adjectives can be inflected for case and number. However, the more characteristic inflectional categories for adjectives consist of attributive and predicative as well as comparative and superlative forms. (Alternatively, it would be possible to regard comparatives and superlatives as belonging to the realm of derivation (cf. Nickel & Sammallahti 2011: 642–645 for North Saami), but for the purposes of the present study, this is mainly a matter of taste that does not significantly affect our understanding of the so-called relation forms in South Saami.)

Adjective inflection is one of the most complex areas of South Saami morphology. Most adjectives have three degrees: the positive, the comparative, and the superlative. In the positive, most autochthonous adjectives have distinct forms in predicative and attributive positions (e.g. *Bïegke bïjvele* '(the) wind (is) warm' but *bïjvele**s** bïegke* 'a warm wind'). However, the mutual relations of the four categories do not lend themselves easily to generalization. Some adjectives have identical forms for both predicative and attributive position (e.g. *noere* 'young', *båeries* 'old'), but most underived adjectives have distinct predicative and attributive forms, and one can seldom automatically derive one from the other. Many adjectives, such as *båeries* 'old', end in *-s*, but for some, the *-s* element occurs in the predicative form only (e.g. predicative *baahkes* vs. attributive *baahke* 'hot'), whereas for other adjectives, the situation is reversed (e.g. predicative *bïjvele* vs. attributive *bïjveles* 'warm'). The predicative and attributive forms may also be quite dissimilar from one another (e.g. *vyölkehke* vs. *veelkes* 'white' or *aebliehtadtje* vs. *aeblehts* 'lazy').

The comparative and superlative markers are *-be* and *-mes*, respectively, for stems that are regarded as disyllabic, but for the trisyllabic stems *-åbpoe* and *-ommes* are used. However, the choice of the suffix is not always obvious, the stems may undergo vowel changes, and for some adjectives, the comparatives and superlatives are based on the attributive forms, whereas for other adjectives, the predicative forms (or both forms) are used. Some adjectives lack comparatives and superlatives altogether. Table 1 provides a condensed and simplified picture of the complexity of adjectival morphology in South Saami.

Given the complexity of adjectival morphology, it is somewhat understandable that in the actual use of this endangered language, many attributive forms tend to be used at the expense of predicative forms in predicative functions as well. On the other hand, some forms, such as the "predicative" *baahkes* and the "attributive" *baahke* 'hot', are used interchangeably for both functions in actual use. Furthermore, especially recent loan adjectives such as *fleksijbele* 'flexible' often occur in analytic comparative and superlative constructions instead of synthetic forms: *jienebe/jeenjebe fleksijbele* 'more flexible' for *fleksijbelåbpoe* and *jienemes/jeenjemes fleksijbele* 'most flexible' for *fleksijbelommes*. Here it is possible to see that the adverbs *jienebe/jeenjebe* 'more' and *jienemes/jeenjemes* 'most' (and further variants) contain the markers *-be* and *-mes*, which are attached to the root *jienebe-/jeenje-* 'much'. Further, the same morphemes can occur

Positive		**Comparative**	**Superlative**
Predicative	Attributive		
noere 'young'	= *noere*	*nuerebe*	*nööremes*
båeries 'old'	= *båeries*	*båarasåbpoe*	*båarasommes*
*baahke**s*** 'hot'	*baahke*	*baahkebe* (*baahkesåbpoe*)	*baahkemes* (*baahkesommes*)
bïjvele 'warm (of weather, clothes)'	*bïjvele**s***	*bïjvelåbpoe*	*bïjvelommes*
vyölkehke 'white'	*veelke**s***	*vielkebe*	*veelkemes*
fleksijbele 'flexible'	*fleksijbele**s***	*fleksijbelåbpoe*	*fleksijbelommes*
jassije 'thick (of flat objects)'	*jassije**s***	*jassajåbpoe*	*jassajommes*
gïssege 'thick (of round objects)'	*gïsse*	*gissebe*	*gissemes*
aebliehtadtje 'lazy'	*aeblehts*	(*aebliehtåbpoe*)	(*aebliehtommes*)

Table 1: A sample of South Saami adjective inflection

in adverbs based on spatial nouns, e.g. *vueliebisnie* [under.CMPV.INE] 'further down', *åerjiebisnie* [south.CMPV.INE] 'further south' and *miehtjiebasse* [away.CMPV.ILL] 'further away'. In this respect, the South Saami comparative and superlative behave quite like their counterparts in other Saami languages as well as analogous morphemes in Finnic and other branches of Uralic (e.g., Finnish *metse-mmä-ksi* [forest-CMPV-TRANSL] and Mari *kožla-škə̑-rak* [forest-ILL-CMPV] 'further toward the forest'; cf. Raun 1949b; Hakulinen 1979: 115–116; Bereczki 1990: 44).

Although the so-called relation forms to be discussed in the following sections are materially related to the comparative and superlative, a functional approach to word forms such as *tjidtjebe*, *tjidtjiebasse* and *tjidtjemes* seen in (1–3) must take into account at least two other morphosyntactic features of the South Saami noun phrase, namely possessive suffixes and article-like demonstratives.

South Saami does not have possessive suffixes as a productive morphological category, but some kinship terms in particular do have possessive forms. For example, *tjædtjeme* 'my mother', *tjædtjedh* 'your mother', and *tjidtjese* 'his/her mother' are possessive forms of the nominative *tjidtjie* 'mother'. The morphological composition of possessive forms is quite unpredictable, as seen in *tjidtjiem* [mother.ACC] : *tjædtjemdh* [mother.ACC.2SG]; *tjædtjan* [mother.ILL] : *tjædtjasadth* [mother.ILL.2SG]; *tjidtjeste* [mother.ELA] : *tjidtjiestadth* [mother.ELA.2SG]. Usually, personal pronouns in the genitive are preferred (e.g. *mov tjidtjie* [1SG.GEN mother]), and anaphoric reference can also be expressed using the reflexive pronoun *jïjtje* (e.g., *jïjtse/jïjtjese tjidtjiem* [REFL.3SG.GEN mother.ACC] 'her/his own mother (obj.)'). It is highly relevant to note here that comparative-like relation forms such as *tjidtjebe* (1) have also been described as possessive forms by Lagercrantz (1923: 91–92) and Hasselbrink (1981–1985: 121–122); see below for further discussion.

The last preliminary remark concerns one of the most distinctive features of the South Saami noun phrase in comparison to those in other Saami languages or the rest of Uralic, for that matter. Hungarian is often considered the only Uralic language with true indefinite and definite articles (*egy* 'a(n)', *a(z)* 'the'), but Finnish and Estonian, and, to lesser extent, North Saami have also occasionally been discussed from the same perspective (Laury 1997, Guttorm 2015). However, it seems safe to say that the highly frequent article-like uses of the numeral *akte* 'one' and the demonstrative pronoun *dïhte* 'it; that' make South Saami one of the strongest candidates for a Uralic article language:

(4) *Akte* *baernie* *aktem* *nïejtem* *vööjni,* *men*
one(=INDF) boy one(=INDF).ACC girl.ACC see.PST.3SG but
dïhte *nïejte* *dam* *baerniem* *idtji* *vuejnieh.*
it(=DEF) girl it(=DEF).ACC boy.ACC NEG.PST.3SG see.CNG
'A boy saw a girl, but the girl didn't see the boy.' (Ylikoski, forthcoming)

The more detailed questions concerning the nature of the article-like phenomena seen above fall outside the scope of the present study (cf. Hasselbrink 1981–1985: 94; Bergsland 1946: 106–107; 1985; Magga & Magga 2012: 223), but when discussing the functions of the so-called relation forms in the language, they must be understood in light of the fact that they occur in a language that has a relatively frequent and grammaticalized means to

express definiteness.[5] This said, the following section is devoted to the relation forms and their relations to adjectival comparatives and superlatives as well as to possessive suffixes and other determiners in South Saami.

3. Relation forms: a synchronic description

Possibly because of their unprecedented position among more prototypical representatives of nominal inflection (such as possessive suffixes) and denominal derivation, the research history of the so-called relation forms in *-be/-åbpoe* and *-mes/-ommes* consists of only brief, scattered and even counterfactual remarks. After a short summary of earlier research (Section 3.1), the phenomenon in question is scrutinized from morphological (Section 3.2), syntactic (Section 3.3) and semantic (Section 3.4) points of view; at the end, a summarizing discussion on the essence of the relation forms is presented (Section 3.5).

3.1. History of research

The short history of the description of the relation forms in South Saami can be easily divided into two parts: the past and the present. The present is represented by Bergsland's (1982/1994) and Magga and Magga's (2012) modern grammars of South Saami, in which it is stated that the morpheme that is formally identical to the comparative degree marker is used to refer to two separate participants that in some way belong together, and in the case of more than two participants, the morpheme identical to the superlative may be used (see Examples 1–3 above).

As Magga and Magga's (2012) *Sørsamisk grammatikk* is largely identical to Bergsland's (1982/1994) *Sydsamisk grammatikk*, even their example sentences are identical. However, a revealing difference between the two is that under Bergsland's (1982/1994) section entitled *Forholdsformer* ("relation forms"), he also mentions the existence of reciprocal derivatives in *-tjh/-adtjh* such as *vïelle* 'brother' → *vïelletjh* 'brothers (to each other)', *tjidtjie* 'mother' → *tjidtjetjh/tjædtjetjh* 'mother and her child(ren)', whereas Magga and Magga describe the latter in a more expected context among other denominal nouns in the derivation section of their grammar. As for the relation forms (or "relation suffixes", *forholdsendelser*), Magga and Magga present those as a part of noun inflection, following case-cum-number paradigms and possessive suffixes. On the other hand, although

Bergsland also describes his relation forms (including reciprocals) right after possessive suffixes, the subsequent section is entitled *Andre substantiv avledet av substantiv*, "Other denominal nouns". In other words, Bergsland places the phenomenon in question in the realm of derivation, whereas for Magga and Magga such forms are inflectional instead; I will return to this question in the following sections.

Despite the above-mentioned differences, Bergsland as well as Magga and Magga describe the relation forms quite uniformly in comparison to earlier accounts, which have mostly concentrated on the comparative-like *-be*/*-åbpoe* and described it as a third person singular possessive suffix. The first scholar to describe the phenomenon appears to have been Lagercrantz (1923: 91–92), who characterizes the possessive form *tjidtje-se* [mother-3SG] 'his/her mother' as having a "reflexive" meaning and being paralleled with the (implicitly non-reflexive) possessive suffixes *-be*/*-åbpoe* and *-mes*, as seen in his examples *vïjve-be* [son.in.law-*be*] and *tjidtje-mes* [mother-*mes*]. However, he does not provide clear examples of such functions, and at best translates such forms by their lexical meaning only (e.g., *tjidtjemes* 'Mutter'). On the other hand, elsewhere he presents three examples including (5–6), but it still remains unclear whether *aehtjiebistie* (5) is meant to be an example of a non-reflexive (non-anaphoric?) possessive suffix. At any rate, Lagercrantz describes *aehtjiebistie* (5) and *eethjemes* (6) as nouns with possessive suffixes:

(5) *Haeneste* ***aehtjiebistie*** *ohtje-beetnegadtjh.*
beg.MOM.3SG father.*be*.ELA little-money.DIM.PL
'He begs for a little money from his father.' (Lagercrantz 1923: 33; 1926: 18)
(Lagercrantz: 'er erbettelt von seinem Vater ein klein wenig Geld.')

(6) ***Eehtjemes*** *jïjtse* *båarasammes* *maanese,* *gosse*
father.*mes* REFL.GEN.3SG old.SUP child.ILL when
pruvreme, *dlie* *provhkoe* *raajedh* *jallh*
marry.PST.PTCP then do.habitually.3SG dowry.INF or
raajoem *vedtedh.*
dowry.ACC give.INF
'The father, when his oldest child has married, usually
gives him/her a present.' (Lagercrantz 1926: 33)
(Lagercrantz: 'der Vater (eig. „sein Vater") pflegt, wenn sein ältestes
Kind sich verheiratet hat, ihm ein Geschenk zu geben.')

The next attempt to describe *-be*/*-åbpoe* is the most comprehensive to date. In his PhD thesis grammar, a glossematic description of the dialect of

Plassje (Røros), Bergsland (1946: 181–182) discusses only the "comparative derivant" *-be/-åbpoe*, stating that a *-be/-åbpoe* form "establishes a relation" between the base form and something else. According to Bergsland, such a relation could be characterized as a third person possessive suffix – "or a definite article" – but unlike possessive suffixes, *-be/-åbpoe* is not necessarily reflexive. Unfortunately, Bergsland does not explain his view in more detail, but he nevertheless is the first one to present a number of example sentences as well as to point out that *-be/-åbpoe* is most often attached to kinship words and that the resulting word form stands in opposition to other participants. However, Bergsland also presents other examples, and he appears to be the only one to have ever pointed out that the cognates of *-be/-åbpoe* in Pite and Lule Saami occasionally have similar functions. As regards *-mes*, Bergsland mentions that this kind of relation form is found in the northernmost variety of South Saami as described by Lagercrantz (1923), but is apparently lacking in the southern dialect spoken in Plassje. I will return to all of remarks and present many of Bergsland's examples in the following sections. However, it is notable that in his later grammar of the language, Bergsland (1982/1994) was rather taciturn on the nature of the phenomenon in question.

For the sake of completeness, it may be noted that the Lagercrantzian idea of describing *-be/-åbpoe* as a non-reflexive possessive suffix is also repeated by Hasselbrink (1981–1985: 121–122) in the grammatical introduction to his dictionary, albeit without further discussion or example sentences. Otherwise, it is remarkable that the phenomenon has apparently never been mentioned outside Saami linguistics, neither in synchronic descriptions nor diachronic studies on the origin of the Saami-Finnic comparative in **-mpV*. Within Saami linguistics, the only remarkable exception outside South Saami grammars may be Grundström's dictionary of Lule Saami (see Section 4.1).

3.2. Morphology

After a lengthy introduction to the core of the present study, this section aims to provide the first comprehensive description of the morphological properties of the so-called relation forms in South Saami. As seen above, the prevailing picture of the relation forms depends almost entirely on the three *-be/-åbpoe* forms and one *-mes* form in the three example sentences seen in (1–3) in Section 1. These are the only example sentences presented

since Bergsland (1946) more than seventy years ago, first by Bergsland himself (1982: 107–108; 1994: 110) and most recently by Magga and Magga (2012: 50). To break loose from the tradition, almost fifty new example sentences will be presented and discussed in the following sections. First consider the following examples from various sources:

(7) *Eelle* ***tjidtjiebinie*** *saemeste* *jïh*
Eelle mother.*be*.COM speak.Saami.3SG and
aehtjiebinie *daaroste.*
father.*be*.COM speak.Norwegian.3SG
'Eelle speaks Saami with her mother, and Norwegian with her father.' (SIKOR)

(8) *Båarasommes* *hov* *soptseste* *guktie* *gåangkoeh* *goesen*
old.SUP DPT tell.3SG how bent spruce.GEN
nualan ***onne-åabpebem*** *gævnjoestamme.*
under little-sister.*be*.ACC hang.PST.PTCP
'Then the oldest one told how they had hooked the baby sister under a bent spruce.' (Bientie 2013: 14)

(9) *Dellie* *staaloe* *healsehti* *galkin* *bååstide* *båetedh.*
then ogre send.a.message.PST.3SG shall.PST.3PL back come.INF
Men *idtji* ***daktaråbpoe*** *sïjhth* *bååstide* *juhtedh.*
but NEG.PST.3SG daughter.*åbpoe* want.CNG back travel.INF
Men ***dïhte*** ***vïjvebe*** *lïjhke* *juhti.*
but DEF son.in.law.*be* anyway travel.PST.3SG
'Then the Ogre sent them a message to come back. But the [Ogre's] daughter did not want to come back. But the son-in-law came anyway.' (Bergsland 1987: 83)

(10) *Dennie* *ståvrosne* *jis* ***vuanavåbpoe*** *jih* *gøøkte*
DEF.INE board.INE DPT mother.in.law.*åbpoe* and two
altese *viellijste.*
3SG.GEN brother.PL.ELA
'On the board [of a culture center], in turn, are his mother-in-law and two of his brothers.' (SIKOR)

(11) *Akten* *baahkes* *giesiebiejjien* *edtja* *Åvletje*
one.GEN hot summer.day.GEN shall.3SG Åvla.DIM
tjietsebem ***Næjlam*** *åadtjodh* *dåeriedidh*
younger.brother.*be*.ACC Næjla.ACC get.INF accompany.INF
aehtjh-aahkeben ***gåajkoe*** *guessine.*
paternal.grandmother.*be*.GEN to guest.ESS
'One summer day, little Åvla is going to have his uncle Næjla to accompany him to visit grandma.' (SIKOR)

(12) *Ij* *leah,* ***dah*** ***vïellebh*** *hov* *lin* *aaj,*
NEG.3PL be.CNG DEF.PL brother.*be*.PL DPT be.PST.3PL also
voestes *jaepie* *hov* *tjåanghkosne* *årroejimh* *gaajhkh dovnh*
first year DPT assembly.INE live.PST.1PL everybody.together
månnoeh ***dej*** ***vïellebigujmie*** *jïh* *dejnie* *voeres*
1DU DEF.PL.GEN brother.*be*.PL.COM and DEF.COM old
geeleskodtjine *dennie* *vaeresne (...)*
old.man.COM DEF.INE mountain.INE
'No, they were not [alone], the brothers were there too, in the first year we all lived together with the brothers and with the old man in the highland.' (SIKOR)

(13) *Jih* *jeenjh* *miesieh* *baatsedieh* *jih* *aaj*
and many(.PL) reindeer.calf.PL remain.3PL and also
giedtien *sijse* *båetieh* *jih* ***ietniebidie*** *ohtsedidh.*
enclosure.GEN into come.3PL INF[6] mother.*be*.PL.ACC seek.INF
'And many reindeer calves are left, and they also come to the enclosure to look for their mothers.' (Bergsland 1987: 31)

The above examples are quite representative of the most typical occurrences of *-be*/*-åbpoe* forms in actual language use. They are predominantly formed from kinship terms such as *tjidtjie* 'mother', *aehtjie* 'father', *onneåabpa* 'little sister', *daktere* 'daughter', *vïjve* 'son-in-law', *vuanove* 'mother-in-law', *tjietsie* 'paternal uncle younger than one's father', *aehtjh-aahka* 'paternal grandmother', *vïelje* (*vïelle*) 'brother' and *ietnie* 'mother', and they inflect for cases like accusative (8, 11, 13), genitive (11) and comitative (7, 12). Perhaps the most remarkable feature of the relation forms, which has not been visible in the three example sentences (1–3) repeated in the grammatical descriptions of the language, is that they are inflected not only for case, but also for number, as seen in (12–13).

Although earlier grammarians have described *-be/-åbpoe* as one of the possessive suffixes or a related morpheme separate from derivation, *-be/-åbpoe* forms in and of themselves have never been explicitly described as entities that are inflected quite like any nouns. It has not been possible to attest authentic inflectional forms for all cases in both numbers, but as the same goes for most lexemes in South Saami, it is safe to present the inflectional paradigm of *tjidtjebe*, for example, on a par with those of its base root *tjidtjie* 'mother' and the deverbal noun *jieleme* 'life' (← *jieledh* 'live'). As can be seen in Table 2, *tjidtjebe* is inflected according to the same pattern as *jieleme* and other similar trisyllabic nouns; for example, they undergo analogous stem-internal and stem-final vowel changes and take the same number/case suffixes – regardless of the difficulty of separating such bound morphemes from one another and from their lexical bases.

	'mother'		'mother' (relation form)		'life'	
	SG	PL	SG	PL	SG	PL
NOM	*tjidtjie*	*tjidtjieh*	*tjidtjebe*	*tjidtjebh*	*jieleme*	*jielemh*
GEN	*tjidtjien*	*tjidtji*	*tjidtjeben*	*tjidtjebi*	*jielemen*	*jielemi*
ACC	*tjidtjiem*	*tjidtjide*	*tjidtjebem*	*tjidtjiebidie*	*jielemem*	*jieliemidie*
ILL	*tjædtjan*	*tjidtjide*	*tjidtjiebasse*	*tjidtjiebidie*	*jieliemasse*	*jieliemidie*
INE	*tjidtjesne*	*tjidtjine*	*tjidtjiebisnie*	*tjidtjiebinie*	*jieliemisnie*	*jielieminie*
ELA	*tjidtjeste*	*tjidtjijste*	*tjidtjiebistie*	*tjidtjiebijstie*	*jieliemistie*	*jieliemijstie*
COM	*tjidtjine*	*tjidtjigujmie*	*tjidtjiebinie*	*tjidtjebigujmie*	*jielieminie*	*jielemigujmie*
ESS	*tjidtjine*		*tjidtjiebinie*		*jielieminie*	

Table 2: Inflectional paradigms of the South Saami *tjidtjie* 'mother', the relation form *tjidtjebe* (from *tjidtjie*) and *jieleme* 'life'

So, relation forms such as *tjidtjebe* inflect for case and number, but how productive are the forms themselves? Does the answer to this question tell us anything about their place on the inflection-derivation cline? According to Bergsland (1982: 107–108; 1994: 110) as well as Magga and Magga (2012: 50), the relation forms refer to persons or things, but the grammarians' examples refer to mothers and daughters only. Indeed, nearly all attested relation forms refer to human referents, and the forms are particularly common with kinship terms such as those seen above and the many others to be seen in the following sections. It is notable that *ietniebidie* [mother.*be*.PL.ACC] in (13) is derived from *ietnie* '(animal) mother', which

most commonly and also here refers to non-human animal mothers rather than human mothers (*tjidtjie*). It was mentioned above that Bergsland (1946: 181–182) explains that *-be/-åbpoe* is most often attached to kinship words and that the resulting word form stands in opposition to other participants; compare the relation of a mother and her children in (1–2) and similar kinship relations in (5–13) above.

However, Bergsland (1946: 182) also mentions the forms *treavkebh* [ski.*be*.PL] and *plaerebe* [leaf.*be*] based on the non-kinship-related and even inanimate nouns *treavka* 'ski' and *plaerie* 'leaf', and other sources contain *naehkebem* [skin.*be*.ACC] based on *naehkie* 'skin', and non-kinship-related animate nouns such as *voelpebe* [friend.*be*] and *kraannebi* [neighbor.*be*.PL.GEN]. On the other hand, such forms are quite exceptional manifestations of a category that is nevertheless clearly dominated by kinship terms. These and other forms will be discussed from a semantic point of view in Section 3.4. It is noteworthy that such forms exist, although it seems safe to state that the relation forms in *-be/-åbpoe* are most productive for kinship terms. The South Saami have a relatively rich kinship system and, as a result, it has been possible to attest more than two dozen kin-term-based *-be/-åbpoe* forms in the electronic corpus of South Saami (SIKOR) and other texts. Example (14) is one more example that illustrates the riches of South Saami kinship terms and their ability to combine with the relation form suffix:

(14) *Jijtje* *tjoeri* *universitetesne* *årrodh,* *mohte*
REFL must.PST.3SG university.INE stay.INF but
muahrebe ***Patricia*** *gon* ***maakebe*** ***Helmuth***
mother's.younger.sister.*be* Patricia and male.relative.*be*[7] Helmuth
tuvristigujmie *barkijægan* *jih* *dah* *guaktah*
tourist.PL.COM work.3DU and 3PL couple
meehtigan *monnem* *viehkiehtidh.*
be.able.PST.3DU 1DU.ACC help.INF
'He himself had to stay at the university, but his aunt Patricia and her husband Helmuth work with tourists and were able to help us.' (SIKOR)

Leaving the more experimental questions of productivity for future studies, I present a summary of my findings from all the relevant sources in Table 3.

Base	Meaning	Relation form
aahka	'grandmother; old woman'	*aahkebe*
aahkuve	'grandchild (of a woman)'	*aahkuvebe*
aajja	'grandfather; old man'	*aajjebe*
aehtjie	'father'	*aehtjebe*
aehtjhaahka	'paternal grandmother'	*aehtjhaahkebe*
baernie	'child'	*baernebe*
böösebe	'boy; son'	*böösebe* (diminutive *böösebadtje*)
daktere	'daughter'	*daktaråbpoe*
eejhtege	'parent'	*eejhtegåbpoe* (plural *eejhtegåbpoeh*)
elkie	'(married) son'	*elkebe*
gaalla ~ geelle	'husband'	*gaallebe ~ geellebe*
gujne	'wife; woman'	*gujnebe*
gåmma	'wife'	*gåmmebe*
hosbåanta	'male householder'	*hosbåantebe*
ietnie	'mother (mostly of animals)'	*ietnebe*
jielbielie	'male cousin'	*jielbielebe*
jyøne	'maternal uncle'	*jyønebe*
kraanna	'neighbor'	*kraannebe*
laevie	'fiancé(e)'	*laevebe*
maadteraajja	'forefather'	*maadteraajjebe*
maake	'male relative'	*maakebe*
maana	'child'	*maanebe*
muahra	'mother's younger sister'	*muahrebe*
naehkie	'skin'	*naehkebe*
nïejte	'girl; daughter'	*nïejtebe*
onneåabpa	'little sister'	*onneåabpebe*
plaerie	'leaf'	*plaerebe*
seasa	'paternal aunt'	*siesebe*
tjidtjie	'mother'	*tjidtjebe*

Base	Meaning	Relation form
tjietsie	'father's younger brother'	*tjietsebe*
treavka	'ski'	*treavkebe*
trïengke	'hired man'	*trïengkebe*
vïelle	'brother'	*vïellebe*
vïjve	'son-in-law'	*vïjvebe*
voehpe	'father-in-law'	*voehpebe*
voelpe	'friend'	*voelpebe*
vuanove	'mother-in-law'	*vuanavåbpoe*
åabpa	'sister'	*åabpebe*

Table 3: Noun-based *-be*/*-åbpoe* forms (here in the nominative singular) in the various sources of this study

It can be seen in Table 3 that the variant *-åbpoe* is relatively marginal in relation to *-be*, but this seems only to correlate with the proportion of trisyllabic (kinship) nouns with respect to disyllabic ones. The *-åbpoe* forms seem to inflect as naturally as those in *-be*, as evidenced by forms like *daktaråbpoen* [daughter.*åbpoe*.GEN] and *vuanavåbpoen* [mother.in.law.*åbpoe*.GEN] in written sources. However, the attested relation form based on *aahkuve* 'grandchild (of a woman)' consists of two instances of *aahkuvebasse*, the illative singular of the unattested **aahkuvebe*, whereas the expected form for a trisyllabic noun such as this is *aahkuvåbpoe*, yielding the illative *aahkuvåbpose*.

Table 3 contains only such relation forms – for a total of 38 nouns – that have been attested in actual use, but the list could be extended with analogous forms for *gobpe* '(old) man', *goffere* 'godfather', *gossene* 'godson', *kristaehtjie* 'godfather', *nyjsenæjja* 'woman' and *åerpene* 'sibling', registered in Hasselbrink's (1981–1985) dictionary and some of its predecessors, but without sentence context. Hasselbrink also mentions *aahkuvåbpoe* (plural *aahkuvåbpoeh*, ‹aakkuvabbaah› < *àχkuʷappàʰ*; Collinder 1943 s.v. *akˈkob*), the expected variant of **aahkuvebe*.

When compared with underived nouns like *tjidtjie* 'mother' or derived nouns like *jieleme* 'life', relation forms like *tjidtjebe*, with all their case/number forms, look more like nouns and much less like representatives of any inflectional category of the type that are commonly known in other languages of Northern Europe. Like in all Saami languages, possessive

suffixes – excluding relation forms that have also been characterized as such – generally follow case markers in South Saami: *tjædtje-dh* [mother-NOM/GEN.2SG] : *tjædtje-m-dh* [mother-ACC-2SG] : *tjædtja-sa-dth* [mother-ILL-2SG] : *tjidtjie-sta-dth* [mother-ELA-2SG]. In this context, it would be quite unintuitive to regard the element *-b(e)-* in the *tjidtjebe* paradigm (Table 2), for example, as a possessive suffix.

The morphological property that most clearly speaks against regarding *-be* as an inflectional morpheme can be seen in the following examples:

(15) *Gårroeh* *bieleste* *Ellen Dærga,* *Anna Dærga,* *Sanna Jonassen,*
left side.ELA E.D. A.D. S.J.
Anna Dunfjeld *jïh* ***bööse**badtje* *Leif Dunfjeld.*
A.D. and son.*be*.DIM L.D.
'Depicted from the left are Ellen Dærga, Anna Dærga, Sanna Jonassen, Anna Dunfjeld and her little son (or: the little boy) Leif Dunfjeld.'
(*Saemeste saaman* p. 46)

(16) *Onnohtje* *saemien* *(skovle)nïejte* *guhkiem* *tjahkasji* *joejkeminie*
tiny Saami (school.)girl long sit.PST.3SG yoik.PROG
fierhten *iehkeden.* *Akte* *aajne* *baakoe* *sov* *vuelesne*
every.GEN evening.GEN one only word 3SG.GEN *vuelie*.INE
– *vielle.* *Mohte* *daate* *baakoe* *satnem* *mujhtehte*
brother but this word 3SG.ACC remind.3SG
aehtjebem, ***tjidtjebem,*** ***åabpebh*** *jïh* ***onn-ohtje***
father.*be*.ACC mother.*be*.ACC sister.*be*.PL and tiny
vielle**badtje, *mah* *leah* *guhkene* *vuelehks-laantesne*
brother.*be*.DIM REL.PL be.3PL far.away lowland.INE
bovtsigujmie.
reindeer.PL.COM
'The tiny little Saami schoolgirl sat yoiking for a long time every night. The one and only word in her *vuelie* (South Saami chant) was *vielle*, brother. But this word reminded her of her father, mother, sisters and tiny little brother who were far away in the lowlands with the reindeer.' (Sjulsson 2013: 26)

The forms *böösebadtje* and *viellebadtje* consist of the nouns *böösе* and *vielle*, which are followed by not only the relation form marker *-be* but also the diminutive derivational suffix *-dtje*, an otherwise expected ancillary with words referring to young children. Such forms are reminiscent of adjective forms like *bueriebadtje* [good.CMPV.DIM] 'somewhat better',

guhkiebadtje [long.CMPV.DIM] 'somewhat longer', *stueriebadtje* [big.CMPV.DIM] 'somewhat bigger' and *unniebadtje* [small.CMPV.DIM] 'somewhat smaller', which are formally diminutive comparatives (cf. Bergsland 1946: 185–186; Hasselbrink 1981–1985: 110) – and analogous to Latin *meliusculus*, *longiusculus*, *maiusculus* and *minusculus* id., or contemporary English *better-ish*, *longer-ish*, *bigger-ish* and *smaller-ish*. However, while in the latter forms the diminutive "diminishes" the meaning of the comparative instead of that of the adjectival root ('more A' → 'a little more A'), in *böösebadtje* and *viellebadtje* the diminutive rather modifies the concrete referents of the nouns *bööse(be)* 'boy; son' and *vielle(be)* 'brother', regardless of how the meaning of *-be* ought to be understood. At any rate, within the nominal inflection of the Saami languages, diminutive suffixes apparently never follow inflectional suffixes such as possessive suffixes but rather precede those.

As regards the other relation form marker, *-mes*, it was already noted that it is used much less frequently, and Bergsland (1946: 182) ascribes it to the northern dialects of South Saami, whereas *-be* is used also in the south and has cognates in Pite and Lule Saami that are used in a similar manner. In addition to (3), the following examples can be given:

(17) *Maanan* ***aehtjemes*** *jis* *jeanoebealesne* *jijtse*
child.GEN father.*mes* DPT riverside.INE REFL.GEN.3SG
vinhtsem *møøleminie*.
boat.ACC paint.PROG
'The child's father, in turn, is painting the boat at the riverside.' (SIKOR)

(18) *Vöölki* ***vuanavommesen*** *råantjam* *lijrehten.*
leave.PST.3SG mother.in.law.*ommes*.GEN reindeer.OX.ACC lead.CVB
'He left, leading his mother-in-law's reindeer ox.' (Lagercrantz 1926: 76)

(19) ***Tjidtjemesh*** *leah* *sov* *baernide* *moeneme*
mother.*mes*.PL be.3PL 3LOG.GEN son.PL.ILL mention.PST.PTCP
dan *bijre* *juktie* *eah* *edtjieh* *dah* *baektien*
it.GEN about so.that NEG.3PL shall.3PL 3PL steep.hill.GEN
sijse *nolleskovvedh* *guktie* *Baektien-Laara.* ***Aehtjemesh*** *leah*
into be.fooled.INF like Baektien-Laara father.*mes*.PL be.3PL
altese *dakteridie* *vaaroehtamme* *guktie* *edtjieh*
3PL.GEN daughter.PL.ILL warn.PST.PTCP so.that shall.3PL
goerkesasse *vaeltedh* *man* *gavhtan* *baernieh* *maehtieh*
mind.ILL take.INF Q.GEN for boy.PL may.3PL
niejtijste *ånnetji* *billedh.*
girl.PL.ELA little fear.INF
'The mothers have told their sons about it, so that they won't
be fooled and end up inside the mountain like Baektien-Laara.
The fathers have warned their daughters, so that they may
understand why boys may be a little afraid of girls.' (SIKOR)

(20) ***Gaajhkh*** ***aehtjemesh*** *dohkh diekie* *vuejieh* *barkoste* *jih*
all(.PL) father.*mes*.PL back.and.forth drive.3PL work.ELA and
viht *gåatan.*
again home.ILL
'All fathers drive back and forth from work to home.' (SIKOR)

Not unlike *-be*/*-åbpoe*, it can be seen that also these relation forms inflect in case (18) and number (19–20). The most common forms are based on the disyllabic *aehtjie* 'father' and *tjidtjie* 'mother', but the trisyllabic *vuanove* 'mother-in-law' yields a relation form in *-ommes* (cf. the formation of superlatives in Table 1). However, while the relation forms in *-be*/*-åbpoe* seem not to differ from the comparative, the relation of *-mes*/*-ommes* to the superlative in *-mes*/*-ommes* seems to be less regular:

(21) *Govnebuatska* ***dam*** ***båeries*** ***aahkemesem*** *bæjhpan*
Govnebuatska DEF.ACC old grandma.*mes*.ACC pipe.GEN
åvteste *gæjhta* *jih* *dle* *vaadtsije* *gånkan* *gåajkoe.*
for thank.3SG and then start.walking.3SG king.GEN to
'Govnebuatska (Norwegian *Askeladden*) thanks the old lady
for the pipe and starts walking to the King.' (SIKOR)

(22) *Dejtie* *jijtse* *gåajkoe* *gohtje,* *jih* *dah* *jis*
3DU.ACC REFL.GEN.3SG to call.3SG and 3DU DPT
Seebedevusem, ***aehtjemesem,*** *vinhtsese* *laehpielægan* *triengkigujmie*
Zebedee.ACC father.*mes*.ACC boat.ILL leave.3DU hired.man.PL.COM
ektesne, *jih* *Jeesusem* *dåeriedægan.*
together and Jesus.ACC follow.3DU
'He called them to himself, and they left Zebedee, their father, in the boat with the hired men, and followed Jesus.' (Mark 1:20)

While *aahkemesem* [grandma.*mes*.ACC] and *aehtjemesem* [father.*mes*.ACC] may look like regular accusative forms of trisyllabic nouns in *-mes*, they differ from the expected accusative forms of superlatives with this ending: Even though the base nouns *aahka* 'grandmother; old woman' and *aehtjie* 'father' yield forms like *aahke-mes-em* and *aehtje-mes-em*, the corresponding superlatives for adjectives like *kruana* 'green' and *aelhkie* 'easy' would usually be the less agglutinative *kråanemes* [green.SUP] : *kråanem**as**sem* [green.SUP.ACC] and *aelhkemes* [easy.SUP] : *aelhk**ie**m**ass**em* [easy.SUP.ACC]. In other words, it seems that there is no full one-to-one relationship between the relation form marker *-mes* and the superlative marker *-mes*. On the other hand, superlatives like *veerre-mes-em* [bad-SUP-ACC] are also attested (SIKOR), and therefore it is possible that the two types of *-mes* are not that distinct from one another after all.

A purely morphological point of view alone is hardly enough to make us understand the nature of the phenomenon labeled as "relation forms" in South Saami grammars. In the following sections, our horizon will be widened to the syntax and thereafter to the semantics of these forms.

3.3. Syntax

Before turning to the semantics of the relation forms, a few purely syntactic remarks can be presented. In a word, the syntax of relation forms does not differ from that of ordinary nouns, whether derived or underived. In other words, the syntactic behavior of *-be*/*-åbpoe* and *-mes*/*-ommes* fits the morphological profile just presented. It appears that the essive and inessive are the only cases not attested in the available texts[8], and, as a consequence, relation forms can be observed in all major functions of nearly all cases: not only as nominative subjects, but also as accusative objects(8, 11, 13, 16, 21, 22), nominative objects (16) and in various complemental and adverbial functions of the illative (2), the comitative (7) and the elative (5). The

genitive is most often either a possessor, as in *vuanavommesen råantjam* 'mother-in-law's reindeer ox' (18), or the complement of an adposition, as in *aehtjh-aahkeben gåajkoe* 'to the paternal grandmother' (11). In (23), the noun phrase *tjidtjie aehtjebistie* functions as the demoted elative subject of a passive clause:

(23) *Ollem* *jaksehtallh* ***tjidtjie*** ***aehtjebistie.***
NEG.IMP.1SG catch.up.ADVPASS.CNG mother father.*be*.ELA
'I hope I won't get caught by mom and dad.' (SIKOR)

Expectedly, plural subjects in *-bh* (12) and *-mesh* (19–20) occur in agreement with plural predicates. Example (24) contains the noun phrase *aehtjebh tjidtjebh* [father.*be*.PL mother.*be*.PL] which, like *tjidtjie aehtjebistie* above, exhibits a covert coordination typical of South Saami (cf. Bergsland 1982: 75; 1994: 75–76). When the referent of the subject NP refers to two persons, the verb is in the dual:[9]

(24) *Gosse* *dellie* ***aehtjebh*** ***tjidtjebh*** *böötigan* *gåatan,*
when then father.*be*.PL mother.*be*.PL come.PST.3DU home.ILL
dellie *maanah* *lin* *båarhte.*
then child.PL be.PST.3PL away
'When the father and mother came home, the children were gone.' (Bergsland 1987: 80)

As regards the internal syntax of NPs headed by relation forms, they behave like ordinary nouns: In the examples presented above, it has already been possible to observe that many such forms are accompanied by the article-like *dïhte* 'it; that; the' (here often glossed as DEF), which agrees with its head in an ordinary manner (Bergsland 1946: 106–107; Magga & Magga 2012: 54, 223): *dïhte vïjvebe* 'the son-in-law' (9), *dah vieljebh* 'the brothers' and *dej vïeljibegujmie* 'with the brothers' (12) and *dam båeries aahkemesem* 'the old woman' (21). Further, a relation form can be modified by adjectives (*dam båeries aahkemesem* 'the old woman') and possessive genitives such as *maanan* in *maanan aehtjemes* 'the father of the child' (17) or *Eallan* 'Ealla's' in (25) and *dan baernien* in (26):

(25) ***Eallan*** ***aehtjebe*** *aaj* *jaami* *daennie* *ovlæhkosne.*
Ealla.GEN father.*be* also die.PST.3SG this.INE accident.INE
'Ealla's father was also one of those who died in the accident.' (SIKOR)

(26) *Dellie mah* ***tjidtjebem*** *aaj* ***dan*** ***baernien*** *åadtjoem*
then DPT mother.*be*.ACC also DEF.GEN boy.GEN get.1SG
bovvestidh jïh bårrelidh.
kill.MOM.INF and eat.MOM.INF
'Then I can kill the boy's mother as well and eat her.' (Halász 1887: 48)

In sum, the relation forms behave just like any nouns, but it may be noted that they do not seem to combine with possessive suffixes, a rather marginal and unproductive category in South Saami. For an illustrative synopsis summarizing many of the observations above, see (27):

(27) *Desnie dihte altese åemie* ***gåmmebe****, vuajna guktie*
there DEF 3SG.GEN deceased wife.*be* see.3SG how
båetieh edtjieh viedtjedh.
come.3PL shall.3PL fetch.INF
'His wife who has died is there, and he sees that they
[spirits] are coming to get her.' (Jacobsen 2010: 29)

In other words, one of the most complex noun phrases headed by a relation form is *dihte altese åemie gåmmebe* 'the deceased wife of his', which in turn could be inflected in case and number like *tjidtjebe* in Table 2 above – and such forms could be used in all syntactic functions needed.[10]

3.4. Semantics

While it is relatively easy to describe the morphology and syntax of the relation forms in *-be/-åbpoe* and *-mes/-ommes*, in order to really understand the role of these forms in South Saami, we must understand their meaning. Undeniably, this has been the most difficult task for earlier scholars and still remains as such. Even though the relation forms have been characterized as possessive suffixes (Lagercrantz 1923, Hasselbrink 1981–1985) or something very much like possessive suffixes (Bergsland 1946), the most recent grammars (Bergsland 1982/1994, Magga & Magga 2012) have refrained from characterizing them as such – albeit without providing an exhaustive alternative.

Indeed, the latter descriptions have remained surprisingly agnostic as regards the semantic – or pragmatic – functions of the forms in question. In light of the actual language data, this seems to have been a wise and understandable decision: the relation forms provide an unusually vague basis for generalizations, and they seem to lack obvious analogues in the

descriptions of the related (Saami and other Uralic) and neighboring (Germanic) languages. For this reason, it is most convenient to refer to individual forms like *tjidtjebe* [mother.*be*] without presenting their meanings with English translations like 'mother', 'his mother', 'her mother' or 'the mother', although all these alternatives seem to fit into the translations of individual sentences in which such forms occur. In fact, this state of affairs is somewhat similar to that of many of the so-called possessive suffixes in many of the Uralic languages east of Saami and Finnic. As is well known, third person possessive suffixes in particular are widely used for information structuring purposes (cf. Nikolaeva 2003, Künnap 2004, Leinonen 2006), and it appears that it is possible to look at the South Saami relation forms from the same perspective, as already hinted by Bergsland (1946: 181), who states in passing that *-be*/*-åbpoe* could also be characterized as a definite article. However, as already understood by Bergsland himself, South Saami *dïhte* (4, 9, 10, 12, 21, 26, 27) is the default definite article of the language, being one of the most grammaticalized Uralic demonstratives in this respect.

As has been seen above, the so-called relation forms are most often based on various kinship terms, and from both morphological and syntactic points of view, such forms look and behave like ordinary nouns. From a semantic perspective, one is therefore tempted to ask whether relation forms like *tjidtjebe* [mother.*be*], *vïellebe* [brother.*be*], *vïjvebe* [son.in.law.*be*] and *vuanavåbpoe* [mother.in.law.*åbpoe*] still ought to be understood simply as a part of denominal derivation, on a par with other derivational suffixes that are used to expand the relatively closed set of kinship terms. As mentioned above, Bergsland (1982: 107–108; 1994: 110) actually describes the relation forms in *-be*/*-åbpoe* and *-mes*/*-ommes* in connection with reciprocal derivatives in *-tjh*/*-adtjh*. The derivations of the latter type refer to symmetrical relationships such as *vïelletjh* 'brothers (to each other)' or less symmetrical relationships such as *tjidtjetjh*/*tjædtjetjh* 'mother and her child(ren)'.

Another group of derived "relation forms" among kinship terms is those formed with the suffix *-sassa*/*-assa*: these words refer to prospective relatives of the type expressed by the base noun: a prospective *vïjve* 'son-in-law' is *vïjvesassa* 'prospective son-in-law', and *vuanove* 'mother-in-law' is the base for *vuanavassa* 'prospective mother-in-law'. From a semantic perspective, the pan-Saami morpheme *-bielie* behaves quite like the derivational suffixes *-tjh*/*-adtjh* and *-sassa*/*-assa*, although *bielie* is otherwise a

noun for 'half', and *tjidtjiebielie* 'stepmother' and *vïellebielie* 'half-brother', for example, can therefore be seen as compound nouns (for the most comprehensive account of the South Saami kinship terminology, see Bergsland 1942; see also Bergsland 1946: 181–185).

However, a significant difference between the above-mentioned derived kinship terms and the main topic of the present study is that while it is possible to present quite exact and stable translations for these such as 'Xs to each other', 'prospective X', 'step-X' and 'half-X', it is difficult to provide analogous general yet concrete translations for *-be*/*-åbpoe* or *-mes*/*-ommes*. Unlike the former derivations, the latter forms seem to acquire their meanings in actual sentence contexts, and this feature undeniably makes the relation forms more grammatical (inflectional) and less lexical (derivational) than the least problematic kinship terms. This can also be seen in the fact that at least the relation forms in *-be*/*-åbpoe* are formed from all kinds of kinship words, whereas derivations like **tjidtjiesassa* 'prospective mother (to someone)' and **gåmmabielie* "stepwife" seem to be nonexistent for pragmatic reasons.

Of course, it is appropriate to remember that in the course of the fragmented history of describing the relation forms in South Saami, most grammarians (Lagercranz, Bergsland [1946] and Hasselbrink) have approached the phenomenon as a subtype of possessive suffix. In addition to these non-native authorities of the language, Anna Jacobsen, one of the foremost South Saami activists, has given the following word forms the accompanying Norwegian translations in the glossary of her South Saami reader:

aehtjebe	'faren hans' ('his father')
aehtjemes	'faren, til flere' ('the father, to many')
tjidtjebe	'moren hans' ('his mother')
tjidtjemes	'moren, til flere' ('the mother, to many')

(Jacobsen 1993: 36)

Again, we are left in between the two alternatives. Here, it seems like *-be* was a possessive suffix ('his X'), whereas the *-mes* forms resemble definite forms, also with a possessive flavor 'the X, to many'. In order to better understand what the author means by such glosses, it is instructive to look at the beginning of the text in question in its entirety. The short story *Maam daen biejjien gaskebeajjan* 'What are we going to have for dinner tonight?' begins as follows:

(28) a. *Maam daen biejjien gaskebeajjan?*
Q.ACC this.GEN day.GEN dinner.ILL
'What are we going to have for dinner tonight?'

b. *Åvla gihtjie goh edtja skovlese vaadtsajidh.*
Åvla ask.3SG when shall.3SG school.ILL start.walking.INF
'Åvla asks when he is leaving for school.'

c. ***Tjidtjebe** joe barkose vualkeme.*
mother.*be* already work.ILL leave.PST.PTCP
'Mother has already gone to work.'

d. ***Aehtjebe** lea buerteste vaeltieminie.*
father.*be* be.3SG table.ELA take.PROG
'Father is cleaning off the table.'

e. *Daen biejjien edtja moerh låadtodh, bovresne*
this.GEN day.GEN shall.3SG wood.PL chop.INF store.INE
minnedh jih gaskebiejjiem voessjedh.
visit.INF and dinner.ACC cook.INF
'Today he is going to chop wood, go to the store and cook dinner.'

f. – *Im manne jis daejrieh, **aehtjebe** vaestede.*
NEG.1SG 1SG DPT know.CNG father.*be* answer.3SG
'Well, I don't know, father replies.'

g. – *Åadtjoem gujht vuejnedh maam bovresne gaavnem.*
get.1SG anyway see.INF Q.ACC store.INE find.1SG
'I'll see what I find in the store.'

h. ***Aehtjemes** gujht daajra, joekoen beapmoeh*
father.*mes* anyway know.3SG special food.PL
vuertieh gosse satne gåetesne abpe biejjiem
wait.3PL when 3SG home.INE entire day.ACC
'At least the father knows that the family is expecting a special dinner when he is at home the entire day.'

i. *Daejrieh buerebe gosse astosne maahta beapmoeh*
know.3PL good.CMPV when leisure.INE can.3SG food.PL
voessjedh.
cook.INF
'They know that it [the meal] gets better when there is time for cooking.'

j. ***Tjidtjemes*** *fierhten biejjien barkosne, gåetide*
mother.*mes* every.GEN day.GEN work.INE home(.PL).ILL
båata gosse maanah skovleste båetieh.
come.3SG when child.PL school.ELA come.3PL
'Mother is at work every day and comes home
when the children come from school.'

k. *Gaajhkesh leah bårrestohteminie, guktie* ***tjidtjemes***
everybody.PL be.3PL get.hungry.PROG so.that mother.*mes*
tjoevere varki gaskebiejjiebeapmoeh jurjiehtistedh.
must.3SG fast dinner.food.PL arrange.MOM.INF
'Everyone is hungry, so mother must fix dinner quickly.' (Jacobsen 1993: 35)

The passage in (28) is the beginning of a fictional text, and therefore all referents are new to the reader. Neither the mother nor the father is more definite than what can be expected in a context where a child is asking about the evening's dinner before leaving for school in the morning. The nouns *tjidtjie* and *aehtjie* are not introduced in their basic forms, but as relation forms – *tjidtjebe* 'his mother' and *aehtjebe* 'his father'. Unlike possessive suffixes proper, these forms are seldom directly anaphoric. However, what is more important is that the "comparative" *-be* forms turn suddenly into "superlative" *-mes* forms. Already in (28h), the father is *aehtjemes* – 'the father to (or: among) many', and in (28j), Åvla's mother seems not to be depicted as such (cf. *tjidtjebe* in 28c) anymore, but rather as *tjidtjemes*, the mother to more children in the family.

However, it appears that in actual use there is a lot of fluctuation in the occurrence of *-be* and *-mes* forms: For example, the noun phrase *maanan aehtjemes* [child.GEN father.*mes*] 'the child's father' in (17) (repeated below for convenience) refers to the father of a one single child in a story in which his mother is first referred to as *tjidtjebe* [mother.*be*], but after the introduction of the father in the family consisting of an infant and his two parents, and in a sense "the father" (*aehtjemes*) to the mother as well, the mother (*tjidtjebe*), too, takes the role of the mother in the entire family (*tjidtjemes*). Indeed, Maja Lisa Kappfjell (p.c.) has suggested that even in (28), *aehtjemes* (28h) and *tjidtjemes* (28j–k) could be translated into Norwegian with the words *faren/moren i husstanden* [father.DEF/mother.DEF in household.DEF] 'the father/mother in the household'. This view is supported by (29) from the same passage as (17). After an incident in which all three family members are involved, the father of the **family** (*aehtjemes*) is able to give the infant back to **his** mother (*tjidtjiebasse* [mother.*be*.ILL]):

(17) *Maanan* ***aehtjemes*** *jis* *jeanoebealesne* *jijtse* *vinhtsem*
child.GEN father.*mes* DPT riverside.INE REFL.GEN.3SG boat.ACC
møøleminie.
paint.PROG
'The child's father, in turn, is painting the boat at the riverside.' (SIKOR < Vangberg 1998: 23)

(29) ***Aehtjemes*** *soejmi* *laakan* *maanam* *vaalta* *jih* *varki*
father.*mes* carefully like child.ACC take.3SG and fast
vihth *våålese* *goegkerde.* *Varki* *gåatan* *skådta* *jih*
again down creep.3SG fast home.ILL hurry.3SG and
maanetjem ***tjidtjiebasse*** *vadta.*
child.DIM.ACC mother.*be*.ILL give.3SG
'The father takes the child carefully back and creeps down quickly. He hurries home and gives the infant$_i$ to his$_i$ mother.' (SIKOR < Vangberg 1998: 23)

Despite the labels "possessive suffix", "relation form" or "relation suffix", the semantic functions of the relation are a difficult nut to crack. In principle, it would be easiest to call these forms "possessive" or "definite" – whatever these labels may mean to different people – but these alternatives have not even been mentioned as a possibility in the most authoritative grammars (Bergsland 1982/1994, Magga & Magga 2012). Indeed, while in many contexts it is natural to translate *tjidtje-be* as 'his/her mother' and *tjidtjemes* as 'their mother', the forms *per se* cannot be analyzed and glossed as mother-3SG or mother-3PL.

Nor do the morphemes stand clearly for definiteness. This is potentially suggested by sentences like (9), (12), (21) and (27), in which the relation forms are preceded by the article-like demonstrative *dïhte*. The relation forms do resemble *dïhte* in that it appears difficult to point to occurrences in which the morphemes in question would be obligatory. In many cases, the use of relation forms, not unlike the use of *dïhte*, seems to be related to information structure; it appears that both *dïhte* and *-be*/*-åbpoe* can often be omitted without an obvious change in propositional meaning or grammaticality (Maja Lisa Kappfjell, p.c.). On the other hand, translations such as the Norwegian *moren hans* [mother.DEF his] 'his mother' and *moren, til flere* [mother.DEF to many] 'the mother, to many' for *tjidtjebe* and *tjidtjemes*, respectively, suggest that the choice of relation form contributes to the propositional meaning – but to an entirely different degree than the kinship terms *tjidtjetjh*/*tjædtjetjh* 'mother and her child(ren)' and *vuanavassa* 'prospective mother-in-law' mentioned above.

To continue to provide authentic examples for the first time since Bergsland (1946), the following examples are presented in order to show that it is possible to question nearly everything that has been stated on the forms by previous scholars or reasoned above. As has been noted above, Lagercrantz (1923: 91–92) and Hasselbrink (1981–1985: 121–122) have characterized the *-be* and *-mes* forms as third person possessive suffixes. Nevertheless, Examples (24) and (26) show that it is possible to come across *-be* forms in sentences where they do not refer to relatives of someone in the third person singular. In light of the original context of (30), *viellebem* clearly refers to the brother of the addressee:

(30) *Vaedtsieh* *amma* ***viellebem*** *veedtjh.*
walk.IMP.2SG DPT brother.*be*.ACC fetch.IMP.2SG
'Go get your brother.' (SIKOR)

However, it would be awkward to analyze *-be* as a possessive suffix referring to not only third but also second person singular, as the list would continue with the first person singular seen in (31):

(31) *Voestesieresne* *dle* ***tjidtjebe*** *aajnehke* *lohkehtæjja* *saemien*
beginning.INE DPT mother.*be* only teacher Saami(.GEN)
gïelesne, *jih* *manne* ***tjidtjebem*** *lohkehtæjjine* *utnim*
language.INE and 1SG mother.*be*.ACC teacher.ESS have.PST.1SG
gaajhki *jaepiej,* *4.* *klaasseste* *9.* *klaassese.*
all.PL.GEN year.PL.GEN 4th grade.ELA 9th grade.ILL
'In the beginning, my mother was the only Saami teacher, and I had my mother as a teacher for all the years, from the fourth to the ninth grade.' (SIKOR)

Further examples include *geellebe* (32) and *gåmmebe* (33), which refer to the spouses of the two (first person singular) speakers, respectively. In (33), *gåmmebe* is even preceded by the genitive possessor *mov* 'my':

(32) ***Geellebe*** *ij* *saemesth,* *juktie* *mijjieh*
husband.*be* NEG.3SG speak.Saami.CNG so.that 1PL
sinsitnine *daaroestieh* [sic].
each.other.COM speak.Norwegian.3PL
'My husband doesn't speak Saami, so we speak Norwegian with each other.' (SIKOR)

(33) *Dihte* *mij* ***mov*** ***gåmmebe*** *mænngan* *sjidti,*
3SG REL 1SG.GEN wife.*be* later become.PST.3SG
lij *dellie* *barkeminie* *Oslovesne,* *Instituttesne* *mij*
be.PST.3SG then work.PROG Oslo.INE institute.INE REL
edtji *ektievuekie-jielemem* *giehtjedidh.*
shall.PST.3SG society-life.ACC investigate.INF
'The one who later became my wife was working in Oslo at that time, at the Institute for Social Research.' (SIKOR)

In the same vein, *tjidtjiebistie* in (34) refers to the mother of the first person singular speaker:

(34) *Byjjeslaakan* *idtjim* *ööhpehtimmiem* *utnieh,* *viehkiem*
publicly NEG.PST.1SG teaching.ACC have.CNG help.ACC
gujht ***tjidtjiebistie*** *åadtjoejim,* *bene* *dïhte* *lij*
anyhow mother.*be*.ELA get.PST.1SG but it be.PST.3SG
eevre *privaate.*
altogether private
'I didn't get an official education, but I got help from my mother, although it was entirely private.' (SIKOR)

To extend the picture even further, examples like (24) above show that unlike what has been claimed about the division of labor between *-be*/*-åbpoe* and *-mes*/*-ommes*, the former is not limited to referring to relatives (or the like) of singular persons. As seen already in Section 1, it has been stated that when speaking of a relationship between many, the relation forms in *-mes* are used instead of those in *-be*, which is supposedly reserved for referring to one of the two in pairs such as a mother and her daughter. In (35) below, however, the elative form *tjidtjiebistie* is used to refer to a mother of many – in other words, in a context in which superlative-like forms in *-mes* ought to be expected, if Bergsland (1982: 108; 1994: 110) and Magga and Magga (2012: 50) are to be taken literally (see Example 3). On the other hand, it is worth noting that in his description of a southern dialect Bergsland (1946: 182) ascribes such forms to other dialects. This said, it appears that sentences like (24) and (35) have not necessarily been foreign to Bergsland, either:

(35) *Nov* *lij* *badth* *dïhte* *learoe* *maam* ***tjidtjiebistie***
DPT be.PST.3SG DPT DEF learning REL.ACC mother.*be*.ELA
åådtjeme *mij* *darjoeji* ***mijjieh*** *idtjimh*
get.PST.PTCP REL make.PST.3SG 1PL NEG.PST.1PL
neerrehtimmeste *aaperh,* *bene* *dan* *bijjelen* *lokngesimh.*
ridicule.ELA care.CNG but it.GEN over rise.PST.1PL
(Dah *lohkehtæjjah* *eah* *lin* *jeatjahlaakan* *mijjese*
DEF.PL teacher.PL NEG.PST.3PL be.PST.3PL differently 1PL.ILL
goh *jeatjabidie.)*
than other.PL.ILL
'I suppose that it was the teachings from our mother that caused us not to care about mocking, but to rise above it. (The teachers didn't treat us differently from the others.)' (SIKOR)

The above examples suggest that there is no reason to regard *-be* as a possessive suffix, as the same morpheme is used to refer to "possessions" of at least 3SG, 1SG (31–34), 2SG (30) and 1PL (35) persons. Example (36) from the 19th century shows that the same goes for 3PL:

(36) *Baernieh* ***tjidtjebem*** *jïjtjesh* *goltelin, (...)*
son.PL mother.*be*.ACC REFL.GEN.3PL listen.PST.3PL
'The sons listened to their mother, (...)' (Halász 1887: 29)

It has been seen above that the demonstrative *dïhte* is the default morpheme serving as a definite article, and since it also occurs with *-be* and *-mes* forms (see Examples 9, 12, 21 and 27), the relation forms are not necessarily the primary means of marking definiteness, either. On the other hand, it is possible to observe that if *-be* is to be interpreted as a marker of definiteness, expressions such as ***dïhte*** *bööremes vïelle****be*** (37a) seem very analogous to Scandinavian phrases such as the Norwegian ***den*** *beste bror****en*** (37b) in which the *-en* of *broren* can be characterized as a suffixal definite article. However, as (37a) seems to be a translation from (37b), the authenticity of (37a) – interestingly containing the superlative adjective *bööremes* preceding the "comparative" relative form *vïellebe* – can always be questioned, regardless of the fact that (37b) is itself also a translation from English:

(37) a. *Datne* ***dïhte*** ***bööremes*** ***vïellebe*** *abpe* *veartanisnie.* (SIKOR)
2SG DEF good.SUP brother.*be* entire world.INE

b. *Du* *er* ***den*** ***beste*** ***broren***
2SG be.PRS DEF good.SUP brother.M.DEF
i *hele* *verden.* (Simon 2004)
in entire world.DEF

'You are the best brother in the entire world.'

Of course, at this point it is necessary to raise the question about the true nature of the so-called relation forms: If they are neither possessive suffixes nor undeniable markers of definiteness, what are they?

Even on the basis of the more than 500 *-be* and *-mes* forms at my disposal (via the 1.1M-word SIKOR corpus and a number of other printed and electronic sources), it is difficult to make confident generalizations on their functions. However, it appears that although the relation forms can often be translated into English (and Norwegian and Swedish) using possessive pronouns and definite articles, an important key to understanding the functions of these forms lies in the notion of contrast. This is most visible in longer passages such as (28) or against similar contextual backgrounds (see Examples 17 and 29 above). In a way, it could be possible to describe the meaning of many relation forms of the type X-*be*/*-åbpoe* using rather clumsy translations like 'the one who is/was X' or 'the/his/her own X'. For example, the meaning of (1) ('the daughter did as her mother said') is in a sense "the one who was the daughter did as her own mother said".

From this perspective, it is also understandable that *aehtjemes* and *tjidtjemes* can refer to the parents of a single child (28) when used in a context in which they could be paraphrased as 'the father/mother in the household (consisting of three persons)', or more generally 'the father/mother among the many'. Conversely, it is possible to use *tjidtjebe* to refer to the mother of a son (*Laara*) and his little sister (*onne åabpebe*), as from the perspective of the son, she may be 'his own mother' rather than *tjidtjemes* 'his and his little sister's mother':

(38) *Laara,* ***tjidtjebe*** *jïh* ***onne*** ***åabpebe*** *Tronesen*
Laara mother.*be* and little sister.*be* Tronesen
gåajkoe *jåhteme.*
to travel.PST.PTCP
'Laara, his mother and his little sister have traveled to Tronesen.' (SIKOR)

An overwhelming majority of relation forms refer to relatives, to the extent that it would be intriguing to propose that the relation forms are a morphological category limited to kinship terms, and, conversely, the kinship terms may appear to be a closed class inflected differently from other nouns (for cross-linguistically common special features of kinship terms, see Dahl & Koptjevskaja-Tamm 2001). However, this is not the case. As a matter of fact, we have already seen the phrase *dam båeries aahkemesem* 'that old grandma (acc.)' (21) in which *aahkemesem* refers not to a grandmother but to another old woman, as the base word *aahka* carries both meanings. Likewise, the following example does not tell about the two grandfathers (*aajja*) of the speaker, but about two old men whom the speaker had met for the first time:

(39) ***Båeries*** ***aajjemesh*** *vienhtigan* *laantese* *kruahka*
old old.man.*mes*.PL think.PST.3DU ground.ILL bury.3SG
edtja *dihte* *bearkoe* *såvroestidh* *jih* *møørehkåbpoe*
shall.3SG DEF meat sour.MOM.INF and tender.CMPV
sjidtedh.
become.INF
'The old men supposed that it [the bear] buries the meat in the ground so that it becomes sour and tender.' (SIKOR)

At least the relation forms in *-be* are possible for nouns that are definitely not kinship terms. The form *kraannebi* (40), based on *kraanna* 'neighbor', occurs in one of the first published samples of the language:

(40) *Så* *dïhte* *Gaasen-munnie* *vihth* *mïnniji* *gånkan*
then DEF Gaasen-munnie again leave.PST.3SG king.GEN
skåakese *jïh* *tjoehpedisti* *gånkan* *gaajhke* *skåakem*
forest.ILL and cut.MOM.PST.3SG king.GEN all forest.ACC
jïh ***kraannebi*** *skåakem.*
and neighbor.*be*.PL.GEN forest.ACC
'Then Gaasen-munnie went to the King's forest again, and cut down the entire King's forest and the forest of his neighbors.' (Halász 1887: 136)

Another example is *voelpebe*, which refers to one of the two friends in Aesop's fable about two companions and a bear. Upon encountering the bear, one of the two has climbed up a tree while the other has played dead on the ground:

(41) *Bïerne skåajjese vøølki jih nïmhtegh gaatoeli.*
bear forest.ILL leave.PST.3SG and just.like.that disappear.PST.3SG
Voelpebe *moereste våålese bøøti.*
friend.*be* tree.ELA down come.PST.3SG
– *Maam bïerne dutnjien jeehti?* ***voelpebe*** *sïjhti govledh.*
Q.ACC bear 2SG.ILL say.PST.3SG friend.*be* want.PST.3SG hear.INF
'The bear went to the forest and disappeared right away.
The other friend came down from the tree. – What did the
bear tell you?, the friend wanted to know.' (SIKOR)

The above example fits quite well the standard description of the relation forms. There are two persons in a reciprocal relationship and the relation form refers to one of the two: *voelpebe* seems to stand for 'the other of the two friends' instead of a definite 'the friend' or a possessive 'his friend'. (The preceding sentence does not tell about either one of the friends, but about the bear.) But then again, the relation form *kraannebi* in (40) rather refers to 'his (the King's) neighbors', who have not even been mentioned earlier in the fairy tale.

To give one more example, the following passage demonstrates the fact that relation forms can be used to refer simultaneously to a householder and his relation to his wife, but also to a non-relative, his hired hand:

(42) *Gosse die dihte triengke vööjni ahte* ***hosbåantebe***
when DPT DEF hired.man see.PST.3SG COMP householder.*be*
veelti dam biedterassem, dellie ussjedi ahte
take.PST.3SG DEF.ACC atlas.ACC then think.PST.3SG COMP
hosbåantebe *veelti bööremes stuhtjem. Dellie*
householder.*be* take.PST.3SG good.SUP piece.ACC then
ussjedi dam jijtse hosbåantam juktiestidh.
think.PST.3SG DEF.ACC REFL.GEN.3SG householder.ACC slay.INF
Men dellie ***gujnebe*** *vööjni ahte triengke vesties*
but then wife.*be* see.PST.3SG COMP hired.man wicked
åssjaldahkh utni. Dellie gujne badth jeehti
thought.PL have.PST.3SG then wife DPT say.PST.3SG
jijtse ålmese edtja ***triengkebasse*** *vedtedh*
REFL.GEN.3SG husband.ILL shall.3SG hired.man.*be*.ILL give.INF
dam biedterassem.
DEF.ACC atlas.ACC
'When the hired hand saw the householder take the atlas vertebra (the topmost vertebra of the neck), he thought that the householder had taken the best part of the meat. Then he planned to kill his master. But then his (the householder's) wife noticed that the hired hand had evil thoughts. Then she told her husband to give the atlas to the hired hand.' (Bergsland 1987: 81)

The apparent optionality of relation forms is seen in the cooccurrence of the unmarked nouns *triengke* 'hired hand, *gujne* 'wife' and *hosbåantam* 'householder (acc.)'.

Finally, Examples (43–44) show that the morpheme *-be* can also be attached to non-animate nouns:

(43) *Mah dïhte* ***plaerebe?***
Q DEF leaf.*be*
'Is this the leaf [belonging to the flower we were talking about]?' (Bergsland 1946: 182)

(44) ***Treavkebh*** *dan laabja.*
ski.*be*.PL so wide
'[He was called Laabje, because] his skis were so wide (*laabja*).' (Bergsland 1946: 182)

Examples (43–44) show almost the only attested instances of inanimate relation forms. Both were mentioned by Bergsland (1946) in his grammar of the Plassje dialect. It is not easy to characterize such forms as productive, but they have not been impossible either. It is worth noting that although the latter examples do not refer to human bonds such as kinship, neighborship or friendship, they nevertheless refer to rather tight unions such as the inalienable possession between a plant and its leaves (43).

True, the relationship between a man and his skis (44) may belong at first sight to the realm of alienable possession and many skis to choose from, but the relationship between an old-time reindeer-herder and his pair of skis is in fact comparable to that between a plant and its leaves. Actually, *treavka* 'ski' seems to be one of the few South Saami inanimate nouns that resemble kinship terms in that the derivational suffix *-sassa/-assa* 'prospective X' can be attached to it. It was mentioned at the beginning of this section that *-sassa/-assa* is used to turn kinship terms like *vïjve* 'son-in-law' and *mænnja* 'daughter-in-law' into words for a prospective *vïjve* or *mænnja*, as in *vïjvesassa* 'prospective son-in-law' and *mænnjasassa* 'prospective daughter-in-law'. Example (45) comes from a description of South Saami wooing, in which the man is making his future bride a pair of skis (cf. Bergsland 1946: 185):

(45) *Die vöölki vihth dïhte saemien baernie jïjtjse*
so leave.PST.3SG again DEF Saami(.GEN) boy REFL.GEN.3SG
hïejmen gåajkoe å skåakese vöölki, ***treavkasassah***
home.GEN to and forest.ILL leave.PST.3SG ski.material.PL
tjoehpi å guksesem.
cut.PST.3SG and birch.burl.cup.material.ACC
'Then the Saami young man went home again, and he went to the forest and got material for skis and a birch burl cup.' (Halász 1887: 164)

Relation forms for non-animate nouns like *plaerie* 'leaf' and *treavka* 'ski' seem to be entirely absent in the 1.1M-word corpus of mostly contemporary South Saami. However, I have come across one additional occurrence in which the accusative form of *naehkebe* is a relation form based on the non-animate noun *naehkie* 'skin':

(46) *Naan aejkien ålma dan gierhkien lihke guktie*
some time.GEN man DEF.GEN wolverine.GEN near so.that
guhkiessoehpenjinie jaksoes, mohte rovnigs, iktesth buektehte
gun.COM accessible but strange, always manage.3SG
naehkebem *voebnesjidh.*
skin.*be*.ACC take.care.INF
'At times, the man is so close to the wolverine that it is possible to shoot it with a gun, but miraculously, it always manages to take care of its skin (= itself).' (Vest 2005: 105)

Again, the inalienable relationship between a wolverine and its skin is comparable to that between a plant and its leaves. What is more, this relation form strongly suggests that it has a function comparable to that of possessive suffixes in languages where such a category is more prolific than in South Saami. Example (46) is a translation from a North Saami novel in which *náhkki*, the skin of the wolverine, is marked with a possessive suffix:

North Saami

(47) *Muhtimin almmái fidnegoahtá geatkki juo*
sometimes man get.INCH.3SG wolverine.GENACC already
báhčinmuddui, muhto dego ipmašis dat goittot
shooting.distance.ILL but like miracle.LOC that anyhow
ovtto seastá ***náhkis****.*
always spare.3SG skin.GENACC.3SG
'At times, the man is so close to the wolverine that it is possible to shoot it with a gun, but miraculously, it always manages to take care of its skin (= itself).' (Vest 1988: 85)

In principle, possessive suffixed forms like *aehtjemse* [father.ACC.3SG] (← *aehtjie* 'father') suggest that an analogous form ?*naehkemse* could be expected, but the translator has nevertheless chosen to translate *náhkis* [skin.GENACC.3SG] as *naehkebem* [skin.*be*.ACC]. It must be remembered that it is impossible to regard *-be/-åbpoe* as a possessive suffix in the sense of referring to a third person (singular and/or plural) only (see 30–36 above). In any case, it is notable that relation forms are still able to refer to inanimate inalienable possession – two generations after Bergsland's (1946) examples (43–44).

To repeat, the semantic functions of the relation forms in South Saami are very difficult to generalize – the neighboring languages of Northern Europe simply seem to lack analogous categories, and even for South Saami, it appears impossible to present a comprehensive definition of the functions of the forms in question. The following subsection aims to provide an interim conclusion on the morphological, syntactic and semantic observations discussed above.

3.5. Interim conclusion

South Saami is a relatively little studied Uralic language and especially its so-called relation forms are so unusual, heterogeneous and poorly described that it has been necessary to provide plenty of examples of the phenomenon – not only for this description but for future studies as well. In actual sentence contexts accompanied by English translations, it may appear that the relation forms can most often be translated using the definite article or possessive pronouns, but this hardly applies to individual relation forms outside of their context: The relation forms do not have straightforward equivalents in English or any of the geographically close languages.

As regards the morphology and syntax of the relation forms, the most common and apparently the most productive form is the one in *-be/-åbpoe*, which is identical to the adjectival comparative marker. Unlike possessive suffixes, to which such forms have earlier been likened, the morpheme *-be/-åbpoe* can be described as a regular bound morpheme that is attached to (mostly kinship) nouns according to similar – albeit more regular – morphophonological rules as the comparative marker (cf. Table 3 in Section 3.2; see also Bergsland 1982: 73; 1994: 74; Magga & Magga 2012: 67–70). As seen in Table 2, relation forms like *tjidtjebe* (← *tjidtjie* 'mother') are inflected in number and case just like deverbal nouns such as *jieleme*

'life' (← *jieledh* 'live') and other regular trisyllabic nouns. A rather marginal, although interesting feature can be seen in (15) and (16), where the diminutive nouns *böösebadtje* [boy/son.*be*.DIM] and *viellebadtje* [brother.*be*.DIM] are based on the relation forms *böösebe* [boy/son.*be*] and *viellebe* [brother.*be*] – in other words, the derivational suffix *-tje* is attached to forms that could otherwise be considered inflectional forms of some kind. Again, the relation forms behave like comparative forms such as *buerebe* 'better' and *unnebe* 'smaller', which have diminutives like *bueriebadtje* 'somewhat better' and *unniebadtje* 'somewhat smaller'.[11] However, the "superlative" relation forms in *-mes*/*-ommes* are less common and obviously absent in certain dialects, and they also seem to be inflected differently from the standard inflection of adjectival superlatives (see Examples 21 and 22). From a syntactic perspective, relation forms behave quite like any nouns – underived and derived alike.

As regards the semantics of the relation forms, most of the authentic occurrences of such forms do fit the simplified picture depicted in the most recent grammars (Bergsland 1982: 107–108; 1994: 110; Magga & Magga 2012: 50). However, there are enough different kinds of exceptions and downright counterexamples to seriously challenge the received view of the relation forms, although the resulting picture unfortunately contains so much variation that it does not lend itself easily to generalizations. Before being characterized as "relation forms" (Bergsland 1982/1994) or word forms containing "relation suffixes" (Magga & Magga 2012), *-be*/*-åbpoe* and *-mes*/*-ommes* were labeled as possessive suffixes by Lagercrantz (1923: 91–92) and Hasselbrink (1981–1985: 121–122), and a similar view was also presented by Bergsland (1946: 181). Indeed, the latter alternative seems quite possible for the majority of relation forms that do refer to kinship relationships between the people in question. However, the idea of possessive suffixes appears to lose its meaning when it can be observed that at least *-be*/*-åbpoe* is able to refer to inalienable possessions, or relatives, of not only third person participants but first and second persons as well. Instead, it seems that the relative forms occupy a functional niche that partly coincides with that of possessive suffixes – a category that has a very marginalized position in the language. This was already hinted by Bergsland (1946: 182), who considered the "possessive comparative" *-be* an extension of the "oppositive comparative" by referring to the conceptual closeness of 'his father' and 'among the two, the one who is the father'.

As for Bergsland's (1946: 182) early observations on the relation forms, he regarded *-be* as an emerging possessive suffix for the third person but also observed (48), in which the relation form occurs with the second person singular pronoun *datne* (genitive *dov*):

(48) ***Doh*** ***dov*** ***vïellebh*** *gaatoeh* *dejnie* *mov*
that 2SG.GEN brother.*be*.PL disappear.3PL DEF.COM 1SG.GEN
goevelinie.
chisel.COM
'Those brothers of yours are leaving with my chisel.' (Qvigstad 1924: 260; 1996: 12)

Bergsland regards the above example as an instance of contamination, but it is remarkable that while (48) occurs in a story told by Ole Samuel Elsvatn (1866–1911) in 1887, such usage has not faded away and can still be observed in (33), where *mov gåmmebe* [1SG.GEN wife.*be*] 'my wife' is a 21st-century translation of Norwegian *kona mi* [wife.DEF my.F] id.

The puzzling position of the relation forms within the grammatical system of South Saami is reminiscent of the so-called prolative ('along; through; via') forms in *-raejkien*/*-raejkiem* (plural *-reejki*/*-raejkieh*) on the fringes of noun inflection. As described in Ylikoski (2015), the morphemes in question behave mostly like local cases, although their nominal origin is transparent – they are all inflectional forms of the noun *raejkie* 'hole': SG.GEN *raejkien*, SG.ACC *raejkiem*, PL.GEN *reejki* and PL.NOM *raejkieh*. The prolatives are similar to the relation forms in that both types are to a certain degree quite productive and morphologically and syntactically regular, but they are not obviously among the most important categories in the language. Instead, even though the prolatives behave quite like case-marked nouns and have grammaticalized from a concrete noun to expressing purely spatial meanings such as in *geajnoe-raejkiem* [road-PROL] 'along the road' and *geajnoe-raejkieh* [road-PL.PROL] 'along roads', they can usually be replaced by other cases (genitive, accusative, elative) or by various adpositions.

From a semantic point of view, the relation forms are more problematic than the prolative forms with concrete spatial meanings. Whereas the prolative forms can be avoided by using other, partly synonymous morphemes instead, many relation forms could be replaced with rather marginal possessive suffixes. However, they can also be replaced – and co-occur – with genitival modifiers and the demonstrative cum definite

article *dïhte*. Moreover, many of the occurrences of relation forms could also be substituted with plain nouns in the same case without an obvious change of propositional meaning. As a matter of fact, I have not been able to identify any contexts in which the use of a relation form would seem absolutely mandatory, i.e. required by the grammatical rules of the language. But then again, this does not mean that the relation forms are void of meaning and completely needless.

After all, and in spite of many counterexamples that reveal the true heterogeneity of relation forms, most of the authentic relation forms in all types of texts do fit the idea of a *relation* form, or Bergsland's (1982/1994) *forholdsform*. Most often, *aehtjebe* does stand for approximately the same as the English words *the father of the two* or *the one who is the father*, and when speaking of the one who is the father in a group consisting of more than two persons, *aehtjemes* (22) or *eehtjemes* (6) can be used. On the other hand, it is possible to use *voelpebe* [friend.*be*] and *vïellebe* [brother.*be*] in contexts in which both participants are friends (41) or brothers (49) one to the other, which makes them once again look like possessive suffixes:

(49) *Alma* *edtja* ***vïellebem*** *jaemiedasse* *seedtedh* *jïh*
man shall.3SG brother.*be*.ACC death.ILL send.INF and
aehtjie *jïjtse* *maanam, (...)*
father REFL.GEN.3SG child.ACC
'A brother will betray his brother to death, a father will betray his own child, (...)' (SIKOR)

In conclusion, a relation form in *X-be/-åbpoe* most often stands for 'the one who is the X in relation to Y' and *X-mes/-ommes* for 'the one who is the X in the group'. When comparing relation forms in *-be/-åbpoe* with the comparative in *-be/-åbpoe*, Bergsland (1946: 182, 202) characterizes the former as an "oppositive" or "selective" comparative, and in cases where the suffix resembles possessive suffixes, the characterization "possessive comparative" (Norwegian *"possessiv" komparativ* with scare quotes) is also used.

It is important to remember that the data presented above stems from many different dialects and registers of South Saami, across the timespan from the 1880s (26, 36 and 40) to the 2010s (8). Therefore, it would certainly be erroneous to think that every instance of a relation form belongs to a single language system. However, it appears that both the morphological makeup and the syntactic properties of the relation forms are actually

surprisingly constant; the morphology of comparative and superlative adjectives is subject to much more variation. What is more labile is the semantics of the relation forms: It is difficult to grasp the exact meaning of a given relation form in a given context, as it is possible to see many examples in which the forms in *-be/-åbpoe* do not refer to unambiguous and complementary roles of pairs such as the daughter (*daktaråbpoe*) and her mother (*tjidtjebe*) repeated in the grammar books and in (1–3) above. For those who might want to regard such forms as third person possessive suffixes, many obvious counterexamples (see Section 3.4) can be found. Relation forms in *-mes* are much less common and seem to be altogether absent in some dialects (Bergsland 1946: 182), making them even more difficult to generalize on.

Finally, it may be made clear that there is nothing adjectival in the superficially "comparative" relation forms – neither in syntax nor semantics. The non-adjectival relation forms in South Saami thus clearly differ from the occasional comparative forms of Finnish nouns, for example. In (50), the comparative – or, perhaps better, moderative – *äidimpi* means approximately 'more of a mother (than X)', not unlike the analytic expression *enemmän äiti* with a similar meaning:

(50) Finnish

Onko	*joku*	*toinen*	***äidimpi***	*kuin*	*toinen?*
be.3SG.Q	someone	other	mother.CMPV	than	other
Onko	*kotiäiti*	***enemmän***	***äiti***	*kuin*	*työäiti?*
be.3SG.Q	home.mother	more	mother	than	working.mother

'Is someone more of a mother than the other? Is a stay-at-home mom more of a mother than a working mother?' (Lankahullu 2012)

The difficulties in describing the true nature of South Saami relation forms may be a symptom of an ongoing change or even a gradual loss of the category in question. In a way, the present collection of relation forms in actual use is reminiscent of lexical corpora that contain data from various dialects, genres and time periods and can be used as the raw material for etymological studies in which all nuances of a polysemous word or word family may be equally important in order to understand the past and present of the morpheme in question. The following section is devoted to diachronic observations on the relation forms in South Saami.

4. Relation forms: diachronic and comparative observations

In the above sections, the South Saami relation forms have been described almost entirely from a synchronic perspective. In the following, a diachronic point of view is adopted, and after a brief overview of earlier research on the origins of the Saami comparatives and superlatives (Section 4.1), the discussion is extended from the westernmost parts of Europe to Tungusic languages spoken in the eastern end of the Eurasian landmass, as languages like Ewen and Nanai turn out to provide highly interesting analogues to the relation forms in South Saami (Section 4.2). In light of typological parallels from Tungusic as well as from Indo-European, it is suggested that the South Saami relation form in *-be/-åbpoe* may have preserved some of the earliest functions of the Uralic suffix **-mpV*.

4.1. On the origins of the Saami comparatives and superlatives

To my knowledge, the origins of the so-called relation forms – nouns followed by morphemes that are homonymous and unquestionably cognate with the pan-Saami comparative and superlative markers – have never been discussed in print. For example, the phenomenon is not mentioned in the two major treatises on Saami historical grammar by Korhonen (1981) and Sammallahti (1998), nor are the forms mentioned in any of the major studies on Saami-Finnic or Uralic comparatives and superlatives in general (e.g., Ramstedt 1917, Beke 1928, Ravila 1937, Fuchs 1949, Raun 1949a). Even Raun's (1949b) paper "Zur Komparation der Substantive im Finnisch-ugrischen" provides data from only Finnic and Hungarian, and his examples, such as Estonian *mehe-m* [man-CMPV] (← *mees* 'man') 'kräftiger, tüchtiger' and Hungarian *rózsá-nál rózsá-bb* [rose-ADE rose-CMPV] 'rosiger als eine Rose', refer to quite adjective-like denominal comparatives rather than to phenomena that would semantically resemble those of South Saami (cf. also Finnish *äidi-mpi* [mother-CMPV] in Example 50 above).

The only scholar to have discussed South Saami relation forms and the history of the comparative cum relation form *-be* on approximately the same pages is Bergsland (1946: 181–183; 203–204), but even he keeps the synchronic description of relation forms apart from the few general comments on the prehistory of the comparative suffix. In a word, no-one seems to have tried to explain the origin of the phenomenon. However, Bergsland

(*ibid*. 182) does make a brief fine-print note in which he mentions that the use of the comparative marker as a relation form marker has also been attested in Pite and Lule Saami (for vague references, see Bergsland). He refers to material collected in the 19th century and states that such functions in those languages are "obviously obsolete" (*tydeligvis foreldet*), but it is worth noting that such forms have existed and to some degree still exist, as many of them have even been published anew as such. The Lule Saami "relation forms" in *-p* (: *-bu-*) are identical to the comparative degree marker in the language (cf. *nuorra* 'young' : *nuora-p* [young-CMPV] : *nuora-bu* [young-CMPV.GEN]). The relation form *áhtjebuv* in (53) is one of the two occurrences I have encountered in post-19th-century texts:

Lule Saami

(51) *Niejdda viehkal goahtáj* ***iednebu*** *lusi mánáv*
daughter run.MOM.3SG home.ILL mother.*p*.GEN to child.ACC
gehtjatjit.
see.SUP
'The daughter runs home to her mother to see the child.' (SIKOR)

(52) *Akti manná dat Stálo vivva vuohpas*
once visit.3SG it ogre.GEN son.in.law father.in.law.GEN.3SG
lunna, ja ***niejdap*** *rávvi* ***boadnjebu*** *maŋen*
at and daughter.*p* order.3SG husband.*p*.GEN with
biebmojt iednestis, hálijt sån iednes
food.PL.ACC mother.ELA.3SG want.3SG 3SG mother.GEN.3SG
njálga biebmojt.
delicious food.PL.ACC
'One time the Ogre's son-in-law visits his father-in-law and his (the father-in-law's) daughter orders her husband to bring her food from her mother; she wants to have her mother's delicious food.' (SIKOR)

(53) *Dievátja nalta de bárnne ájttsá* ***áhtjebuv*** *soage*
hill.DIM.GEN off DPT son notice.3SG father.*p*.ACC birch.GEN
vuolen, vuojnnet jasska oademin.
under see.INF peacefully sleep.PROG
'Looking from the hill, the son notices that his father is sleeping under a birch, he seems to be sleeping peacefully.' (SIKOR < Tuolja 1987: 61)

It may also be noted that such forms are mentioned in Grundström's comprehensive dictionary of Lule Saami dialects, in which forms like *oappáp* and *vieljap* are translated as "*systern*" (*hans, hennes, sin syster*) and

"*brodern*" (*hans, hennes, sin bror*), respectively (Grundström 1946–1954 s.v. *åppāp*, *vieljap*):

Lule Saami

(54) ***Oappáp*** *tjuovoj* ***vieljabuv***.
sister.*p* follow.PST.3SG brother.*p*.ACC
'The sister followed the brother (her brother).'
(Grundström: 'systern följde brodern (sin bror)'
(Grundström 1946–1954 s.v. *vieljap*)

As for *oappáp*, Grundström adds that the forms are rare, and indeed, these kinds of word forms are lacking in contemporary dictionaries (e.g., Kintel 2012) and grammar books (Spiik 1989), with apparently the only exception being *iednep* [mother.*p*], *áhtjep* [father.*p*], *niejdap* [daughter.*p*] and *bárnep* [son.*p*] in Korhonen's (2007) dictionary. Moreover, such forms are absent in modern texts such as those available in the 1.2M word corpus (SIKOR) – Tuolja's (1987) novel being the sole exception (53).[12]

As has been mentioned above, superlative-like relation forms in *-mes* are also lacking in the Plassje dialect of South Saami (Bergsland 1946: 182), and it is therefore no surprise that such forms seem to be absent from other Saami languages as well. However, when mentioning *-mes* forms, Bergsland fleetingly refers to the existence of the South Saami interrogative pronoun *gåabpa*/*gåabpetje* 'which of the two' and its North Saami equivalent *goabbá*, which in turn is accompanied by the "superlative" pronoun *guhtemuš* 'which (of the many)'. While *gåabpa*/*gåabpetje* and *goabbá* have cognates throughout the Saami branch as well as in Finnic (see below), the distribution of *guhtemuš* seems to be limited to the most central languages from Pite to Aanaar Saami; furthermore, its relation to the Saami superlative in **-moksi* is quite complicated (see Itkonen 1964).

The origins and usage of the Saami comparative and superlative forms have been discussed by many scholars, but this has almost always been done within the study of Uralic comparatives and superlatives – or the lack of such forms in many branches – in general (e.g. Budenz 1886: 448–454, Ramstedt 1917, Beke 1928, Ravila 1937, Fuchs 1949, Raun 1949a). On the other hand, the second half of the 20th century and the beginning of the present century have witnessed a remarkable stagnation during which the description of the origins of the comparative and superlative markers has been limited to repeated references to the received view, although the question cannot be regarded as solved. Perhaps the most influential original study

has been Ravila's (1937) paper on the development of the comparative in Saami, Finnic and Hungarian, although many of his thoughts and examples were presented already by Budenz (1886: 448–454).

As mentioned at the very beginning of the present study, and in almost all studies on the subject, the Saami-Finnic comparative marker **-mpV* (e.g., South Saami *-be*/*-åbpoe* and Finnish *-mpi* : *-mpA-*) seems to correspond to the Hungarian *-bb*, but the relations of the superlatives (South Saami *-mes*/*-ommes*, Finnish *-in* : *-impA-*, Hungarian *leg-*A*-bb*) are much less straightforward. Moreover, one of the oft-repeated truths is that there is little evidence of a pan-Uralic or pan-Finno-Ugric comparative in **-mpV*; instead, the Saami-Finnic and Hungarian comparatives are usually regarded as results of the convergent development of an element that was originally a derivational suffix with other functions. Opinions – and interests of Eurocentric Finno-Ugricists – differ as to whether Tundra Nenets moderative adjectives (*səwa* 'good' →) *səwa-mpoy*° [good-MODER] 'rather good' (cf. Finnish *some-mpi* [nice-CMPV] 'nicer') and (*ŋarka* 'big') → *ŋarka-mpoy*° [big-MODER] 'rather big' ought to be considered cognates of the Finno-Ugric comparatives (see Bergsland 1946: 204; Hajdú 1976: 146; Korhonen 1981: 247; Janhunen 2018: 51–53; Aikio, forthcoming).

To mention but a few of the most comprehensive descriptions of Saami, Finnic and Uralic historical morphology, scholars like Hakulinen (1979: 116), Korhonen (1981: 247) and Janhunen (1982: 29) refer to originally contrastive and especially spatial functions of **-mpV*, as evidenced by Saami pronominal adverbs such as South Saami *daebpene* 'here', *debpene* 'there', *duebpene* 'there (further away)' and *dubpene* 'there (far way)', as well as East Mari adjectives and adverbs like *umbal* 'distant', *umbalne* 'at a distance; far away' and *ümbal* 'top; surface', *ümbalne* 'above, on the top'. The moderative functions of the Nenets suffix are often ignored in this context.

Some authors such as Itkonen (1966: 270), Häkkinen (1985: 91–92; 2002: 86–87) and Abondolo (1998: 18) give more attention to the contrastive or oppositive (and not necessarily spatial) functions of the suffix. The most commonly cited examples include the above-mentioned North Saami interrogative pronoun *goabbá* 'which (of two)' (~ South Saami *gåabpa*/*gåabpetje* id.) and its transparent Finnic cognates such as Finnish *kumpi* id. and Estonian *kumb* id. (< Pre-Proto-Saami, (Pre-)Proto-Finnic **ku-mpa* [Q-**mpV*]). Another common example is North Saami *nubbi* 'other; second' (~ South Saami *mubpie* id.), going back to Pre-Proto-Saami **muu-mpa* [other-**mpV*] and paralleled by (Erzya) Mordvin *ombo* 'other' and *omboće*

'second; following', apparently based on another, pronominal stem. Example (35) also contains South Saami *jeatjabidie* [other.PL.ILL] (nominative *jeatjebe*), in which the comparative cum relation form suffix *-be* is attached to the pronominal-adjectival stem *jeatja-* 'other', resulting in the pronominal meaning 'other; else' (cf. Bergsland 1946: 182).

It may also be added that in addition to the well-known interrogative pronoun *kumpi* 'which (of two)' and the partly reduplicative indefinite pronoun *jompikumpi* 'either one (of two)' in present-day Finnish (~ Estonian *emb-kumb*), earlier Finnish also had a corresponding demonstrative pronoun *sempi* 'that; it (of two)' and a relative pronoun *jompi* 'that (of the two)'. In the following examples from the 16th century, the semantic closeness to the adjectival comparative is obvious:

Finnish

(55) *Nÿtt* *riteleuät* *miehett* ***cumbi*** ***lähimäiſe-mbi*** *on*
now dispute.3PL man.PL which.of.two near-CMPV be.3SG
perimän, *olkan* *ſembi* ***lähimmäiſe-mbi*** *lunaſtaman*
inherit.INF be.IMP.3SG that.of.two near-CMPV redeem.INF
peripinnett ***cumbi*** ***lähimmäiſe-mbi*** *on* *pericunnan*
prerogative.PTV which.of.two near-CMPV be.3SG heirs.GEN
lughuſa.
number.INE
'When two men are disputing over which of the two is the nearer heir, the nearer one to redeem the inheritance shall be that of the two who is nearer in succession.' (SKM II: 43)

Finnish

(56) *Sanouat* *caxi* *löÿnnens* *ÿhden* *kimalaiſten*
say.3PL two find.PST.PTCP.GEN.3PL one.GEN bee.PL.GEN
hulikan, *ottakan* ***ſembi*** *löÿtäiäiſen* *palkan,*
hive.GEN take.IMP.3SG that.of.two finder.GEN reward.GEN
iombi *enſin* *löÿſi* *eli* *ilmoitti.*
that.of.two first find.PST.3SG or make.known.PST.3SG
'When two people claim to have found a beehive, let the finder's reward be taken by that (of the two) who was the first one (of the two) who found it or made the claim.' (SKM II: 89)

Although the above discussion on the South Saami relation forms and their origin is based on the prevailing view in which the Uralic suffix **-mpV* is seen as a historically nominal-adjectival morpheme, there is also an alternative line of thought. Among scholars who have tried to explain

the origins of *-*mpV*, the most remarkable exception to the prevailing view has been Ramstedt (1917), who briefly suggested that *-*mpV* was originally a participle (*-*pA*) of derived verbs ending in *-*m*-. As pointed out by Janhunen (2018: 52), Collinder (1960: 260, 273) may have been the only scholar to support Ramstedt's hypothesis, which has otherwise been ignored by others. Interestingly, nearly a century later, Pystynen (2015) presented a quite similar preliminary hypothesis independently of Ramstedt. The most recent contribution to the topic comes from Janhunen (2018) who cautiously rehabilitates Ramstedt's early proposal, including typological parallels from Turkic (see also Aikio, forthcoming). According to this hypothesis, adjectives that refer to properties like 'red' and 'dark' could go back to participles meaning 'reddening' and 'darkening'.

Although the thoughts presented by Ramstedt, Pystynen and Janhunen do not directly contradict the received view with the main focus on nominal suffixes, the participial hypothesis is hardly compatible with it. Instead of focusing on the contrastive functions of *-*mpV*, the participial hypothesis draws attention to the moderative functions of the suffix. Most importantly, Janhunen presents examples from Nenets, which lacks an obvious category of adjectives (see also Jalava 2013), but instead expresses properties using both nouns and verbs. On the other hand, he acknowledges that this hypothesis presents both morphological and semantic challenges, some of the most important being that the presumed cognates of the *-*mpV* comparatives in Saami, Finnic and Hungarian do not function as comparatives – and can be found only in Nenets.

The most obvious advantage of the participial hypothesis is that it offers an explanation that breaks *-*mpV* down into even simpler terms: This could explain why there are few signs of a true Proto-Uralic comparative form – which may have never existed – but instead, there are some seemingly related and possibly convergent comparatives and analogous forms spread across Uralic. On the other hand, while some of the functions of *-*mpV* could be explained by the participial hypothesis, this is not true for all of them. In fact, a large part of the westernmost branches – in addition to Saami and Finnic, also Mordvin and Mari – have depronominal, contrastive *-*mpV* forms that hardly seem to go back to participles with moderative meanings. It is also worth noting that among the diachronically and synchronically heteogeneous comparative forms in Uralic, the *-*mpV* comparatives in Saami, Finnic and Hungarian are considered the least moderative and most contrastive and emphatic (see Raun 1971:

107–110, 117–118). In contrast to the participial hypothesis alone, a more logical but undeniably much less elegant alternative could be the hypothesis that some of the moderative-comparative *-*mpV* forms may go back to Proto-Uralic participles, whereas some of the more contrastive comparatives – and South Saami relation forms – may have an altogether different origin. This question must, however, be left for future studies.

As for the origins of the superlative in South Saami, much less is known, as the obvious origin of the suffix *-mes*/*-ommes* is limited to Proto-Saami. Opinions differ as to whether the suffix must be considered a loan from Finnic or whether it is a collateral cognate of the (deadjectival) derivational suffix *-mus*/*-mys* as seen in Finnish *ylimys* 'member of the nobility' (← *ylä-* 'top part'), which is cognate to South Saami *jille-mes* ~ *jïlle-mes* [high-SUP] 'highest', or *laiskimus* 'sluggard' (← *laiska* 'lazy'), cognate to North Saami *láikkimus* [lazy-SUP] 'laziest' (see Korhonen 1981: 248; Sammallahti 1998: 91).

To return to the relation forms, it can only be repeated that the origins of these special functions – of what seem to be comparative and superlative markers that occur mostly with kinship terms – have apparently not been pondered in any publications. The phenomenon has not even been mentioned in diachronic studies of any kind. Interestingly enough, the only relation form I have encountered in such studies has gone without attention by Fuchs (1949: 147), who mentions the words *gaampelåbpoe tjidtjiebistie* 'older than one's mother' as an example of the case marking for the standard of comparison, thus focusing only on the comparative *gaampelåbpoe* 'older' and the elative case suffix (*-stie*). The example comes from sentence (57) recorded by Lagercrantz (1939 § 1919):

(57) *Juktie* *gaampelåbpoe* ***tjidtjiebistie***, *dam*
because old.CMPV mother.*be*.ELA 3SG.ACC
jiehtieh *"muahra".*
say.3PL *muahra*
'If [the mother's sister] is older than the mother [of the speaker], she is called *muahra* [*sic*[13]].' (Lagercrantz 1939 § 1919)

It is worth noting that in the earliest approaches to the origins of the Saami-Finnic comparative, scholars like Budenz (1886: 449–450), Ravila (1937: 40–41), Fuchs (1949: 152) and specifically Beke (1928) paid attention to the fact that the interrogative pronouns like North Saami *goabbá* 'which (of the two)' (~ South Saami *gåabpa*/*gåabpetje* id.) and Finnic (Finnish) *kumpi* id. are etymologically analogous to Greek *πότερος*, Sanskrit कतर

(*katará*) and Old English *hwæþer* 'which (of the two)', all going back to Proto-Indo-European **k^{w}óteros*, which in turn is made up of the interrogative stem **k^{w}o(s)-* and the contrastive suffix **-teros*.[14] The same suffix also occurs in Latin *alter* 'second; other' (cf. *alius* '(an)other' as well as South Saami *mubpie* 'other, second' and Erzya *ombo* 'other' mentioned above), but most importantly, descendants of Proto-Indo-European **-teros* also include comparative suffixes in Greek (*-τερος*), Sanskrit (*-तर* = *-tara*) and Celtic (e.g. Greek *πρεσβύτερος* 'older; senior; elder' ← *πρέσβυς* 'elderly; aged'; Sanskrit *पुण्यतर* = *puṇyatara* 'purer; holier' ← *पुण्य* = *puṇya* 'purity; pure'). However, this parallelism has received barely any attention for decades. It will be seen in the following section that it is typological parallels like these – together with the heretofore neglected relation forms – that provide us with interesting perspectives for reconstructing the prehistory of the Saami-Finnic(-Hungarian) comparative.

4.2. Typological perspectives – from the Russian Far East

For over half a century, there has largely been a consensus on the origins of the Saami-Finnic comparative and the supposedly convergent history of the comparative in Hungarian. In principle, there is no need to question the received view, but instead of continuing to repeat what has already been stated by Budenz (1886: 448–454), it seems reasonable to try and dust off the classical view by adopting a slightly wider perspective. The new perspective on Uralic **-mpV* – and the South Saami comparative cum relation form in *-be*/*-åbpoe* in particular – is provided by Tungusic languages and especially Alonso de la Fuente's (2011) study on the origins of the so-called comparative suffix **-tmAr*/*-d(ï)mAr* in Northern Tungusic.

Before commencing with Tungusic, it may be noted that there seem to be no typological studies on the diachrony of comparative markers. Instead, Haspelmath (2001: 1501–1502) points out that while most languages of Europe do have comparative forms for adjectives, such morphological categories are relatively uncommon elsewhere. In fact, even the Tungusic "comparatives" are often mentioned in scare quotes and are also known as "dual-comparatives", "intensifiers", "partitive(-comparative)s" and "selectives". However, more important than the labels used are the functions of such morphemes labeled as comparatives here. Consider the following two pairs of examples from Ewen (Northern Tungusic) and Nanai (Southern Tungusic):

Ewen

(58) *Эрэк оран тарак орандук* ***гудадмар***.
Erek oran tarak oranduk ***guda-dmar***.
this reindeer that reindeer.ABL high-CMPV
'This reindeer is higher than that reindeer.' (Popova 2015: 170)

Ewen

(59) ***Эвэдмэр*** — *Фёдор,* ***мэнэдмэр*** — *Иннокентий.*
Əwə-dmər — *Fjodor,* ***mənə-dmər*** — *Innokentij.*
Ewen-CMPV Fyodor Itelmen-CMPV Innokenty
'The Ewen is Fyodor; as for the Itelmen, he is Innokenty.'
(Alonso de la Fuente 2011: 185 < Benzing 1955: 53)

Naikhin Nanai

(60) *Улги мападуй* ***сэтуйдимэ***.
Ulgi mapaduy ***setuy-dime***.
Siberian.chipmunk bear.ABL weak-CMPV
'The chipmunk is weaker than the bear.' (Alonso de la Fuente 2011: 187 < Avrorin 1959: 211)
(Avrorin: 'Бурундук в сравнении с медведем — тот, который из них слабый.')

Naikhin Nanai

(61) *Вайчай най* ***гиудимэвэ*** *пуентухэни.*
Waycay nay ***giu-dime-we*** *puentuxeni.*
hunting man roe-CMPV-ACC hurt.PST.3SG
'The hunter hurt the roe (but no other animals).'
(Alonso de la Fuente 2011: 187 < Avrorin 1959: 197)
(Avrorin: 'Охотник косулю (ту, которая из них косуля) ранил.')

As for Ewen *tarak oranduk gudadmar* 'higher than that reindeer' and Nanai *mapaduy setuydime* 'weaker than the bear', they resemble the corresponding South Saami comparative constructions *dehtie bovtseste jïllebe* [DEF.ELA reindeer.ELA high.CMPV] and *bïerneste hiejjiehtåbpoe* [bear.ELA weak.CMPV], respectively. However, the same suffixes, Ewen *-dmar*/*-dmər* and Nanai *-dima*/*-dime* (*-jima*/*-jime*), can also be attached to nouns like 'Ewen', 'Itelmen' and 'roe'. This, of course, seems similar to the relation forms in South Saami. Space does not allow for a detailed description of the Tungusic data and its variegated research history, but the resemblance with South Saami is quite striking. The reader is referred to Alonso de la Fuente (2011) and the references cited therein, but the following lines summarize the fragmented research tradition quite well:

> According to Benzing's [1955] description, Ewen V°-*(A)dmAr* ~ C°-*dAmAr* is not only a comparative marker, but also one which is used to express duality ("potentielle-elliptische Dual"). Generally speaking, the "dual" function entails a contrast between two entities. Other authors have come up with different labels, e.g. Malchukov [1995] calls it "Intensifier". On the other hand, Cincius [1947 and] Novikova [1960] both seem to consider that "Comparative" is the proper label. However, Cincius recognises that this suffix has a particular use, the same described by Benzing, for which she uses, like Malchukov, the label "Intensifier" (lit. указание, усиление). (Alonso de la Fuente 2011: 184)

One of the claims of Alonso de la Fuente's Tungusological contribution is that the Northern Tungusic "comparative" marker (58–59) is etymologically distinct from that of Southern Tungusic, i.e. the one seen in the Nanai examples (60–61) above. Nevertheless, the two are functionally so similar that the author is content to describe the phenomena seen in the relation-noun-like examples (59) and (61) – irrespective of the different origins of Ewen *-dmər* and Nanai *-dime* – as follows:

> The explanation behind the "Partitive", "Dual" or "Selective" function so described by Avrorin [1959], Benzing [1955] and Kazama [2008] for Nanay, Ewen and Ulcha (and Orok) respectively is by far the easiest task to be dealt with in this paper.
>
> **The function underlined by this suffix is nothing else but the (particularising-)antinomic one.** Both functions, comparison and antinomy, are linked semantically and well spread cross-linguistically. The best-known example is the (Proto-) Indo-European suffix */-(t)ero-/ (...) (Alonso de la Fuente 2011: 189; emphasis J.Y.)

Here, Alonso de la Fuente goes on to describe the development of PIE *-*tero*- – the same affix that has been mentioned by many Uralists as seen in the previous section. As Alonso de la Fuente's condensed paper focuses on the historical phonology and morphology instead of syntax and semantics, it must be admitted that he is quite bold in claiming that expressions of comparison and what he terms "antinomy" are "well spread cross-linguistically"; I am not aware of typological studies on this topic. However, when the comparative-marked nouns (such as those in (59) and (61)) are said to have "particularizing", "antinomic", "contrastive", "intensifying" or "selective" functions, their use seems to resemble that of South Saami relation forms indeed. As seen in the quotation above, Benzing (1955) characterizes Ewen *-dmar/-dmər* as a "potential (or elliptic) dual". His description of the functions of these forms comes so close to the picture depicted in Section 3 for the relative forms in South Saami that Benzing is also worth citing verbatim:

> Neben der Bezeichnung der Mehrheit (und, in Resten, der Zweiheit?) kennt das Lamutische noch eine, **in ihrer wirklichen Bedeutung ganz unklare Form der Nomina**, von der ich aber glaube, sie der Behandlung der Einzahl und Mehrzahl anschließen zu sollen. Es handelt sich um **Formen mit besonderen Suffixen, welche ein Ding (oder eine Gruppe von Dingen) in Bezug auf eine Gesamtheit kennzeichnen. Mit Hilfe dieser Suffixe kann man anzeigen, ob ein Gegenstand Teil einer Gruppe von 2 Gegenständen ist** (elliptischer oder potentieller Dual — es existiert immer ein Element, das den Dual vervollständigt — s. § 102), oder ob er zu einer Gruppe von mehr als zwei gleichartigen Gegenständen gehört (elliptischer oder potentieller Plural, s. § 103).
> (Benzing 1955: 52; emphasis J.Y.)[15]

As it turns out, the form in *-dmar*/*-dmər* has recently been discussed also by Matić (2011) and Matić and Wedgwood (2013: 152–153), who describe it as a contrastive focus marker. Although the details of the true nature of this form fall outside the scope of the present paper, and the word forms in (59) and (61) seen above are lexically different from the kinship terminology that is the heartland of the South Saami relation forms, Cincius (1947: 237) and Benzing (1955: 52) mention the form *amadmar* (← *aman* 'father') and translate it as 'отец (тогда и отец)' and '(von den beiden) der Vater; aber der Vater'. Indeed, many such forms can be found in texts, and corresponding forms for mother (*enin*) exist as well:

Ewen

(62) ***Амадмар*** *хуты* *хупкучэклэ* *эмэнин.*
Ama-dmar *xutï* *xupkucəklə* *əmənin.*
father-CMPV child.REFL school.DIRLOC leave.TRANSLOC.3SG
'The father left his son at school.' (Cincius 1947: 237)
(Cincius: 'Отец (тогда и отец) сына в школе оставил.')

Ewen

(63) Вася *эрэв* *энинтэкий* *тэлэнгчэлэн,*
Vasja *ərəw* *ənintəkii* *tələŋcələn,*
Vasya this.ACC mother.DIR.REFL tell.PST.PTCP.LOC.3SG
энидмэр *хоч* *урэлдэн.*
əni-dmər *xoc* *urəldən.*
mother-CMPV very(.much) be.happy.3SG
'When Vasya had told his mother about this, the mother was very happy.' (Sverčkova 1975: 127)
(Sverčkova: 'После того как Вася расказал об этом своей матери, мать очень обрадовалась.')

In Matić and Wedgwood's (2013: 152–153) words, Ewen *-dmar/-dmər* is seen in contexts where "there is a highly restricted (usually binary) distinction between two alternatives" and the suffix "produces an inference of the default set to which the denotatum of this noun belongs", such as the set {father, child} in (63). While I acknowledge that detailed analysis of Ewen data belongs to the experts in the field, it is remarkable that these characterizations seem applicable to most occurrences of the South Saami relation forms. It is thus possible to present analogous South Saami sentences containing the relation forms *aehtjebe* (62′) and *tjidtjebe* (63′):

(62′) ***Aehtjebe*** *baerniem* *skovlese* *leehpi.*
father.*be* son.ACC school.ILL leave.PST.3SG
'The father left his son at school.' (J.Y., personal knowledge; confirmed by Maja Lisa Kappfjell)

(63′) *Gosse* *Vasja* *dan* *bïjre* *tjædtjan* *soptsestamme,*
when Vasja it.GEN about mother.ILL tell.PST.PTCP
tjidtjebe *joekoenlaakan* *aavoedi.*
mother.*be* very.much rejoice.PST.3SG
'When Vasya had told his mother about this, the mother was very happy.' (J.Y., personal knowledge; confirmed by Maja Lisa Kappfjell)

Leaving more fine-grained contrastive studies between Ewen and South Saami for the future, I wish to claim that Ewen and other Tungusic comparative markers definitely seem to be the closest available parallels to South Saami *-be/-åbpoe*. This observation has diachronic implications as well: It seems fruitful to try to understand the development of *-be/-åbpoe* in light of Alonso de la Fuente's claims about the origins of the Northern Tungusic comparative. Referring to the Indo-European parallels mentioned above, Alonso de la Fuente (2011) is confident about the direction of semantic change in Tungusic as well:

> The *opinio communis* claims that it was from the contrastive function that the comparative function developed after the generalisation of constructions like 'A is old in comparison to B, which is young' or 'A is X, B isn't', where B was most likely marked with */-(t)ero-/. The evolution "antinomic" > "comparative" is the only reasonable conclusion to satisfactorily explain the historical distribution of */-(t)ero-/. (...) it would be really hard to argue otherwise about the direction in the functional evolution of the suffix */-(t)ero-/: how would have the comparative arrived to the much more restricted separative function? How would we explain why */-(t)ero-/ yielded comparatives in Greek, Old Indian or Celtic, and not in other languages? (Alonso de la Fuente 2011: 190)

It appears to me that Indo-Europeanists' and Alonso de la Fuente's (2011) reasoning can also be applied to Uralic **-mpV*, and this is actually not far from the prevailing view (Section 4.1). It might be typologically adventurous to assert that South Saami *-be/-åbpoe* has gradually developed from a comparative marker ('more') into a nominal suffix that can even be (mis)taken for a possessive suffix or definite marker (for the emergence of definites, see Lyons 1999 and De Mulder & Carlier 2011). Alonso de la Fuente (*ibid*. 195) actually seeks support for his proposal from Uralistics and refers to Finnish *kumpi* 'which (of the two)' in this connection. On the other hand, Poppe (1958: 206) already fleetingly points out that Benzing's (1955: 52) *amadmar* '(von den beiden) der Vater' is reminiscent of *kumpi* 'welcher von den beiden', and suggests that *amadmar* may originally have meant 'derjeningen, der mehr Vater ist'; the other would the be 'less father', i.e. 'not the father'. It is likely that the South Saami data presented in this study provide more support to Alonso de la Fuente's Tungusic reconstructions.

Even if only vague and partial, the functional resemblance between South Saami *-be/-åbpoe* and Ewen *-dmar/-dmər* as well as other corresponding morphemes in Tungusic (see Alonso de la Fuente 2011) is quite remarkable in itself, but on the other hand, this fits into the picture provided by Indo-European **-tero-* as well.[16] As the South Saami relation forms have not been discussed in historical Uralistics before, no-one has ever opposed the idea that the South Saami relation forms – with obsolete cognates in Pite and Lule Saami, too – might actually be among the best-preserved remnants of the most original pre-comparative functions of Uralic **-mpV*. On the other hand, it appears that the reconstructed history of the Tungusic comparatives does not offer direct help in reconstructing the ultimate origins of the Uralic comparatives: According to Alonso de la Fuente (2011: 198), the North Tungusic comparative marker seems to be a loan from a Mongolic moderative suffix, while its South Tungusic counterpart might go back to an ablative case suffix followed by an adjectival derivational suffix.

Of course, it is also possible to think that South Saami and the rest of the westernmost Saami languages on the westernmost fringes of the Uralic family might have developed the present-day relation forms on their own as a result of unknown factors. However, it may be equally possible to consider that relation forms such as *aehtje-be* may stem all the way from Pre-Proto-Saami if not Proto-Uralic **ićä-mpä* ~ **ećä-mpä*. Let us once again turn back to the interrogative pronoun *gåabpa* 'which (of the two)', which has cognates throughout Saami and Finnic up to South Estonian:

(64) South Saami

a. ***Gåabpa*** *dotneste* ***nuerebe?***
which.of.two 2DU.ELA young.CMPV
'Which one of you is younger?' (Bergsland 1982: 74; 1994: 75; Magga & Magga 2012: 216)

Võro

b. ***Kumb*** *teist* *om* ***noorõmb?***
which.of.two 2PL.ELA be.3SG young.CMPV
'Which one of you is younger?' (J.Y., personal knowledge)

Even though the descendants of Saami-Finnic **ku-mpa* may never have been regarded as comparative forms any more than relation forms, they are, in a sense, both. As can be seen in the above examples, the interrogative occurs naturally with comparative adjectives. Comparatives like *nuerebe* and *noorõmb* may also function as independent answers to the one-word questions *gåabpa?* and *kumb?*, respectively – such comparatives come close to nouns with their meaning of 'the younger one; the one (of the two) who/which is younger'. This in turn is not far from another type of possible answer to the question *gåabpa?* (or the entire question clause in 64a) – in other words a relation form such as *aehtjebe*, often meaning approximately 'the one (of the two) who is the father'.

Although it has become evident in Section 3 that the relation forms do not always have such evidently contrastive – or to use more Tungusological terminology, "antinomic", "intensifying", "particularizing" or "selective" – meanings, it is reasonable to think that word pairs like *aehtjebe – tjidtjebe* may have formerly meant 'the one (of the two) who is the father' and 'the one (of the two) who is the mother', just like *nuerebe – båarasåbpoe* stand for 'the one (of the two) who is young' and 'the one (of the two) who is old'. Put more concretely, it is possible to equate the relation forms of (1) with the comparatives in (65):

(1) ***Daktaråbpoe*** *darjoeji* *guktie* ***tjidtjebe*** *jeehti.*
daughter.*åbpoe* do.PST.3SG as mother.*be* say.PST.3SG
'The (one who is the) daughter$_i$ did as (the one who is) her$_i$ mother$_j$ said.' (Bergsland 1982: 107; 1994: 110; Magga & Magga 2012: 50)

(65) ***Nuerebe*** *darjoeji* *guktie* ***båarasåbpoe*** *jeehti.*
young.CMPV do.PST.3SG as old.CMPV say.PST.3SG
'The (one who is the) young(er) one did as the (one who is the) old(er) one said.' (J.Y., personal knowledge; confirmed by Maja Lisa Kappfjell)

For the sake of completeness, it is worth noting that especially the above textbook example (1) and earlier characterizations of relation forms as possessive suffixes also remind us of the phenomenon referred to as the "Janus construction" in Lewis' (1967: 48) description of Turkish. According to Lewis, the term refers to "the curious facing-both-ways construction wherein, when two people who are related or otherwise closely connected, are mentioned in one sentence, each is defined by a third-person suffix linking him to the other". His examples include the following:

Turkish

(66)	***Oğl-u***	***baba-sı-na***	*bir*	*mektup*	*yazdı.*
	son-3SG	father-3SG-DAT INDF		letter	write.PST.3SG

'The son wrote a letter to the father', "His – the father's – son wrote a letter to his – the son's – father." (Lewis 1967: 48–49)

What is more, Haiman (1980: 370–371) provides analogous examples from Hua (Yagaria), a language of Papua New Guinea, stating that it is one of "many other languages" in which possessive markers are used in such constructions.[17]

To return to Uralic, the remaining question is whether the Saami relation forms could be as old as the Saami-Finnic comparatives and the interrogative **ku-mpa*. Disregarding the separate development of the Hungarian comparative, the closest distant relative of the contrastive **-mpV* and (South) Saami depronominal *mubpie* 'second; other' in particular seems to be the above-mentioned (Erzya) Mordvin *ombo* 'other'.

It ought to be possible to hypothesize that the denominal (and depronominal) **-mpV* forms may have at least as long a history as the deadjectival forms, if not an even longer one – as long as it is possible to identify a separate category of adjectives in earlier stages of western Uralic (cf. Pajunen 1998; Aikio, forthcoming). Of course, one can ask whether the westernmost Saami languages alone would have preserved (and developed further) a hypothetical and nebulous Pre-Saami-Finnic phenomenon that has been the basis of present-day relation forms and a possibly later innovation, the Saami-Finnic adjectival comparative. It must be admitted that the present study is not able to provide decisive arguments for this preliminary hypothesis, but the comparative evidence from Indo-European and Tungusic makes the hypothesis seem feasible.

It is also worth noting that if the common proto-language of Saami, Finnic and Mordvin were to be reconstructed based on these languages

alone, the only reliable cues for reconstructing an accusative marker in *-*m* as well as the best evidence for an earlier OV order would be provided by South Saami. South Saami also appears to be the only Saami-Finnic language that has truly preserved the ancient use of the genitive case in possessive clauses – with analogical genitives in use in Mordvin and Mari (see Inaba 2015: 172–231). From this perspective, the language could also serve as a key for identifying the original functions of *-*mpV*. As a minor comment to the oft-repeated assumptions about the original contrastive and/or spatial functions of the suffix, the core functions of the South Saami relation forms in *-be*/*-åbpoe* provide an important example of a relatively productive category, as the element in question occurs with (mostly) animate nouns, which are a far more open class than the pronominal stems to which earlier examples have been limited (see Section 4.1).

5. Discussion and conclusion

The preceding sections have mostly been devoted to the synchronic description of the South Saami relation forms in *-be*/*-åbpoe* and, to a lesser extent, those in *-mes*/*-ommes*. In Section 4, the discussion was extended to a brief comparison of the phenomena in question with unexpectedly analogous phenomena in Tungusic. In so doing, the discussion seeks to provide new typological perspectives on the South Saami relation forms, but in spite of some remarks and hypotheses concerning the origin of the South Saami *-be*/*-åbpoe* and its cognates in the rest of the Saami languages as well as in the neighboring Finnic, deliberately little has been said about the cognates of these morphemes in the more distant branches of Uralic, such as Hungarian and Samoyed. Although the decidedly diachronic approaches to the puzzle of Uralic *-*mpV* is left for future studies, it appears that the South Saami relation forms must be taken into account in those studies. The same can be said about the ability of the Finnic comparative to occur as a moderative suffix attached to nouns such as *äiti* 'mother' (→ *äidimpi* 'more of a mother') in (50). In fact, in her description of Tundra Nenets, Nikolaeva (2014) mentions that the possible cognate of South Saami *-be* and Finnic *-mpi*, the moderative suffix *-mpoy°h*/*-poy°h*, can also occur with nouns with "some parametric component in their meaning", which is emphasized by the use of the moderative:

Tundra Nenets

(67) *t'iki°* *n'a-mpom'i!*
this companion-MODER.1SG
'This is a real friend of mine!' (Nikolaeva 2014: 135)

To be sure, moderatives like this are very different from the South Saami relation forms, which are better characterized as contrastive, for example. Although the elements *-mpoy°h/-poy°h* and *-be/-åbpoe* might share a common ancestor in Proto-Uralic (**-mpV*), it must be remembered that its descendants in Saami and Samoyed have been growing apart from each other for several millennia. The contemporary functions of the suffixes must be regarded as more or less natural outcomes of long-standing diversification of the two branches – as well as Finnic and Hungarian, for that matter.

However, the existence of South-Saami-like relation forms in Lule Saami (51–54) as well as the existence of pan-Saami-Finnic words for 'which (of the two)' (South Saami *gåabpa* < **kumpa* > Finnish *kumpi*) suggest that the South Saami relation forms are not a quirk that can be ascribed to an idiosyncratic development in South Saami alone. A related contrastive meaning can be seen in the many "comparative" forms for 'other', such as South Saami *mubpie* 'other; second', Erzya *ombo* 'other' and South Saami *jeatjebe* 'other', as well as in other analogous pronouns in Finnic (*jompikumpi* 'either one (of two)', *jompi* 'that (of the two)', *sempi* 'that (of two)'; see Examples 55–56). Further, it may be noted that certain Finnic words for 'left' and 'right' go back to analogous derivations; cf. Estonian *parem* 'right, dexter; better' (← Proto-Uralic **para* 'good') and Finnish *vasen* (dial. *vasempi*) : *vasempa-* 'left' (← Proto-Uralic **wasa* id.), thus implying the contrastive or oppositive meaning 'of the two opposites, the one on the right/left side'.

To return to present-day South Saami in particular, it is important to keep in mind that the language is an interesting mixture of old and new. South Saami is in many aspects a rather conservative representative of the Saami branch, but at the same time an age-old neighbor of Germanic idioms that have shaped the language in numerous ways. Therefore, it is worthwhile to remember that when beginning his vacillation on the true nature of the relation forms, Bergsland (1946: 181) fleetingly mentions that *-be/-åbpoe* could also be characterized as a definite article.

Even though there are not many compelling reasons to resort to Bergsland's suggestion (see Section 3.4), it is certainly possible to think that

the Scandinavian languages, with their (rather fusional) suffixal definite articles, may have influenced the use of the relation forms. One of the most probable instances of Scandinavian interference was seen in (37a), where the noun phrase *dïhte bööremes vïellebe* [DEF good.SUP brother.*be*] 'the best brother' looks very much like Norwegian *den beste broren* [DEF good.SUP brother.M.DEF] (37b). Other examples include *geellebe* [husband.*be*] (32) and *mov gåmmebe* [1SG.GEN wife.*be*] (33), referring to the spouses of the two (first person singular) speakers, as it is possible to observe that the examples are translations from Norwegian sentences with the noun phrases *mannen min* [husband.M.DEF my.M] and *kona mi* [wife.F.DEF my.F], respectively. In the same vein, it would also be possible to translate words like *tjidtjebem jïjtjesh* [mother.*be*.ACC REFL.GEN.3PL] '(listened to) their mother' (36) and *doh dov vïellebh* [that 2SG.GEN brother.*be*.PL] 'those brothers of yours' (48) into Norwegian as *moren sin* [mother.M.DEF their.M] and *disse brødrene dine* [those brother.PL.DEF your.PL].

Mere translational equivalence is hardly enough to prove that we are dealing with suffixal articles in South Saami; more research would be needed in order to make such a claim. It goes without saying that if the South Saami relation forms were analyzed as definite articles, this would be typologically remarkable, as definite articles – and Uralic definite articles in particular – are generally known to derive from demonstratives and possessive markers but not from morphemes related to comparatives (Lyons 1999, De Mulder & Carlier 2011).

Finally, the use of the superlative marker *-mes*/*-ommes* as a relation form marker has played only a secondary role in this study. In the 1.1M-word corpus (SIKOR) and other texts available, occurrences of these forms are virtually limited to the forms *tjidtjemes* [mother.*mes*] (3, 19, 28), *eehtjemes* ~ *aehtjemes* [father.*mes*] (6, 17, 19, 20, 22, 28, 29), *aahkemes* [grandma.*mes*] (21), *aajjemes* [grandpa.*mes*] (39) and *vuanavommes* [mother.in.law.*ommes*] (18), and they do not belong to all traditional dialects (Bergsland 1946: 182). In light of the fact that the Saami superlative marker **-moksi* is evidently a much younger suffix than **-mpV*, it is possible that the relation forms in *-mes*/*-ommes* are a relatively new and unestablished phenomenon that may have come into existence as a result of analogy with much older and more established relation nouns in *-be*/*-åbpoe*.

In spite, and because, of the undeniable difficulties in analyzing and generalizing on the data discussed in this study, the so-called relation forms in South Saami are a noteworthy morphological category that seems

to lack any obvious parallels in the best-known present-day languages of Europe – Lule Saami, with its marginal forms such as *iednep* [mother.*p*], *áhtjep* [father.*p*], *niejdap* [daughter.*p*], *boadnjep* [husband.*p*], *oappáp* [sister.*p*] and *vieljap* [brother.*p*], being the only exception among the most vigorous Saami languages (Section 4.1).

The present study has labeled the category in question as "relation forms" mainly in order to make use of Bergsland's (1982/1994) Norwegian term *forholdsformer*, but it may be added that characterizations such as these are actually quite suitable for the present purpose. The ad hoc label *relation form* is undeniably vague and rather unique – we are dealing with a morphological category whose true nature still remains somewhat elusive and is indeed rather unique among the languages of the Uralic language family as well among other languages spoken in Europe. However, despite the irrefutable heterogeneity of these forms and their functions in particular, most of them do fit the implications of the label *relation form* in many ways.[18] It is not unimaginable that a better understanding and awareness of the Saami forms and their Tungusic analogues may help us to identify and describe comparable phenomena in other parts of the world, as well as lead us to a better understanding of analogous phenomena in Indo-European languages with which Uralic **-mpV* was compared already in the 19th century.

As the main yet secondary contribution of this primarily synchronic study to general comparative-historical Uralistics, it can be concluded that the present-day functions of the South Saami relation forms in *-be*/*-åbpoe* probably do not go back to the Saami-Finnic marker of the comparative degree of adjectives. Instead, they can be regarded as direct descendants of the original contrastive, or oppositive, functions of Proto-Uralic **-mpV*, although this is definitely not the sole answer to the riddle of **-mpV*. The heretofore almost unknown relation forms in South Saami thus offer an interesting combination of typologically uncommon innovations in the vicinity of marking of possession and definiteness and, at the same time, a new key to a better understanding of the origins and development of Uralic comparatives. It is to be hoped that the observations presented here will be of interest and inspiration to synchronic, diachronic and typological linguistics alike.

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Notes

1 For some reason, Bergsland (1982: 107; 1994: 110) and Magga and Magga (2012: 50) present (1) with the substandard, dialectal spelling ‹daktarabpoe› instead of ‹daktaråbpoe›, in which the form is reproduced here. The ultimate origin of this example seems to be (i), from a story recorded from Lars Nilsen Axmann (born in Mïhte/Mittådalen in 1910) in 1941 and reproduced in 1987 with the expected spelling ‹daktaråbpoe›:

(i)

Ja	*dâktarâppa*	*bât*	*dârjajij*	*guh*	*ahčəbˌə*	*jehtəjij.*
Jaa	*daktaråbpoe*	*badth*	*darjoeji*	*goh*	*aehtjebe*	*jeehti.*
well	daughter.*åbpoe*	DPT	do.PST.3SG	as	father.*be*	say.PST.3SG

'Well, the daughter$_i$ did as her$_i$ father$_j$ said.' (Bergsland 1943: 300; 1987: 82)

For illustrative and pedagogical purposes, I refer to Bergsland's (1982: 107; 1994: 110) and Magga and Magga's (2012: 50) ‹daktarabpoe› as ‹daktaråbpoe› in this paper. Further, the huge variation of earlier scholarly transcriptions has been reduced to a minimum by converting all data to the present-day South Saami orthography (and Example 54 to the Lule Saami orthography), or by using versions already modernized by others. Some of the dialectal or substandard word forms are presented in a standardized form and occasional misprints have been corrected. The core topic of the present study, the "relation forms" in *-be*/*-åbpoe* and *-mes*/*-ommes* are glossed as *be*, *åbpoe*, *mes* and *ommes* throughout the paper.

2 I wish to make clear that I have chosen to speak of "the Saami-Finnic comparative in **-mpV*" instead of "the Uralic (or Finno-Ugric) comparative in **-mpA*", for example. Although the morpheme in itself can be traced back to the earliest predecessors of Saami and Finnic and can thus be characterized as Uralic, I do not wish to proclaim that the morpheme was used as a comparative marker in Proto-Uralic. The element is often represented as **-mpA*, but I have chosen to use a less definite notation **-mpV* (see Korhonen 1981: 246–247; Janhunen 2018: 50).

3 I wish to express my thanks to many colleagues, especially José Andrés Alonso de la Fuente, Rogier Blokland, Kaisa Häkkinen, Maja Lisa Kappfjell, Olle Kejonen and Martin Joachim Kümmel, as well as the two reviewers for their valuable help and comments on earlier versions of this paper.

4 The contents of Section 2 is mostly adapted from a forthcoming grammar sketch of South Saami (Ylikoski, forthcoming).

5 Even a brief glance at the occurrence of *akte* and *dïhte* in a corpus shows that their frequencies are significantly higher than those of their counterparts in other Saami languages. In the SIKOR corpus by UiT The Arctic University of Norway, the lemmas *akte* and *dïhte* constitute 0.8% and 2.2% of the 1.1M word forms in the South Saami corpus, whereas North Saami *okta* and *dat* make up only 0.16% and 1.4% of the 28.4M word corpus. Note, however, that South Saami *dïhte* also functions as a third person singular personal pronoun to a much greater extent than North Saami *dat*.

6 For the development of the coordinating conjunction *jïh*/*jih* into an infinitive marker, see Ylikoski (2017).

7 The noun *maake* may refer to a number of types of male relatives, including the husband of an aunt who is older than the speaker.

8 Given the overarching syncretism between the comitative singular (*tjidtjiebinie* [mother.*be*.COM] and *aehtjiebinie* [father.*be*.COM] in 7), the inessive plural and the essive in South Saami, it is possible to present the essive form *tjidtjiebinie* in Table 2. For semantic and pragmatic reasons, the South Saami inessive case is very rarely used for nouns with human referents.

9 It may be noted that even though relation forms are quite common in coordinated phrases like the ones seen in (23–24), the element *-be/-åbpoe* in itself is not a substitute for the coordinating conjunction *jïh* 'and'. Instead, it is more common to say *aehtjieh tjidtjieh* [father.PL mother.PL] 'father and mother' than *aehtjebh tjidtjebh* as seen in (24).

10 It must be admitted that the examples of superlative-like *-mes/-ommes* forms available for verifying the above generalization based on *-be/-åbpoe* forms are less authentic.

11 The ability to form diminutives could be used as a justification for regarding comparatives as derivations rather than as inflectional forms (cf. Section 2).

12 The relation forms in Grundström's (1946–1954) dictionary would merit a more detailed study. As kindly pointed out by Olle Kejonen (p.c.), some of Grundström's examples suggest that in Lule Saami, too, relation forms appear to be – or to have been – to a certain extent interchangable with possessive suffixes (see, e.g., the examples s.v. *āhtjēp* and *sibjukabbō*). It is also of interest to note that according to Grundström (s.v. *parˈnēp*), *bárnep* has two different meanings: in addition to the meaning 'the/his/her son' (*sonen (sin son)*), the other meaning is that of a comparatively sleek bachelor or a widower who is presumably intending to get married again (*(vid jämförelse mellan ogifta män:) äldre och därigenom förmer; även: finare klädd; kan jämväl sägas om änkling, som börjat gå finare klädd, så att man kan misstänka att han går i giftastankar*).

13 Even according to Lagercrantz (1939 § 4031), *muahra* denotes 'mother's younger sister', whereas the word for 'mother's older sister' is actually *gåeskie* (1939 § 2674).

14 As kindly pointed out by Martin Joachim Kümmel (p.c.), Sanskrit also makes use of the superlative कतम = *katamá-* 'which (of many)', being thus comparable with North Saami *guhtemuš* id. mentioned above.

15 I thank my reviewer for clarifying that the phenomenon labeled "elliptic or potential plural" by Benzing is nowadays better understood as an alienable possession marker and does not need to be discussed here.

16 See also Ostrowski (2013, 2018) for an analogous development of an earlier focus marker to the Lithuanian comparative marker *-jau(s)*.

17 I wish to thank Rogier Blokland for making me aware of the Janus construction in Turkish.

18 The term *relation form* is certainly not very informative or transparent *per se*, but the same goes for many etymologically unexpected linguistic labels such as *accusative* and *infinitive*.

Abbreviations

ABL	ablative
ACC	accusative
ADVPASS	adversative passive
CMPV	comparative
CNG	connegative
COM	comitative
COMP	complementizer
CVB	converb
DAT	dative
DEF	definite
DIM	diminutive
DIR	directional
DIRLOC	directive-locative
DPT	discourse particle
DU	dual
ELA	elative
ESS	essive
F	feminine
GEN	genitive
GENACC	genitive-accusative
ILL	illative
IMP	imperative
INCH	inchoative
INDF	indefinite
INE	inessive
INF	infinitive
LOC	locative
LOG	logophoric
M	masculine
MODER	moderative
MOM	momentaneous
N	neuter
NEG	negative
PL	plural
PROG	progressive
PRS	present
PST	past
PTCP	participle
PTV	partitive
Q	question
REFL	reflexive
REL	relative
SG	singular
SUP	supine
TRANSLOC	translocative

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Altlettgallische Lehnwörter in den mordwinischen Sprachen?

Grünthal (2012) has counted 36 Baltic loanwords in Mordvin and divided them into two chronological layers according to their vowel substitutions. These borrowings have usually been connected to extinct Baltic dialects of the Dnepr and Oka basins, distinct from East Baltic. This article suggests some phonological and morphological evidence of an Old Latgalian origin for some Mordvin lexical items. They include (1) analogical *a*-present in OLtg **red'a* ~ **redźa* 'to see' → PMord. **rät'a*- 'to notice'; (2) OLtg *dź*- → PMord. *ś*- in **śiŕä* 'good', ?**śivä* 'wage' and ?**śimeni* 'relative, friend'; (3) OLtg. -*dź*- → PMord. -*t'*- in **rät'a*-; (4) OLtg. -*s*- / -*z*- → PMord. -*s*- in **pusma* 'bunch, bundle' and **riśmä* 'chain, rope'; (5) EBalt. *ei* ~ PMord. *eji* in **pejili* 'knife' vs. EBalt. *ie* ~ PMord. *e*, *i* in **leppä* 'alder' and **likä* 'another, else'. The article also presents new loan etymologies for PMord. **śiŕä* 'good' and ?**śivä* 'wage'.

1. Frühere Auffassungen von der Ursprungssprache der Lehnwörter
2. Die Hydronyme baltischer Herkunft und das Altlettgallische
3. Zwei Lehnwortschichten
4. Die Vertretung von urbalt. *g* (> lett. *dz*) vor Vordervokal
5. Die Vertretung des sekundären *a*-Präsens des Lettischen
6. Die Vertretung der Sibilanten lit. *š*, *ž* ~ lett. *s*, *z*
7. Die Vertretung der ostbaltischen Diphthonge *ei* und *ie*
8. Neue Lehnetymologien
9. Schlussfolgerungen

Mein Beitrag behandelt die Frage der Ursprungssprache der neueren baltischen Lehnwortschicht in den mordwinischen Sprachen (Ersa und Mokscha) und schlägt eine mögliche Antwort vor. Die chronologische Schichtung der baltischen Lehnwörter im Mordwinischen wurde kürzlich von Riho Grünthal (2012) aufgezeigt, der die Lehnwörter anhand lautlicher Kriterien in zwei Gruppen unterschiedlichen Alters aufgliedert, in die vormordwinischen und die urmordwinischen Entlehnungen aus dem Baltischen. In meinem Beitrag richte ich die Aufmerksamkeit auf einige in den Wörtern der jüngeren Lehnwortschicht begegnende, von Grünthal nicht behandelte Lautbeziehungen, die sich möglicherweise als Ergebnis-

se relativ später ostbaltischer Lautentwicklungen erklären lassen. Zudem habe ich im Wortschatz der mordwinischen und baltischen Sprachen nach möglichen Parallelen zu diesen Lautbeziehungen gesucht und schlage auf ihrer Grundlage einige neue baltische Lehnetymologien in den mordwinischen Sprachen vor.

1. Frühere Auffassungen von der Ursprungssprache der Lehnwörter

Baltische Lehnwörter im Wortschatz der mordwinischen Sprachen fand bereits Tomaschek (1883: 704–6, 1889: 11–13). Thomsen (1890: 153–5) untersuchte ihr Verhältnis zu den alten Wörtern baltischen Ursprungs im Ostseefinnischen. Er war der Ansicht, dass aus den baltischen Sprachen 16 Wörter ins Mordwinische entlehnt wurden, von denen 12 auch ins Urfinnische übernommen worden seien. Daraus schloss Thomsen, dass der Wortschatz baltischer Herkunft wahrscheinlich aus dem Urfinnischen, das eine mehr als zehnfache Menge baltischer Lehnwörter übernommen hatte, ins Mordwinische gelangt war, vielleicht über die später ausgestorbenen Sprachen Merjanisch und Muromisch. Andererseits hielt Thomsen als Erklärung für Entlehnungen ohne ostseefinnische Entsprechungen auch eine separate baltisch-mordwinische Kontaktkette für möglich.

Zu Thomsens Zeit war der mordwinische Wortschatz unzulänglich bekannt, und die spärliche Forschung konzentrierte sich darauf, seine Verbindungen zu bekannteren verwandten Sprachen, vor allem zum Finnischen zu suchen. Das heutige Bild von den ostseefinnischen Verbindungen der baltischen Entlehnungen im Mordwinischen ist grundlegend anders, da einige der baltischen Etymologien Thomsens widerlegt und neue vor allem für Wörter vorgeschlagen wurden, die keine Entsprechung im Ostseefinnischen haben. Nun präsentiert Grünthal (2012: 310–1) sogar 36 Wörter als Entlehnungen aus den baltischen Sprachen ins Mordwinische. Höchstens neun dieser Wörter wurden Grünthal zufolge auch ins Urfinnische entlehnt, und auch für diese lässt sich nicht in jedem Fall eine gemeinsame baltische Ausgangsform rekonstruieren (op.cit. 299).

Das wichtigste außerhalb der Lehnwortforschung vorgebrachte Argument für direkte baltisch-mordwinische Kontakte stammt aus der Toponomastik. Im vergangenen Jahrhundert wurde ein großer Teil der Makrohydronyme des ostslawischen Gebiets Osteuropas als Substrat aus den baltischen oder uralischen Sprachen postuliert.

Aufgrund der Verbreitung der Hydronyme baltischer Herkunft schlug Būga (1924c: 103–4) als baltisch-mordwinisches Kontaktgebiet die Umgebung des Flusses Sož an der Ostgrenze des heutigen Weißrusslands vor. Bald darauf wies Vasmer (1932 und 1934: 81–83) Flussnamen baltischer Herkunft auch weiter östlich nach und lokalisierte auf dieser Grundlage die Kontakte bis in das Moskauer Gebiet. Er vertrat die Auffassung, dass die baltischen Entlehnungen sowohl im Ostseefinnischen als auch im Mordwinischen von dem baltischen Stamm der östlichen Galinder oder Goljad (russ. *голядь*) stammten, den die mittelalterlichen Chroniken in die Nähe des heutigen Moskau platzieren.

Kalima (1936: 192) hielt die galindische Herkunft im Fall des Mordwinischen für möglich, lehnte sie aber für die baltischen Lehnwörter im Ostseefinnischen aus geografischen und chronologischen Gründen ab. Direkte baltisch-mordwinische Kontakte postulierten auch Toporov und Trubačev (1962: 247–8), die Hydronyme baltischer Herkunft umfassend inventarisiert hatten, und nach ihnen die wichtigsten Sprachwissenschaftler, die die baltisch-mordwinischen Kontakte untersucht haben (Vaba 1983, Wälchli 1997, Pareren 2006, Grünthal 2012).

2. Die Hydronyme baltischer Herkunft und das Altlettgallische

Nach heutiger Auffassung begegnen Gewässernamen baltischer Herkunft im gesamten Gebiet Weißrusslands, in Russland innerhalb der Linie Pskow–Twer–Moskau–Kursk sowie an der Nordgrenze der Ukraine. Lekomceva (1980: 53) zufolge beträgt ihre Gesamtzahl bis zu 2 000. Die Gewässernamen, die unmittelbar östlich und nördlich des Gebiets der Hydronyme baltischer Herkunft begegnen und älter als die Slawisierung sind, werden auf die uralischen Sprachen zurückgeführt. Unsere Kenntnisse über die östlich des Baltikums gesprochenen baltischen Sprachformen beruhen ausschließlich auf diesen Hydronymen und auf anderem Substrat, das sie hauptsächlich im Weißrussischen und in russischen Dialekten hinterlassen haben. Schriftdenkmäler dieser Sprachformen gibt es nicht.

Lekomceva (1980, 1981) hat versucht, die Phonologie des Galindischen oder weiter gefasst des „Dnepr–Düna-Baltischen" einerseits auf der Basis des Namenguts des Moskauer Gebiets – neben Hydronymen auch auf das Baltische zurückgeführte Familiennamen – und andererseits anhand des Lautbestands des in dieser Region gesprochenen russischen Dialekts zu rekonstruieren. Die Schwäche der Rekonstruktion ist jedoch die unkritische

Methode: mehrere Namensetymologien sind völlig zufällig, und Lekomceva geht davon aus, dass der Lautbestand des heutigen Dialekts im Gebiet Moskau eine direkte Kopie aus der ein Jahrtausend zuvor gesprochenen baltischen Sprache sei.

Glaubhafte Schlüsse über unbekannte Substratsprachen aufgrund der Phonetik, Morphologie und des Namensgutes bekannter Sprachen sind ohne Lehnwortevidenz schwer zu ziehen (Saarikivi 2000). Eine unabdingbare Voraussetzung wäre eine kritische etymologische Analyse, die sich auf die Namensgebungsmuster in den bekannten verwandten Sprachen der mutmaßlichen Substratsprache stützt und für jeden postulierten Substratnamen klärt, ob die ursprüngliche Benennungsmotivation des Ortes in ein solches bekanntes Namensgebungsmuster passt (Saarikivi 2006: 100).

Zu den Substratnamen in Osteuropa, für die eine baltische Herkunft vermutet wird, liegt noch keine ausreichend kritische etymologische Analyse vor. Sicherlich stammt ein großer Teil von ihnen aus *irgendeiner* als baltisch zu bezeichnenden Sprachform, doch Lekomceva (1980, 1981) und Dini (1997: 39–40) begeben sich auf äußerst schwankenden Boden, indem sie auf deren Basis das „Dnepr(–Düna)-Baltische" als separaten Sprachzweig neben dem Ost- und Westbaltischen konstruieren. Besser begründet ist der Gedanke, dass das Urbaltoslawische sich in drei Zweige teilte, Ostbaltisch, Westbaltisch und Slawisch, die ungefähr gleich weit voneinander entfernt sind (Mažiulis 1964, Matasović 2005, Kortlandt 2008).

In der Diskussion über die erloschenen baltischen Dialekte wurde die Möglichkeit praktisch nicht in Betracht gezogen, dass sie zum selben ostbaltischen Zweig gehört haben könnten wie die heutigen baltischen Sprachen Litauisch, Schemaitisch, Lettisch und Lettgallisch. Noch im Spätmittelalter haben sich die heutigen ostbaltischen Sprachen jedoch von Osten nach Westen verbreitet. Man weiß, dass der Stamm der Lettgallen bis zur Zeit der Kreuzzüge im heutigen Lettgallen siedelte, während in den westlicheren Teilen Lettlands die ostseefinnischen Liven, die im Allgemeinen als westbaltisch angesehenen Kuren sowie die als ostbaltisch geltenden Selonen und Semgallen ansässig waren. Nach der Zeit der Kreuzzüge verringerte sich die Bedeutung dieser westlichen Stämme, bis von ihrer Sprache nur ein Substrat in den lettischen Dialekten zurückblieb, die auf der Grundlage des sich von Osten verbreitenden Altlettgallischen entstanden waren. Im westlichen Teil Litauens entstand der schemaitische Dialekt (die schemaitische Sprache) entsprechend, als sich das Ostbaltische in dem früher westbaltischen Gebiet verbreitete (Zinkevičius 1996: 28; Forssman 2001: 20).

Das Lettgallische wird in der wissenschaftlichen Literatur häufig als Hochlettisch (*augšzemnieku dialekts*) bezeichnet und zählt zu den Hauptdialekten des Lettischen. Es ist jedoch begründet, es als eigene Sprache anzusehen, die sich spätestens in den Jahrhunderten nach der Reformation von der lettischen Sprache abtrennte, nachdem sie unter starken Einfluss des Polnischen und Weißrussischen geraten war, während gleichzeitig das Lettische ebenso stark vom Hochdeutschen beeinflusst wurde. Die gemeinsame Vorform dieser Sprachen wird häufig als Vorlettisch bezeichnet, vor allem in Bezug auf die Epoche zwischen der slawischen Expansion und den Kreuzzügen. Ich habe mich hier jedoch für die Bezeichnung Altlettgallisch entschieden, denn gerade die Sprache des Stammes der Lettgallen ist die Basis aller Dialekte des heutigen Lettischen.

Die Hypothese von Kontakten zwischen dem Altlettgallischen und dem Urmordwinischen ist geografisch nicht erwartungsgemäß, denn die historischen Verbreitungsgebiete des Lettgallischen und der mordwinischen Sprachen sind weit voneinander entfernt. Von Zilupe an der Ostgrenze Lettlands zum Schokscha am westlichen Rand des mordwinischen Gebiets sind es etwa 920 Kilometer in der Luftlinie. Für lettgallisch-mordwinische Kontakte lassen sich jedoch Argumente anführen, die sich sowohl auf die Formmerkmale der bereits bekannten baltischen Lehnwörter im Mordwinischen als auch auf neue Lehnetymologien stützen. Ich beginne mit den bekannten baltischen Lehnwörtern, die Remco van Pareren (2006) und Grünthal (2012) erwähnen.

3. Zwei Lehnwortschichten

Grünthal (2012) listet insgesamt 36 sichere und mögliche baltische Entlehnungen auf, von denen neun seine eigenen Etymologien sind. 12 Lehnwörter ordnet er (S. 311) der älteren, von ihm als vormordwinisch bezeichneten Lehnwortschicht zu und 11 der jüngeren, urmordwinischen Schicht; 13 Entlehnungen hält er hinsichtlich der Lautchronologie für ambivalent.

Die vormordwinischen Entlehnungen haben in etwa dieselben Vokalveränderungen durchlaufen wie der uralische Erbwortschatz des Mordwinischen (vgl. Tabelle 1a), die urmordwinischen Entlehnungen wiederum stehen ihren baltischen Ausgangsformen lautlich näher (vgl. Tabelle 1b). Auf der Basis der Konsonantvertretungen zieht Grünthal weniger chronologische Schlüsse. Der erste Ausgangspunkt dieses Beitrags waren meine

Urwesturalisch > Mordwinisch			**Urbaltisch → Vormordwinisch > Mordwinisch**		
i_i: > e	**kiwi*	E *кев*, M *kev*	*ĭ_ĭ > e*	**tirdi-* **spingi-*	E *мерде-*, M *t′eŕd′ə-* E *пенге*, M *pengä*
i_ä > e_ə	**ćilmä*	E *сельме*, M *śeľmä*	*ĭ_ă, ĭ_ĕ > e_ə*	Keine Fälle	
e_i > e	**keti*	E *кедь*, M *ked′*	*ĕ_ĭ > e*	? **peili(ja)-* ? **kreiša-*	E *неель*, M *pejeľ* E *керч*, M *kerd′ži*
e_ä > i_ə	**enä*	E *ине*, M *ińä*	*ĕ_ă, ĕ_ ĕ > i_ə*	**kerdā* **leika-* **perkuna-*	E *кирда*, M *kərda* E *лия*, M *l′ijä* E *пиргине*, M *pərgəńä*
ä_i > ä	**käti*	E *кедь*, M *käď*	Kein **ä* im Urbaltischen		
ä_ä > ä_ə	**kämä*	E *кеме*, M *kämä*			

Tabelle 1a: Die Vertretung der Vordervokale im uralischen Erbwortschatz der mordwinischen Sprachen und in den baltischen Lehnwörtern des Vormordwinischen

Baltisch → Mordwinisch		
ĭ_ĭ > i	**giminē*	E *сыменьь*, M *śimәń*
ĭ_ă, ĭ_ĕ > i_ə	**rišma-* **šikšnā*	*i*: E *рисьме*, M *riśmä* *i > o*: E *кшна*, M *šna*
ĕ_ĭ > e	? **peili-* ? **kreiša-*	*e*: E *неель*, M *pejeľ* *e*: E *керч*, M *kerd′ži*
ĕ_ă, ĕ_ĕ > ä_ə	**regja-*	ä: E *редя-*, M *ŕäd′a-*

Tabelle 1b: Die Vertretung der Vordervokale in den baltischen Lehnwörtern des Urmordwinischen

eigenen Beobachtungen über die Vertretung des urbaltischen *g* in den Entlehnungen.

In drei von Grünthal erwähnten Lehnwörtern ist das einem Vordervokal vorangehende urbalt. *g* vertreten, in jedem anders. Dies erinnert an das Verhältnis lit. *g* ~ lett. latg. *dz* in entsprechender Position:

1. urmordw. *-k-*: E *пенге*[1], M *peŋgä* ‘Holzscheit, Brennholz’ < urmordw. **peŋkə* ← urbalt. **spingi-* > lit *spingis* ~ *spingys* ‘Durchhau, (Wald)schneise’

2. urmordw. *-ťʹ-*: E *редямс*, M *ŕäďams* ‘bemerken, gewahr werden’ < urmordw. **räťa-* ← urbalt. **regi-* > lit *regėti* : *regi-*, lett *redzēt* : *redza-* ‘sehen’
3. urmordw. *ś-*: E *сымень*, M *śimәń* ‘Stamm, Geschlecht; Wurzel; Zuchttier’ < urmordw. **śimeni* ← urbalt. **giminē* > lit *giminė* ‘Verwandtschaft, Familie, Geschlecht, Stamm’

Das Korpus ist viel zu klein, um haltbare Schlüsse zu ziehen, aber es ist möglich, eine Hypothese über die chronologische Verteilung der Vertretungen aufzustellen. In dem Wort **peŋkə* entspricht dem urbaltischen *i* in erster Silbe urmordw. *e*, in dem Wort **śimeni* urmordw. *i*. Diesen Unterschied erklärt Grünthal (S. 311) als chronologisch: Die *e*-Vertretung ist dieselbe wie im uralischen Erbwortschatz des Mordwinischen infolge der bereits von Erkki Itkonen (1946) definierten Lautveränderung *i* > *e* in der ersten Silbe, sodass **peŋkə* eine vormordwinische Entlehnung ist, **śimeni* eine urmordwinische (vgl. Tabelle 1). Auf dieser Grundlage lässt sich annehmen, dass die Vertretung *k* für das vor einem Vordervokal stehende urbaltische *g* vormordwinisch und die Vertretung *ś* urmordwinisch ist.

Die Datierung der dritten, der *tʹ*-Vertretung erfordert zusätzliche Kenntnisse der Vokalgeschichte des Mordwinischen. Phonologisch betrachtet könnte das *ä* im urmordw. Stamm **räťa-* ein Nachfolger des vormordwinischen *ä* sein, wenn das urbalt. *e* bei der Entlehnung damit substituiert wurde. Den zwei Vordervokalen des Urbaltischen, *i* und *e*, standen im Vormordwinischen drei, *i*, *e* und *ä*, gegenüber, sodass die Substitution urbalt. *e* → vormordw. *ä* vom Lautsystem her im Prinzip möglich ist.

Die Nachfolger des vormordw. *ä* vertreten in den anderen baltischen Lehnwörtern im Mordwinischen jedoch nicht das urbalt. *e*. In den Lehnwörtern der vormordwinischen Schicht wird der urmordwinische Wandel *e* > *i* (> *ə*) /_*ä* sichtbar: E *кирда*, M *kərda* ‘Sitte, Brauch, Lebensart, Verfahrensweise; Fest, Feier’ ← urbalt. **kerdā*; E *лия*, M *ľijä* ‘der andere, ein anderer’ ← urbalt. **leika-*; E *пургине ~ пиргине*, M *puŕgəńä ~ pərgəńä*[2] ‘Donner’ ← urbalt. **perkuna-* (Grünthal 2012). Da urbalt. *e* auch in nichtpalataler Umgebung durch vormordw. *e* substituiert wurde, fällt es schwer, zu glauben, dass es in palataler Umgebung durch vormordw. *ä* substituiert worden wäre. Daher dürfte **räťa-* eine jüngere, urmordwinische Entlehnung sein, wie auch Grünthal (S. 311) vorschlägt.

4. Die Vertretung von urbalt. *g* (> lett. *dz*) vor Vordervokal

Wälchli (1997: 319–20) schlägt für die *t′*-Vertretung zwei mögliche Erklärungen vor: „Die augenfälligste lautliche Differenz balt. *-g-* zu mordw. *-d′-* lässt sich erklären, kennt doch das Mordwinische in intervokalischer Position praktisch kein *-g-*, da fiu. *-kk-* > mordw. *-k-* (selten), fiu. *-k-* jedoch nur vor Konsonant > *-g-*, sonst je nach palataler oder velarer Umgebung zu *-j-* oder *-v-* wurde. Eine andere, von Jorma Koivulehto (briefl. Mitteilung) bevorzugte Erklärungsmöglichkeit ist die phonetische Nähe von balt. palatalem *-ģ-* (> lett. *-dz-)* und mordw. palatalem *-d′-*."

Wälchlis erste Erklärung setzt voraus, dass der Stamm erst nach dem urmordwinischen Wandel *k* > *v* ~ *j*/V_V und *t′* > *d′*/V_V in der Form **räd′a-* entlehnt wurde. Grünthal (S. 328) ist jedoch der Ansicht, dass diese Konsonantveränderungen sehr spät, erst nach dem Ende der baltischen Kontakte des Mordwinischen eingetreten sind. Grünthal befürwortet Koivulehtos Erklärung mit einer leichten Veränderung: Das *g* der baltischen Ursprungssprache wurde in palataler Umgebung durch urmordw. *t′* substituiert. Als Parallelen erwähnt er die uralten indogermanischen Lehnwörter der uralischen Ursprache, in denen die palatalen Klusile des Urindogermanischen durch die ururalischen Laute *ć*, *ś* oder *j* substituiert wurden, sowie die lettischen Lehnwörter im Estnischen, bei denen den lettischen Klusilen *ķ-* und *ģ* das (prä)palatalisierte *t* entspricht.

Es ist jedoch zu beachten, dass zum urindogermanischen ebenso wie zum lettischen Lautsystem sowohl die palatalen als auch die velaren Klusile als Phoneme gehören, deren Auftreten nicht durch die Qualität des folgenden Vokals eingeschränkt wird. Im Urbaltischen gab es keine palatalen Konsonantphoneme, sondern der Grad der Palatalität von *k* und *g* hing von dem ihnen folgenden Vokal ab, vermutlich in sehr ähnlicher Weise wie beim urmordwinischen *k*. Urmordwinisch *t′* und *d′* wiederum waren junge, erst durch die für das Mordwinische typische Palatalisierung entstandene Laute, die sich vor Hintervokal in Lehnwörtern aus solchen Sprachen verbreiteten, in denen es ihnen entsprechende Laute gab. Daher besteht Grund zu der Annahme, dass die Ausgangsform des urmordw. Verbs **rät′a* nicht mehr das urbaltische *-g-* enthielt, sondern ein von diesem bereits deutlich abweichendes Phonem, wahrscheinlich entweder *d′* oder *dź*, denn palatale Klusile neigen dazu, sich zu Affrikaten zu entwickeln.

Aufgrund des oben Dargelegten scheint nur die Vertretung *-k-* für das urbalt. *g* vormordwinisch zu sein, die Vertretungen *-t′-* und *ś* dage-

gen urmordwinisch. Der wahrscheinlichste Grund für den Unterschied zwischen der alten und den neuen Vertretungen ist der Lautwandel in der lehngebenden Sprache: Die Vertretung *k* geht noch auf das velare urbalt. *g* zurück (< idg. *g*, *g*^{w}, *g*^{h}, *g*^{wh}), die Vertretungen *ś* und *t´* dagegen auf den bereits palatalisierten Klusil *d´* oder eher auf die daraus entstandene Affrikate *dź*. Für die Affrikate der Ursprungssprache spricht die wortanlautende Vertretung *ś*. Die Vertretung *-t´-* (pro **ć*) im Wortinneren wiederum zeigt, dass zumindest **rät´a-* nach dem Wandel *ć* > *ś* im Vormordwinischen, aber vor dem späteren Wandel *ćć* > *ć* entlehnt wurde: In der Zielsprache gab es zum Zeitpunkt der Entlehnung also keine kurze Affrikate *ć*, mit der das *dź* der Ursprungssprache hätte substituiert werden können (vgl. Keresztes 2011: 48).

Die lautliche Entwicklung *g* > *d´* > *dź* vor Vordervokal ist an sich keineswegs ungewöhnlich, denn in palataler Stellung sind die Velarklusile anfällig für Affrikatisierung, aber beispielsweise in den östlichen Hydronymen baltischer Herkunft wurden keine Anzeichen für eine Affrikationsentwicklung gefunden – es wurde allerdings auch nicht danach gesucht. Von den baltoslawischen Sprachen ist nur im Lettischen und der ihm historisch-geografisch nächsten verwandten Sprachform, dem Lettgallischen, das urbaltoslawische *g* vor Vordervokal zu *dz* geworden (*g* > *d´* > *dź* > *dz*). Dieselbe Entwicklung ist im Licht des Substratwortschatzes und -namenguts auch für die ausgestorbene kurische Sprache zu rekonstruieren.

Auch im Urslawischen sind die Velarklusile in derselben Stellung zu Sibilanten geworden (die sog. erste Palatalisierung), aber in den slawischen Sprachen wird das *g* durch den unmouillierten Zischsibilanten *ž* vertreten, der in den russischen Lehnwörtern des Mordwinischen meist durch die Zischsibilanten *š* und *ž* substituiert wurde (zu möglichen *ś* und *ź* -Substitutionen s. unten). Keines der beiden hier behandelten baltischen Wörter hat slawische Entsprechungen, so dass man für die mordwinischen Wörter **śimeni* und **rät´a-* auf dieser Grundlage keine russischen Ausgangsformen rekonstruieren kann. Daher stelle ich hier die Hypothese auf, dass mindestens ein Teil der späteren, urmordwinischen Schicht der baltischen Lehnwörter aus der gemeinsamen Vorsprachform des Lettischen und Lettgallischen, dem Altlettgallischen stammt.

5. Die Vertretung des sekundären *a*-Präsens des Lettischen

Der bereits erwähnte Verbstamm **räťa* ist aus der Sicht des Präsensstamms **regi-*, der aufgrund des Litauischen für das Urbaltische zu rekonstruieren ist, nicht erwartungsgemäß. Man würde erwarten, dass das baltische *i*-Präsenszeichen im Mordwinischen mit dem verbreiteten Verbstammtyp E *-e-* ~ M *-ə-* < urmordw. *-ə-* (< vormordw. *-i-*) substituiert worden wäre und nicht mit dem sowohl selteneren als auch phonologisch weiter entfernten *-a*-Stammtyp. Dasselbe gilt für die Infinitivform urbalt. **regētei* > lit. *regėti* und den Präteritumstamm **regējā-*, die im Prinzip ebenfalls als Ausgangsform der Entlehnung in Frage kämen. Hinter den mordwinischen Formen steht offensichtlich das baltische *a*-Präsens, das in den meisten lettischen und lettgallischen Dialekten sowie in einigen Dialekten des Litauischen das *i*-Präsens analog ersetzt hat (Endzelin 1922: 609–16; Forssman 2001: 200).

Urbalt. *e* hat sich im Lettischen in die Phoneme *e* und *ä* geteilt (bei Enzelin *e* und *ę*, vgl. Forssman 2001: 48), die in der Schriftsprache beide mit *e* markiert werden. Das Urbaltische *e* dürfte dem *ä* näher gewesen sein als dem *e*, wurde aber während der Sonderentwicklung des Lettischen in palataler Umgebung zu *e* (Rudzīte 1993: 213–216; Forssman 2001: 74). Im Lettischen gibt es also ebenso viele Vordervokale wie im Urmordwinischen. Daher scheint das urmordwinische *ä* in dem Verb **räťa-* das Vokalphonem *ä* (*ę*) des heutigen Lettischen in der Präsensflexion des Verbs *redzēt* widerzuspiegeln: Die mit Abstand häufigste ist die Form der dritten Person *rädz* (Holst 2001: 151; die anderen Formen sind Sg1 *rädzu*, Sg2 *redzi*, Pl1 *rädzam* und Pl2 *rädzat*). Eine solche Deutung wäre jedoch anachronistisch, denn die Teilung des urbalt. *e* geschah erst zu einer Zeit, als lett. *dz* (< *dź* < *ģ*) seine frühere Palatalität bereits verloren hatte: Im entgegengesetzten Fall müsste das enge *e* immer in Verbindung mit *dz* auftreten (Rudzīte 1993: 290). Das alveolare *dz* würde im Mordwinischen kaum durch einen palatalen Klusil ersetzt werden.

Die Form der dritten Person Präsens des Verbs urbalt. **regētei* 'sehen' dürfte sich wie folgt weiterentwickelt haben: urbalt. **regi* > **reďi* ~ **redźi* > (anal.) **reďa* ~ **redźa* > **redza* > **rädza* > lett. *rädz*, latg. *radz*. Auf die letzte, in die Zeit der Kreuzzüge fallende Phase des Altlettgallischen, in der Lettisch und Lettgallisch sich trennten, ist vermutlich **rädz* zurückzuführen, denn dem lett. *ä* entspricht immer lettg. *a* (vgl. Cibuļš & Leikuma 2003: 12). Urmordw. **räťa-* ist aus dem früheren Stadium **reďa* ~ **redźa*

entlehnt, das deutlich vor der Zeit der Kreuzzüge liegt, da dort sowohl der Vokal der zweiten Silbe als auch die Palatalität des Konsonanten erhalten sind. Das *e* der Ursprungssprache wurde durch das *ä* des Urmordwinischen ersetzt, weil es von den beiden Vordervokalen des Urbaltischen der offenere war.

6. Die Vertretung der Sibilanten lit. *š, ž* ~ lett. *s, z*

Grünthal (S. 526) schlägt das Wort E *пусмо*, M *pusma* 'букет; клок / Strauß, Bündel, Ballen' < urmordw. **pusma* als Entlehnung aus der baltischen Ausgangsform **bužma-* ~ **buzma-*, das im Litauischen durch *bužmas* 'Falte, Krause; Beule' repräsentiert ist. Der Vokalismus der ersten Silbe und die semantische Nähe der Wörter zeigen, dass es sich um eine junge Entlehnung handelt, wie Grünthal feststellt. Das nicht erwartungsgemäße *s* des Mordwinischen (pro ***š*) kann man jedoch nicht, wie Grünthal es tut, erklären, indem man für das Urbaltische die Form **buzma-* postuliert, aus der lit. *bužmas* durch einen sporadischen Wandel *z* > *ž* hätte entstehen können. Im Urbaltischen gab es das Phonem *z* noch gar nicht: Es entwickelte sich später aus urbalt. *s* vor stimmhaftem Klusil (Stang 1966: 94).

Das Wort *bužmas* wird in den etymologischen Wörterbüchern des Litauischen (LEW, SEJL, EDBIL, ALEW) nicht erwähnt. Es gehört möglicherweise infolge eines unregelmäßigen Vokalwechsels zu den *-ma*-Verbableitungen *bažmas* 'große Menge, Gedränge' und *buožmas* 'Bauchnetz, omentum', deren Grundverb lettisch *bāzt* 'stecken, stopfen' und *bāzties* 'sich drängen, sich hineindrängen, sich einmischen' repräsentieren und mit denen Fraenkel (LEW s.v. *bažmas*) weiterhin die Wörter ai. *bāhate* 'drängt, drückt', arm. *bazum* 'viel' und russ. *bazlo* 'Kehle, Schlund, Rachen' verbindet.

Im Lettischen und Lettgallischen entsprechen den litauischen Zischsibilanten *š* und *ž* die späteren *s* und *z* (Rudzīte 1993: 276–79; Forssman 2001: 48), so dass für die mordwinischen Wörter die späte baltische Ausgangsform **buzma-* (< **bužma-*) zu rekonstruieren ist. Dieses Argument grenzt die Ursprungssprachform der Lehnwörter jedoch nicht so stark ein wie die Vertretung des urbalt. **g*, denn *s* und *z* entsprechen den indogermanischen Palataliklusilen *ḱ*, *ǵ* und *ǵʰ* auch im Slawischen und Altpreußischen: Von den Nachfolgern des Urbaltoslawischen weist nur das Litauische *š* und *ž* auf. Das Wort *bužmas* hat jedoch keine direkten Entsprechungen außer-

halb des Litauischen. Dennoch ist es möglich, dass seine verschwundenen Entsprechungen außer ins Mordwinische auch ins Urfinnische entlehnt wurden.

Als urfinnische Entlehnung aus der erwähnten baltischen Wortfamilie gilt das Wort fi. *pahmas* 'Kornschälvorrichtung od. Stampftrog bei einer Mühle; ein Stroh-, bzw. Streumaß', est. *pahmas* 'Dreschkorn' (vgl. Ojansuu 1921: 29; Vaba 1996: 81). Im Estnischen gibt es auch das Wort *puhmas* 'Strauch, Gesträuch, Blumenstock', das von seiner Bedeutung her dem erwähnten Wort in den mordwinischen Sprachen nahe kommt, wegen seiner Konsonantenvertretung aber nicht dessen Entsprechung und auch keine ebenso junge Entlehnung von baltischer Seite sein kann; wenn es nicht durch einen unregelmäßigen, deskriptiven Lautwechsel mit dem Wort *pahmas* verbunden ist (was nicht wahrscheinlich sein dürfte), kann es trotz seiner eingeschränkten Verbreitung ebenfalls eine urfinnische Entlehnung aus dem Baltischen sein.

Auf dieselbe Weise lässt sich die Sibilantvertretung auch in dem schon lange als aus dem Baltischen stammend geltenden Wort E *рисьме*, M *ŕiśmä* 'Kette; Seil; Schnur, Band' < urmordw. **ŕiśmä* erklären, denn *s* im Wortinnern ist in palataler Umgebung zu *ś* geworden. Keresztes (2011: 51) unterstreicht allerdings die Widerstandsfähigkeit des *s* gegen Palatalisierung im Vergleich zu anderen Alveolarkonsonanten, doch die Suche in den Korpora des MdWb und des ERV ergibt keine Treffer für zwischenvokalische *-см-*Verbindungen vor oder nach einem Vordervokal, wenn man die jungen russischen Lehnwörter außer Betracht lässt. Die einzige Ausnahme ist *тысмадемс* 'stossen' im ERV, das als affektiv zu interpretieren ist und im MdWb ebenfalls nur Varianten mit *śm* hat (*тесьмедемс* usw.). Ansonsten tritt *-см-* nur in hintervokalischer Umgebung auf (*касмо*, *космадемс*, *насмодемс*, *насмудемс*, *нусманя*, *пусмо*, *сусмань*, *усма*), *-сьм-* wiederum nach Vordervokal, unabhängig von der Art des folgenden Vokals (*лисьма*, *лисьме*, *письмар*, *ресьмедемс*, *рисьме*, *тесьма*).

Die Ausgangsform von urmordw. **ŕiśmä* ist die baltische *-ma*-Verbableitung altlettg. **risma* ~ **risima-* ~ **risama-*, vgl. lit. *rišimas* 'Binden; Bündel; Lösung', lett. *risamais* 'Band', deren Stammverb lit. *rišti* 'binden, knoten, knüpfen, lösen' und lett. *rist* 'binden, auftrennen' vertreten (Grünthal S. 328). Anders als Grünthal annimmt, ist lit. *š* in dem Verb *rišti* nicht als Ergebnis des urbalt. *s* > *š* -Wandels (die sog. RUKI-Regel) entstanden, sondern geht auf den idg. *ḱ*-Klusil zurück (idg. **wr(e)iḱ*, EDBIL s.v. lit. *rišti*), so dass der mordwinische *s*-Sibilant nicht als Archaismus erklärt werden

kann. Das mordwinische *-śm-* kann auch nicht die *-šm*-Verbindung der Ursprungssprache vertreten, denn *-шм-* begegnet im ERV verhältnismäßig häufig in Vokalumgebungen aller Art: *башмак*, *душман*, *ишме*, *кошма*, *лашман*, *лашмо*, *лишме*, *лушмо*, *рушмо*, *ушма*, *ушмо*, *шушмо*, *яшма*.

7. Die Vertretung der ostbaltischen Diphthonge *ei* und *ie*

Der *ei*-Diphthong des Urbaltischen hat ebenfalls drei Lehnvertretungen in drei von Grünthal erwähnten mordwinischen Wörtern:

1. urmordw. *eji*: E *неель*, M *pejeĺ* 'Messer' < urmordw. **pejili* ← lit. lett. *peilis* id. < urbalt. **peilijā*
2. urmordw. *e*: E *лене*, M *ĺepä* 'Erle' < urmordw. **leppä* ← lit. lett. *liepa* 'Linde' < ostbalt. **liepā* < urbalt. **leipā*
3. urmordw. *i*: E *лия*, M *ĺijä* 'der andere, ein anderer' < urmordw. **likä* ← lit. *liekas* 'übrigbleibend, unpaar', lett. *lieks* 'angelegt, falsch; überflüssig' < ostbalt. **lieka-* < urbalt. **leika-*

Im Altpreußischen blieb urbalt. *ei* erhalten und im Slawischen entwickelte es sich zu *i*, aber in den ostbaltischen Sprachen teilte es sich infolge von Lautentwicklungen, deren Bedingungen unklar und seit langem umstritten sind, in die Diphthonge *ei* und (*ę̄* >) *ie* geteilt (Stang 1966: 52–68). Am sichersten auf den *ei*-Diphthong des Urbaltischen zurückzuführen ist die urmordw. *eji*-Vertretung in dem Wort **pejili*. Es ist unmöglich, das Alter der Entlehnung aufgrund der Vokalvertretung zu erschließen, denn das vormordw. *e* der ersten Silbe blieb vor *i* in der zweiten Silbe erhalten. E *неель*, M *pejeĺ* zeigt jedoch, dass das Urmordwinische, in dem es keine Diphthonge gab, den baltischen auf *i* endenden Diphthong in zwei separaten Silben substituierte. Wenn urbaltisch **leipā* und **leika-* in das Urmordwinische entlehnt worden wären, müssten also auch sie Spuren der *eji*-Sequenz aufweisen.

Es ist möglich, dass sowohl die *i*- als auch die *e*-Vertretung auf den ostbaltischen *ie*-Diphthong oder den ihm vorangehenden Vokal *ę̄* zurückgeht. Dann könnte man ihren Unterschied als chronologisch betrachten, aber aufgrund der bisherigen Erkenntnisse lässt sich nicht sagen, welche die ältere ist, ob also ostbaltisch *ę̄* oder *ie* als *e* substituiert wurde, das sich im älteren Lehnwort vor *ä* in zweiter Silbe zu *i* verengte, oder ob es als *i*

substituiert wurde, das sich im älteren Lehnwort vor *ä* in zweiter Silbe reduzierte und so zu *e* wurde (vgl. Itkonen 1946: 301, 306). Wahrscheinlich ist die *i*-Vertretung älter, denn urmordw. **likä* wurde unbedingt vor dem Schwund der Einzelklusile im Wortinneren übernommen, während urmordw. **leppä* auch danach übernommen sein kann, im Prinzip auch nach der Verkürzung der Geminata in der Form **lepä*.

Wesentlich ist jedoch, dass nichts dagegenspricht, alle drei Wörter gerade als ostbaltische Entlehnungen anzusehen, denn der Diphthong *ei* ist im gesamten Ostbaltischen in dem Wort *peilis* erhalten geblieben. Die Diphthongvertretung gibt jedoch keine genauere Auskunft über die Ursprungssprachform innerhalb des Ostbaltischen.

8. Neue Lehnetymologien

Für die Vertretung mordw. *ś-* ← urbalt. *g-* ~ lett. *dz-* in dem Wort E *сыменьь*, M *śimәń* < urmordw. **śimeni* ← lit. *giminė* können zwei neue Parallelen vorgelegt werden. Aus lautlicher Sicht sind beide sogar gesichertere baltische Entlehnungen als **śimeni*, dessen ersanische Entsprechung einen nicht erwartungsgemäßen unmouillierten Sibilant enthält. Die eine Entlehnung gehört mit Sicherheit zu der von Grünthal als urmordwinisch bezeichneten Lehnwortschicht, denn sowohl das mordwinische als auch das ostbaltische Wort weist als Vokal der ersten Silbe *i* (oder *ī*) auf. Für das zweite Wort ist jedoch eine baltische Ausgangsform sowohl mit *i* (oder *ī*) als auch mit *e* möglich, so dass die Zeit der Entlehnung unklarer ist. Im Prinzip ist es also möglich, dass der Kontakt zum Altlettgallischen bereits in der Epoche der vormordwinischen Vokalveränderungen begann: Das etymologische Material ist jedoch leider zu spärlich, um zuverlässige Schlüsse zu ziehen.

1. E *śive*, M *śivä* ‘Lohn, Belohnung; Bezahlung’; E *сиведемс*, M *śivәďәms* ‘mieten, in Dienst nehmen, dingen; vermieten; sich verdingen; (gegen Entgelt) leihen’ ~ lett. *dzīve* ‘Leben; Wirtschaft’, *dzīvs* ‘lebend(ig)’, *dzīvot, -āt* ‘leben; arbeiten, beschäftigt sein’, *dzīvotājs* ‘Lebender, Lebenskräftiger, Arbeiter’, vgl. lett. *dzīt*, lit. *gyti* ‘gesund, heil werden; leben’, *gyvas* ‘lebendig; Bargeld’ < idg. **g^{w}jeh$_{3}$-* (LEW s.v. *gyti*, LIV 2001)

Veršinin (ESMJa) leitet das Verb E *сиведемс*, M *śivəd′əms* von dem uralischen Erbwort E *сиве*, M *śivä* ‘Kragen’ ab, ohne jedoch zu versuchen, die offensichtliche semantische Kluft zu überbrücken. Bartens (1999: 159–61) hält das mordwinische *-d′*-Verbableitungssuffix für ausschließlich deverbal. Es dürfte sich um eine *d′*-Ableitung von dem geschwundenen Stammverb **śivəms* handeln, das sich möglicherweise als Entlehnung aus dem lettischen Verb *dzīvot ~ dzīvāt* erklären lässt. Das Verb **śivəms* dürfte dann die Bedeutung ‘(gegen Lohn) arbeiten’ gehabt haben. Die Ausgangsform der Entlehnung war vermutlich die üblichste der baltischen Verbformen, die dritte Person Präsens, lett. *dzīvo ~ dzīva*. Im Litauischen hat dieses Verb keine direkte Entsprechung. Das Nomen **śivə* (> E *śive*, M *śivä*) kann eine Nullsuffixableitung von demselben Lehnverb sein oder eine separate Entlehnung des baltischen Nomens, dem lett. *dzīve* entspricht.

Da das erwähnte ostbaltische Verb auch in den slawischen Sprachen eine Entsprechung hat, ist zu erörtern, ob E *сиведемс*, M *śivəd′əms* ein russisches Lehnwort sein könnte. Auch das russische Verb *жить* : *живёт* ‘leben’ hat die Nebenbedeutung ‘arbeiten, dienen’, die allerdings vornehmlich in seinen Präfixableitungen begegnet. Keresztes (2011: 115) zufolge wurden in den allerältesten, vor dem 12. Jahrhundert übernommenen russischen Entlehnungen im Mordwinischen russ. *š′* und *ž′* durch den palatalen Sibilanten des Mordwinischen substituiert. Keresztes führt jedoch nur ein Beispiel an, E *розь*, M *roź* ← russ. *рожь* ‘Roggen’ id., und hält auch dieses eher für eine Entlehnung aus dem Iranischen. Veršinin (ESMJa) nennt außerdem E *śit′kä* ‘Spund (Querbrett) in der Tür’ ← russ. *шитик* ‘flaches Flussfahrzeug’, doch der Bedeutungszusammenhang ist sehr unsicher.

Die Frage der Sibilantvertretung der frühesten russischen Lehnwörter im Mordwinischen muss geklärt werden, um die Grenze zwischen ihnen und den baltischen Lehnwörtern im Mordwinischen ziehen zu können. Ich habe es an früherer Stelle für möglich gehalten, auch das ersanische (Dial. Bajewka) Verb *śijäd′ims* ‘nähen, sticken’ als baltisches Lehnwort mit lett. *dzija* ‘Garn’, lit. *gija* ‘Faden im Aufzug eines Gewebes’ < idg. **g*^{w}*jeH-* ~ **g*^{w}*iH-* zu verbinden (LEW s.v. *gija*; EWAiA I: 603). Da noch nicht nachgewiesen wurde, dass das mordwinische *-d′*-Verbableitungssuffix denominal ist (vgl. oben), ist es jedoch glaubhafter, dass E *śijäd′ims* eine *-d′*-Ableitung von einem untergegangenen Lehnverb **śijäms* ist, dessen Ausgangsform russisch *шить* : *шью* ‘nähen’ war. Veršinin (ESMJa) schlägt für das Verb *śijäd′ims* einen Zusammenhang mit E *сия*, M *śijä* ‘серебро / Silber’ vor, doch hier fehlt erneut die semantische Verbindung. Das Wort *śijäd′ims*

kann als stärkster Kandidat für eine Entlehnung gelten, bei der russ. *š'*, *ž'* > mordw. *ś*.

2. E *śiŕe*, M *śiŕä* Parallelwort zu *paro* 'Gutes' in Verfluchungen ~ lett. *dzirt : dziņ* : *dzīra* 'rühmen', *dzirties* 'sich brüsten, prahlen, sich etw. vornehmen, wollen, versprechen', lit. *girti* : *giri* : *gyrė* 'rühmen, loben', *gyrius*, *gyriai*, *gyra* 'Großtun, Prahlerei', *geras* 'gut, tüchtig, angenehm, trefflich, freundlich' < idg. *g^{w}erH-* (LIV 2001; LEW s.v. *girti*)

Für die Verwendung des Parallelwortes E *śiŕe*, M *śiŕä* führt das MdWb als Beispiele u.a. *paro-śiŕe iĺa ńek!* 'Du sollst nichts Gutes erblicken!', *koda meńeĺť-mastort vejs vasoďit', śeste parodo-śiŕeďe ńek!* 'Wenn der Himmel und die Erde zusammenstossen, dann mögest du Gutes sehen!' und *paroń-śiŕeń purnića* 'einer der sich Hab und Gut zusammenrafft' an. Urmordwinisch **śiŕä ~ *śirä* wäre aus lautlicher Sicht hervorragend als Entlehnung aus der altlettgalischen Form **dźiŕa-* zu erklären, der im Litauischen das pluralische *gyriai* 'Großtun, Prahlerei' entspricht. Semantisch noch näher ist jedoch das litauische Adjektiv *geras*, im Neutrum *gera* 'gut'. Die Vokalbeziehung würde dann eine Entlehnung bereits in vormordwinischer Zeit voraussetzen. Die Palatalisierung *r* > *ŕ* geschah im Wortinneren in vordervokalischer Umgebung (Keresztes 2011: 51–54).

9. Schlussfolgerungen

Für urmordwinisch-altlettgallische Kontakte kann man die folgenden lautlichen Argumente anführen, in der Reihenfolge vom bestimmtesten zum ungenauesten:

1. Urbalt. *g-* > alettg. *dź-* ~ urmordw. *ś-* in den Wörtern **śiŕä*, ?**śivä-* und ?**śimeni*
2. Urbalt. *g-* > alettg. *dź-* ~ urmordw. *-ť-* im Verb **räťa-*
3. Sekundäres, analoges *a*-Präsens als Ausgangsform des Verbs **räťa-*
4. Urbalt. *-š-* / *-ž-* > alettg. apr. asl. *-s-* / *-z-* ~ urmordw. *-s-* in den Wörtern **pusma* und **riśmä*
5. Ostbalt. *ei* ~ urmordw. *eji* vs. ostbalt. *ie* ~ urmordw. *e*, *i* in den Wörtern **pejili*, **leppä* und **likä*

Nicht alle der 11 baltischen Lehnwörter, die Grünthal der urmordwinischen Schicht zuordnet, passen lautlich zum Altlettgallischen. Zwei Lehnwörter haben offensichtlich einen anderen baltischen Ursprung: E *инже*, M *inži* 'Gast' und E *луводемс*, M *lungâd′əms ~ luvâd′əms* 'aufspringen, losgehen usw.' enthalten den im Lettischen und Lettgallischen nach Vokal geschwundenen Nasal und das erstgenannte zudem die nur im Litauischen erhaltene Vertretung von urbalt. *ž*. Als Ausgangsform dieser Wörter kommt lautlich sowohl die urbaltische als auch die litauische Gestalt in Frage. Andererseits sind die urbaltischen Formen nicht geeignet, um die hier behandelten und auch von Grünthal als spät (urmordwinisch) angesehenen Lehnwörter **leppä*, **likä*, **pusma*, **riśmä*, **räť a-* und **śimeni* zu erklären. Zu den beiden ersten würde die litauische Form als Ausgangsform passen, aber zu allen sechs nur die altlettgallische (vorlettische) Form.

Die hier behandelten Wörter urmordw. **śiŕä* und **śivä-* erhöhen die Zahl der ausschließlich altlettgallischen Lehnwörter auf sechs. Von diesen sind gesicherte baltische Entlehnungen **pusma*, **riśmä*, **räť a-* und **śiŕä*, weniger sichere **śivä-* und **śimeni*. Sowohl urlettgallische als auch eine andere baltische Herkunft kommt aus lautlicher Sicht bei zwölf Wörtern in Frage. Dabei handelt es sich um die von Grünthal der urmordwinischen Schicht zugeordneten urmordw. **leppä*, **likä*, E *мукоро*, M *mâkâr ~ mukâr* 'Steiss, After, Hinterer', E *рудаз*, M *rudas ~ ârdas* 'Schmutz, Kot' und E *муртов* 'zu; für', aber auch um die bei Grünthal ambivalenten urmordw. **pejili*, E *кардаз* 'Umzäunung für Tiere', E *каркс*, M *karks* 'Gürtel', M *luv* 'Raum zwischen zwei Fingern', E *мала-*, M *mala-* 'Nähe', E *раське*, M *raśkä* 'Verwandter; Bekannter' und E *малай*, M *talaj* 'vor einiger Zeit'. Insgesamt scheint es also vier bis zwölf altlettgallische Lehnwörter zu geben.

Der Gedanke an altlettgallische Lehnwörter weicht erheblich von dem Bild ab, das die bisherige Forschung von dem vorgeschichtlichen Kontext der mordwinisch-baltischen Kontakte gezeichnet hat. Die Kontakte wurden vor allem anhand der andeutungsweisen Resultate der Namenforschung und der Archäologie lokalisiert und datiert, und es wurde nicht versucht, anhand der Lehnwörter selbst chronologische oder geografische Schlüsse zu ziehen (Grünthal 2012: 309).

Im Zusammenhang mit den baltischen Kontakten des Mordwinischen wurde wiederholt auf die östlichen Galinden hingewiesen, die alten Quellen zufolge an der Oka siedelten (Grünthal 2012: 299). Aus den baltischen Sprachen, die in Weißrussland, in Russland innerhalb der Linie

Pskow–Twer–Moskau–Kursk und an der Nordgrenze der Ukraine gesprochen wurden, ist über die Gewässernamen und das Substrat baltischen Ursprungs im Ostslawischen hinaus kein Beweismaterial erhalten, doch auf dieser Grundlage wurde in der Forschung ein ganzer „Dnepr-baltischer Sprachzweig" postuliert, obendrein ohne kritische etymologisch-lautgeschichtliche Analyse. Ein erheblicher Teil der baltischen Entlehnungen in den mordwinischen Sprachen scheint jedoch durch den Einfluss der Vorformen der bekannten ostbaltischen Sprachen, vom Urbaltischen bis zum Altlettgallischen, erklärbar zu sein. Daher müsste untersucht werden, ob die Hydronyme baltischen Ursprungs und die Substrat-Erscheinungen im ostslawischen Gebiet doch mit den Vorgängern der heutigen ostbaltischen Sprachen oder ihnen sehr nahen Dialekten in Verbindung gebracht werden können.

Die altlettgallisch-urmordwinischen Kontakte brauchen nicht in eine sehr ferne Vergangenheit datiert zu werden. Der glaubhafteste Kontext ist die späte Eisenzeit unmittelbar vor der Expansion der Slawen nach Norden und die Jahrhunderte während der Expansion. Die Zahl der hier behandelten Lehnwörter reicht auch noch nicht aus, um nachzuweisen, dass das Gebiet, in dem Altlettgallisch gesprochen wurde, in der Kontaktzeit sehr weit nach Osten oder das Gebiet des Urmordwinischen erheblich weiter nach Westen gereicht hätte als heute. Die Kontakte konnten beispielsweise durch Handelsverbindungen entstehen. Deren Art und Kontext kann die künftige Forschung anhand der Semantik der Lehnwörter und auf der Basis des archäologischen Materials beleuchten. Die etymologische Erforschung des Wortschatzes der mordwinischen Sprachen steht jedoch erst am Anfang, so dass neue Lehnwortfunde das Gesamtbild der baltisch-mordwinischen Kontakte noch wesentlich verändern können.

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Anmerkungen

1 Da sich im Ersa eine normierte Schriftsprache mit zweckmäßiger Orthografie etabliert hat, verwende ich im Folgenden die ihr entsprechenden, in kyrillischer Schrift geschriebenen Formen, sofern das Wort sich im Wörterbuch der Schriftsprache, ERV, findet. Andernfalls betrachte ich das Wort als dialektal und gebe die Form des MdWb an, ohne die nicht-phonemischen diakritischen Zeichen. Auch das Mokscha hat eine etablierte normierte Schriftsprache, deren Orthografie jedoch für die etymologische Forschung zu ungenau ist, weshalb ich alle mokschanischen Wörter nach dem MdWb wiedergebe. Die Wortbedeutungen sind dem MdWb entnommen.

2 Wie Grünthal (2012: 325) schreibt, muss das *u* der ersten Silbe in diesem Wort sekundär sein. Er vermutet, dass es unter dem labialisierenden Einfluss des *p*- entstanden sei. Meiner Ansicht nach wäre eher an den lautlichen Einfluss des Verbs E *пургамс*, M *purgams* 'spritzen, bespritzen' zu denken, das zum selben semantischen Feld gehört wie 'Donner'.

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From the Middle Ages to modern times: the Karelian female name system

This paper[1] offers an analysis of the system of female names used among the Karelian population. In addition to the analysis of the forms of Christian names used in the past and present in the territory populated by ethnic Karelians in the Republic of Karelia, as well as in Finland and the Tver and Leningrad Regions, an attempt is made to reconstruct the pre-Christian female name system of Medieval Korela. An important observation is that, as opposed to pre-Christian male names, which can be uncovered not only in documents but also in Karelian surnames and toponymy, there are no documented traces of female pre-Christian names from the Karelian population. At present, the main source of knowledge about Finnic pagan female names is, admittedly, oral folk poetry. The author, however, believes that there is another important source of information in addition to folklore, i.e. cow names, which can potentially offer quite a bit of data about the pre-Christian female name system of the Medieval Karelians. The pre-Christian system of female names began to gradually vanish from the Karelian land as Orthodoxy took over. After the baptizing event in 1227, the introduction of the Russian Orthodox onomasticon into the Karelian milieu led to the emergence of multiple vernacular variants. To account for these, the author analyzes the main patterns in the phonetic adaptation of Russian-language forms of female names in the Karelian language.

1. Research question and aims
2. Pre-Christian Karelian female names
3. Karelian Christian female names and their variants

1. Research question and aims

The system of personal female names now in use among the Karelian population has taken shape as a result of a long process. At the same time, there are thus far no scientific papers specifically dealing with this matter. Fragmented notes, mostly lists of female names that were once the most common or still are in use in Karelian communities, can be found, for instance, in papers by Samuli Paulaharju (1924), Viljo Nissilä (1976), Pertti Virtaranta (1972, 1992), A. Gromova (1979) and Denis Kuzmin (2016).

One must acknowledge that the bulk of the formerly used female names and their variants still remains unidentified. Similarly, no targeted efforts have been made, in either Russia or Finland, to collect Karelian-language forms of Christian female names, with the exception of the works of Virtaranta, Paulaharju and Gromova (concerning the Padany sub-dialect). These too, however, mainly recorded only the most widely used forms of the names in question. The staff at the Karelian Research Center also began the collection of Karelian-language anthroponymy only recently. Before that, not much attention had been given to this issue during expeditions for a number of reasons. One of the reasons is, for example, that female names are only sporadically present in the Karelian toponymy. The largest group of anthroponymically derived denominations there comes from male Christian names. The reason for this is that the master of the house was almost always a man, and it was he who owned the homestead as well as engaged in various trades and crafts. The total number of records of female names in the toponymy of the northern parts of Karelia, for instance, was 10% of the total number of place names incorporating Christian names in the region. We mostly find these in the names of small geographic sites as well as agricultural features in the immediate vicinity of settlements (Kuzmin 2014: 56–57).

Oddly enough, it was owing to World War II and the related casualties that female names got a chance to step up. Some 40% of the male population of Karelian-speaking areas never returned from the war. After the war, their widows headed the families, and thus the number of homestead names with women's names fixed in them grew sharply. The names of land lots attached to the homestead also became more often based on women's names.

It is worth mentioning here that the scarcity of studies on either female names in general or the retrospective of their variants in Russia and the former USSR is due both to the governing theoretical approach to the analysis of female names and the lack of reliable field data for many

territories. The complete corpus of variants of canonical female names for Russia is still non-existent, although researchers have produced some papers on some areas and general issues. One can mention, for instance, N.A. Petrovskiy's Dictionary of Russian Personal Names, as well as studies by A.V. Superanskaya, B.A. Uspenskiy, F.V. Stepanova, N.N. Parfyonova and some others. The number of vernacular variants presented in these has, however, been rather limited.

Since documentary sources are missing from the research toolkit, no studies have thus far considered the functioning of the Christian female name system in the first half of the 17th century and earlier. Such studies could clarify the usage of certain forms of names among non-Russian peoples, for instance in Karelia. It is now not always clear how to explain the functioning of one Karelian-language variant or another, since we do not know which Russian-language form it was based on. Meanwhile, we know that many Karelian-language variants were derived not from the canonical name as such, but from its vernacular form that used to be common among the neighboring Russian population (Kuzmin 2016: 63). The name *Ägräššie*, to take one example, would have been difficult to analyze had we not known that the calendar name behind it was *Agrafena* (< *Agrippina*). Knowing this, we can hypothesize that the Karelian-language variant is based on the vernacular form *Agrasiya* / *Agras'ya* / *Agrashiya* / *Agrash'ya* (cf. Kar. *Nastassie* – *Anastasiya*) or, possibly, *Agrafiya*. These forms, however, have not yet been recorded from the neighboring Russian-speaking areas. What makes this case even more complicated is that the Karelian-language form is a word with front vocalism, which is rather infrequent in anthroponymy.

The main reason for the lack of such studies is that female names only began to appear regularly in documentary sources during the third census, carried out early in the 1760s. Prior to that, the various census, land survey and cadastral documents mainly recorded only the male population. Women's names could appear in documents, for instance, in connection with widowhood, when women were legally entitled to head the family. One of the probable origins of this phenomenon is the *domostroy* (household rules) tradition, which placed constraints on the involvement of women in public life (Zinin 1972: 89).

Thus, 1678 Survey Books (KP 1978) of seven Lop′ pogosts mentioned only six women for this huge territory stretching from the former Vokhtozerskaya Volost in the south of Karelia to the border with present-day

Murmansk Region in the north: viz. widow *Irinitsa* wife of Vasiliy (Panozero) (62 ob), widow *Aksen'itsa* wife of Mikhail (Kompakovo) (47 ob), widow *Stefanidka* daughter of Timofey (Rugozero) (45 ob), widow *Fevron'itsa* daughter of Alexey (Pelkula) (410b), widow *Akilinka* daughter of Andrey (Mudalaksha) (23 ob) and widow *Irinitsa* daughter of Fyodor (Myaranduksa) (99 ob). A somewhat larger number of widowed women were mentioned in the Lop' pogosts' census books from 1707 (PK 1707), following three lean years in a row in the mid-1690s and possibly in connection with the beginning of the Great Northern War. A similar situation also occurred in the 16th-17th centuries in Korelskiy Uyezd in the Ladoga region. We have thus far identified 26 female names in the available census records, viz. *Dompni* (1618), *Ortijsa* (1618), *Okulintke* (1631) (IK 1987: 294, 303, 521); *Malana* (1637), *Ostenia* (1637) (IK 1991: 101, 192); *Fenka* (1629), *Manka* (1582), *Orinka* (1582), *Ulitka* (1582) (IK 1993: 155, 264, 275, 367), etc.

At the same time, research can examine a unique document – the 1650/51 Census of Karelian migrants in Bezhetskiy Verkh published by the Finnish researcher Veijo Saloheimo (1992). It contains information about 1,200 families of Karelians who moved to the north-eastern part of the Tver Region after the 1617 Peace of Stolbovo. The listings mention 1,218 females, including both adults and children. The document will be scrutinized in future studies, but it can now be stated that it has recorded over a hundred female names with their variants. Thus, we have a unique opportunity to get familiar with the official Christian female nomenclature of the Karelian population of Ladogan Karelia and northwestern Russia in general at the turn of the 17th century. Cf.

Mariya: mentioned 127 times in the following variants – *Mariya, Mariyka, Mariza, Maritsa, Marika, Mariko, Manchko, Man'ka, Mar'eka*;
Praskov'ya: mentioned 23 times, variants – *Paraskovia, Paraskoviya, Paraska, Porasko, Pasoka*;
Fevron'ya: mentioned 28 times, variants – *Khovridka, Khovronitsa, Khovroshka, Khovrol'ya, Khovrosiya, Fevrol'ya, Fevrolka, Fevronitsa, Fevroniya, Fevrosiya*;
Fedos'ya: mentioned 44 times, variants – *Fedoz'ya, Fedoziya, Fedos'ya, Fedosiya, Fedositsa, Fedoska, Fedoshka, Fedochka, Fedoseyko*;
Kseniya: mentioned 25 times, variants – *Aksin'ya, Aksoska, Aksyuska, Oksemia, Oksenia, Oskinitsa, Oksin'ya, Oksinka, Oksyuka, Oksyutka, Oksyunko, ? Soksyutko, ? Soksyunka, ? Osyutka, ? Sosyutko*.

V.A. Nikonov has estimated that out of the several hundred names in the church calendar, only 74 names were used among Russian peasant women in the 18th century. This is certainly an incomplete estimate, given that the counts did not cover the entire territory of Russia at that time. On the other hand, the number of female names in each specific case of the territories covered by the study was even lower – only 44 to 50 names. Besides that, the top 10 most common[2] names, as the author of the study remarked, sufficed in the second half of the 18th century for the multimillion lot of Russian peasant women. Nikonov also concluded that a feature of the naming situation at that time was that there were very few female names that occurred uniquely or only a handful of times. The reason for this was that the naming tradition in many areas excluded the possibility of giving a name that was not the name of anyone else in the village (Nikonov 1971: 125–126).

Although we now have an idea about the female nomenclature on the Ladogan Karelia in the first half of the 17th century, we still have very little information about the native forms of the names that were in use in the Karelian-language milieu. Only very rarely can we say that one or another variant of the name was used as it is among Karelians at the time. We gained some knowledge of the Karelian-language vernacular forms as late as in the last third of the 19th – early 20th centuries, when Finnish researchers of folklore started recording the names of folk poetry performers, cf. *Bogdanoff Moarie* (< Maria), *Hermanoff Kat'ť'i* (< Yekaterina), *Homon'e Vetora* (< Fedora) (Niemi 1921: 1082, 1084, 1089), etc. Somewhat more extensive is our knowledge of the situation in Finnish Karelia, since local forms of female names were recorded in some 18th century censuses, but their number is not very high either. Swedish sources on the territory of the former Karelian district (Karel'skij Uyezd) also contain some variants of female names from the 17th century. Compared to the total number of names and their variants recorded, inter alia, in the 1650/51 listing, known Karelian-language forms are very few.

At the same time, familiarity with the female nomenclature of the 17th century Karelian population of Ladogan Karelia and the modern vernacular variants used in various Karelian-speaking territories (present-day Republic of Karelia, Tver Region, Leningrad Region and borderland Finnish Karelia) enables the identification of the earliest forms of female Christian names through comparisons. The assumption here is that the records of identical variants in the above-mentioned areas are the oldest forms that had been used in Ladogan Karelia prior to the major migration of Karelians to their current areas of residence in the first half of the 17th century.

One can also suppose that variations of the same name indicate that we are dealing with a name with a longer history of usage among the Karelian population as compared to names with fewer variants.

Examples of presumably early forms of the names Agaf'ya and Ol'ga:

Agaf'ya:	**Ol'ga**:	
Ogo(i)	*Ol'o*	(southern dialects of Karelian Proper)
Okoi	*Ol'o*	(northern dialects of Karelian Proper)
Ogo	*Ol'o*	(southern dialects of Karelian Proper, Leningrad Region)
Ogo	*Ol'o*	(southern dialects of Karelian Proper, Tver Region)
Ogoi	*Ol'o(i)*	(Karelian sub-dialects in Finland)
Ogoi	*Ol'oi*	(Livvi Karelian)
Ogoi	*Ol'oi*	(Ludic Karelian)

The first documentary evidence of the Christianization of Karelians is dated to 1227, when Prince Yaroslav Vsevolodovich passed the respective order. It is since then that we can speak of a gradual arrival and advancement of the new religion in medieval Karelia. Over the course of the nearly 800 years since, Karelians have assimilated quite a number of Christian names, which have developed into multiple vernacular variants generated according to the phonetic and morphological norms of the Karelian language. The table below, for example, relays the vernacular forms of the name Maria in the Karelian language:

Maču	Maija	Maikki	Maka	Maki	Man'a
Man'ka	Man'ke	Manni	Man'oi	Man'u	Man'ukka
Man'ukki	Manu	Mar'a	Mar'aša	Maraša	Mar'o
Mar'u	Mari	Maria	Marija	Marie	Marikka
Marikko	Marina	Mariška	Marja	Marju	Marjuška
Maru	Masa	Maša	Mašoi	Massa	Mašši
Mašukki	Mj̨arjuška[3]	Muarjuška	Maarie	Mååria[4]	Muari
Muarie	Muarii	Muarja	Muarjo	Muarjoi	Muarju
Muard'a	Muaša	Muaški	Marja	? *Mairi	? *Mas'a[5]

Table 1: The vernacular forms of the name Maria in the Karelian language

2. Pre-Christian Karelian female names

It took several centuries for the new system of Christian names to become established in Karelia. Before that, the medieval Karelian population had had its own pre-Christian system of personal names. According to the earliest documentary sources from the 16th century, however, a majority of the male population of Karelian territories had, at least officially, Christian names. On the other hand, in the first half of the 17th century[6] we still find documents with pre-Christian male names, both native and Old Russian, cf. a 1618 record from Suojärvi Pogost, Čiipakonniemi Village *Liberå (*Libero)*[7] *and Kaucho (*Kauko) Muliakof* (IK 1987: 363), a 1629 record from Tiurala Pogost, Petkola Village *Michitta Häränpoika* (lit. son of the Bull), and from Lauroila Village *Timoska Migriläinen* and his grandson *Pervo* (Russ. *Первой 'first') (IK 1993: 356, 364); a 1637 record from Madiala Village of Sortavala Pogost – *Achti Ivanof* (IK 1991: 375) and from Illiala Village Pälkijärvi Pogost – *Martyn Nyrick*[8] *Kurkojev* (IK 1991: 305, 676); in Taipale in Liperi Pogost – *Malafej Ihalempiof Kerkkänen* (1657) (Saloheimo 2010: 200).

As mentioned above, names of Karelian women in 16th–17th century written sources occur only sporadically, and all of these are already of a Christian nature. However, there is one exception: in the village of Savioja in the Kurkijoki Pogost mentions *Maima* Ulasies Änckia (i.e. Vlas's widow *Maima*) (1637) (IK 1991: 86), whose name is likely to be of prehistoric origin (cf. Kar. *maima* 'small fish; young fish' → *'small; short-statured'[9]. A similar situation was observed in the neighboring Russian-speaking territories. One may remark, however, that 17th century written sources for other regions of Russia still contain some, albeit scarce, pre-Christian female names: viz. widows *Goluba* Ignat(')iva (*Голуба* Игнат(ь)ива), Neupokoy's wife *Lyubavka* (Неупокоевская жена *Любавка*), *Kunavka* Ivanova (*Кунавка* Иванова) (DK 1623: 46 ob, 49–49 ob); Pavel Potrekeyev with his wife *Dosada* (*Досада* 'displeasure') and the prayer name – *Matrena* Pavel's daughter (1637), maiden Dashka daughter of Yakov, but nicknamed *Soroka* (*Сорока* 'magpie') and the prayer name *Pigas'ya* (1637) (DG 1637: 2–3). Stepanova (2006) observed that the total number of Old Slavic female names recorded in dictionaries by N.M. Tupikov, S.B. Veselovskiy and M. Moroshkin was not more than[10] sixty units. On the other hand, the 1650/51 list of Karelian migrants points to quite a few more pre-Christian names of Russian origin in use at that time, at least among the Karelian population

of the Ladoga region, viz. *Durka, Goriska, Kozyutka, Maresyanka, Nasonilka, Onositsa, Salanko, Solvenko, Iyelgiya* (Saloheimo 1992). It cannot, of course, be ruled out that some of these are actually variants of some Christian names whose corresponding original forms have not yet been identified.

Compared to native pre-Christian male names, traces of which can be found not only in documents but also in modern surnames of Karelians and Finns, female non-calendar names are completely unknown among the local Finnic population, at least at the documentary level, even in Russified form. Currently, the main source of the pre-Christian onomasticon of Finnic peoples is oral folk poetry. Examples of female names found in this material are *Lokka, Piltikkä, Rauni, Pal'l'oi, Pal'l'oni, Ainikki, Mimerkki, Mielikki, Tuulikki, Tuuvikki, Tyynikki, Tyytikki, Vuohikki, Slavnikki, Loviatar, Kuutar, Melutar, Päivätär* (SKVR[11]), etc. In addition to folklore texts, there is another important source from which information about the pre-Christian onomasticon of medieval Karelians can be derived. This source is pet and livestock names, especially cow names with the suffix *-kki*[12]. The examples above show that this suffix is quite often present in female names in oral folk poetry.

The study of Karelian-language names given to cattle has demonstrated that the same anthroponymic bases can be found behind them as in oral folk poetry. Modern cow names are often based on female Christian names. In Finland, for instance, such cow names were recorded already in the 18th century (Ojansuu 1912: 34). We believe this situation can also be projected back to an earlier period, when profound changes associated with the increasing introduction and utilization of the new Christian naming system were taking place in the female onomasticon of Finnic peoples late in the medieval period. The old non-calendar system of female names has not, however, vanished without a trace, but has persisted through transfer to another linguistic level, i.e. to the practices of naming pets and livestock, in particular cattle. In other words, quite a few Karelian-language cow names in use today have medieval female names behind them. Even more of such names can be found among cow names in the Finnish language. The influence of the Russian language and culture has for a long time been exerted on all levels of the Karelian language, especially in the southern parts of Karelia and in the Tver Region. This can be seen also in the naming of livestock. To put it another way, Livvi and Ludic Karelian, as well as the Karelian Proper dialects of the Tver and Leningrad Regions, now

have very few native names for livestock, since these have been supplanted by borrowings from Russian: cf. *Belka, Bel'ka, Pel'a* 'white', *Rižuha* 'red', *Pestruha* 'variegated', *Buura, Buuroi, Buurikki* 'brown', *Krasotka* 'pretty', *Zor'ka* 'born at dawn', *Nočka* 'born at night', *Marta* 'born in March', *Dun'a, Daška, Lukoi, Lukerju, Sil'va, Maška* (female names), etc.

It can be stated that the bulk of the traditional cow onomasticon in the Karelian language has been lost irretrievably, since it has never been collected specifically, and hundreds of pre-Christian Karelian female names have "sunk into oblivion" by proxy. Cattle names in the Karelian language, however, partially coincide with the cow onomasticon in Finland and Estonia. This fact suggests that the cow names used by Karelians, Finns and Estonians may have common Finnic pre-Christian names behind them. Below are some examples of anthroponymic bases common to folk poetry and Karelian-language names of cows, cf. in folklore: *Ainikki*, *Ainikki*[13] Turuzenpoiga, *Aino* – cows: Kar. *Ainikki*, *Ainikko*, *Aino*, Finn. *Ainikki*, *Ainike*; *Kyllikki* – Kar., Finn. *Kylli*, *Kyllikki*; *Mielikki* – Kar., Finn. *Mielikki*; *Suovakko* – ? Kar. *Suobikki*, *Suopo(i)*, ? Finn. *Aikasuopa*, *Suovi*; *Lemmingöine* – Kar., Finn. *Lemmikki*; *Tähetär* – Kar. *Tähikki*, *Tiähti*, Finn. *Tähikki*, *Tähdikki*.

The following cow names have the same bases as attested e.g. in the pre-Christian male onomasticon of Finnic peoples: male name *Joutsi* – Kar. *Joučikki*, *Joučči*, Finn. *Jouhtikki*; male name *Kyllätty* – Kar., Finn. *Kyllikki*; male name *Lemmitty* – Kar., Finn. *Lemmikki*, *Lempi*; village *Mairi/la* (1618, Korel'skij Uyezd) – Kar., Finn. *Mairikki*; male name *Mielitty* – Kar., Finn. *Mielikki*; male name *Merikirja* – Finn. *Merikki*, Finn. *Kirjakka*, Kar. *Kirjo*; male name *Päiviö*, *Päiväkkä* – Kar., Finn. *Päivikki*; male name *Toija*, village *Toija/la* – Kar. *Toijo*; male name *Toivottu*, *Toivo* – Kar., Finn. *Toivikki*, *Toivoi*, male name *Valittu* – Kar. *Valikki*.

There is evidence from folklore texts that the female onomasticon contained i.a. generic animal names, viz. *Lokka* 'gull', *Kajavainen* 'gull', *Vuohikki*[14] from *vuohi* 'goat', etc. In the Karelian onomasticon, names of animals are mainly represented among non-calendar male names, e.g. in 1629 in Petkola *Michitta Häränpoika*[15] (lit. Nikita son of the Bull) (IK 1993: 356), in 1618 in Hyrsylä *Jaakko Repånpoika Putto* (lit. Yakov son of the Fox), and in Suojärvi *Kondrato Kokonpoicha* (lit. Kondrat son of the Eagle) (IK 1987: 360–361), etc. The Russian population had such pre-Christian female names as, for example, *Korova* 'cow', *Shchuka* 'pike', *Kuritsa* 'hen', etc. (Stepanova 2006). It is thus possible that Karelian-language cow

names such as *Lokka* 'gull', *Hanhikki* from *hanhi* 'goose', *Joučikki*, *Joučikoi* and *D'oučuoi* from *joučen* 'swan', *Piäsköi* 'swallow', *Peipo* 'chaffinch' and *Lindoi* 'bird', as well as the sheep name *Tikki* from *tikka* 'woodpecker', are based on non-calendar female names. In Finland, the following faunal names have been given to cows: *Alli* 'long-tailed duck', *Ahma* 'wolverine', *Tiira* 'tern', *Joukahainen* from *joukahainen* 'swan', *Sotka* 'pochard', *Orava* 'squirrel'. while the name *Peippo* 'chaffinch' has been given to she-goats (NA). One of the names given to cows by the Veps is *Hahkoi* 'gray', cf. Kar. *huahka* 'mew gull; gray (referring to hair)'. The Russian population has also given their cows names associated with generic names of birds and animals, viz. ? *Belka* 'squirrel', *Vorona* 'crow', *Galka* 'jackdaw', *? Goluba* 'dove', *Lastochka* 'swallow', *Lebyodka* 'swan', *Lisa* 'fox', *Perepyolka* 'quail', *Soroka* 'magpie'. Observe that the same names have been recorded among Russian pre-Christian female names.

Karelians have lived side by side with Russians for centuries. The female onomasticon of the latter has included pre-Christian female names such as *Chernava*, *Belyana* and *Malyuta* (associated, respectively, with the Russian words for black, white and small). The same names have been used as cow names in the Russian language. One can thus assume that Finnic peoples also once had female names such as *Pienikki* from *pieni* 'small', *Mussikki*, *Mustikki*, *Muššukki* or *Muštikoi* from *musta*[16] 'black' and the sheep name *Mučukki* from *mučči* 'black', which are now used as livestock names. Finns have also named cows *Valkonen*, *Valk(k)o* and *Valkuna* from *valkoinen* 'white', and Karelians have used the same base for the names of horses (*Valko*) and reindeer (*Valkie*).

In addition to the motifs mentioned above, the pre-Christian male onomasticon contains names pointing to the sequence and time of birth of boys in the family, e.g. *Pervoi* 'first', *Vtoroi* 'second', *Trety'yak* 'third', *Chetvertak* 'fourth', *Pyatoi* 'fifth' and *Subbotka*[17] 'born on Saturday'. Similar borrowed names have been recorded from among the Karelian population, cf. *Pervo* (< *Первой*), *Piättö*, *Piätöi* (< *Пятой*) > homestead name *Piättöilä* (White Sea Karelia), name *Zubottu* (< *Subbot(k)a)* > village *Zubottalu* (Olonets Karelia). Looking at the system of naming cows in Karelia, one can see that some of the names indicate the days of the cows' birth, e.g. *Enčikki*, *Enčoi*[18], *Endžikki*, *Endžoi*, *Ensikki*[19], *Ensoi* 'born on Monday' (< 'first'); *Toičikki*, *Toinikki*[20] 'born on Tuesday' (< 'second'); *Kolm(u)oi*[21] 'born on Wednesday' (< 'third'); *Piäštikki*, *Piätkö* 'born on Friday' (< 'fifth'). Could it be so that the background of these names are the pre-Christian

names, but in this case those of women, that could indicate either the day on which a child was born or the sequence of their birth in the family? Remarkably, such names based on days of the week were given in the Karelian milieu to cows but not to bulls.

The examples below are Russian pre-Christian names and Karelian-language cow names, presumably based on former female names, in which the same semantics can be discerned. Thus, they demonstrate some universalia in the naming of girls in Finnic languages and among the Russian population, cf. Russ. *Goluba* – Kar. *Heluna*, Russ. *Gostena* – Kar. *Gostikki*, *Kostikki*, Russ. *Zhdana* – Kar. *Toivikki*, Russ. *Malyuta* – Kar. *Pienikki*, Russ. *Zabava* – Kar. *Lysti(kki)*, Russ. *Chernav(k)a* – Kar. *Mussikki*, *Muštikoi*, Russ. *Lyuba(va)* – Kar. *Lemmikki*, Russ. *Khotena* – Kar. *Haluna*, etc.

One final remark that should be made here is that the dictionary by N. Tupikov (2005) includes around six thousand Russian pre-Christian names. This fact may suggest that the number of non-calendar names among Finnic peoples, namely Karelians, was probably also quite substantial. The materials above prove that modern cow names have preserved traces of at least some native female names used in the Middle Ages. Thus, further collection and study of Finnic names of pets and livestock can help to reveal new, previously unknown non-calendar names. It can be noted that in addition to the ones already identified, the Karelian language has quite a number of other cow names, including those with the suffix *-kki*, which may possibly reveal other pre-Christian female names[22], e.g. Kar. *Halikki*, *Helmi(kki)*, *Hermikki, Herukki, Hiilikki*, *Kauni(kki)*, *Kortikki*, *Liipakko*, *Lysti(kki)*, *Komi*, *Onnikki*, *Orvikki*, *Orvokki*, *Piirikki*, *Sorokki* and *Toirikki*, as well as the sheep name *Hamukki*.

3. Karelian Christian female names and their variants

Let us recall here that according to the Laurentian copy of the Chronicle of Novgorod, the first Karelians were baptized in 1227, when Prince Yaroslav Vsevolodovich ordered the Christianization of Korela. Over the nearly 800-year-long history of Karelian Christianity, the Russian church onomasticon has gained a plethora of vernacular variants while being assimilated into the Karelian community. It should be remarked that up until the mid-20th century, the Russian population used significantly fewer female names than male names. Thus, prior to the Mongol Invasion in the 1250s, Russian Orthodox liturgical texts and menologies contained 445

male names and 72 female names. Apart from these, there were also some Greek names (92 male and 33 female) in use, which are not included in the church calendars and menologies. Thus, in the first tertial of the second millennium, there were 537 recorded male and 105 female names. Some of the names gradually fell out of use and were replaced by others. Eventually, by 1960, the calendar contained 874 male and 228 female names (Superanskaya 1998: 29–30, 36).

It was after the event of official baptizing that the step-by-step accession of the new Christian names into the Karelian milieu began. Understandably, this was a long process, and it took until the 16th century for the "new" system of Christian names to be more or less internalized in a majority of Karelian-speaking territories, at least at the official level.

The female Christian onomasticon was made up of full-form canonical names such as *Anastasiya*, *Luker'ya*, *Matrena (Matryona)*, *Paraskeva*, *Setukhvina*, *Solomonida* and *Stepanida*, to name a few. Many of these, however, were not used even by the Russian-speaking population of Karelia and the adjacent regions, and it was even rarer for such names to be taken directly into Karelian usage. Full baptismal names were already transformed into numerous vernacular forms in Russian territories. Their sound was therefore shaped by the phonetic and morphological rules of the Russian language at different historical periods, and they were often borrowed into the Karelian language in this pre-modified form.

As a rule, early Karelian vernacular forms of names comprise two syllables and differ from the original canonical variants in that they lack certain sounds, cf. e.g. Kar. *As'o*, *Hodo*, *Lukki*, *Oni*, *Vemi* – Russ. *Anastasiya*, *Fedos'ya*, *Luker'ya*, *Anis'ya*, *Yefimiya*. The forms of canonical names in use among Karelians thus suggest that at the beginning there was a clear tendency towards abridging the named borrowed into the Karelian language to two syllables. On the other hand, the contemporary Karelian onomasticon has quite many trisyllabic forms of names, some of which may be relatively "old".

Karelians assimilated the Christian onomasticon indirectly, via the Northern Russian dialects, with their own phonetic norms and rules. Some of these can still be seen in the Karelian-language anthroponymy, in both vocalism and consonantism.

One such phenomenon is the so-called *okanye*[23], i.e. the differentiation between the vowels *o* and *a* in unstressed syllables. This trait appears at the very beginning of quite a number of names, where the initial *a* in Russian

full-form calendar names and their vernacular forms was changed to *o*, and the names or their forms were then borrowed into the Karelian language: cf. Kar. *Okki, Okku* < North Russ. *Okulina* < Ch. *Akulina*; *Oka, Ogoššu* < *Ogaf'ya* < *Agaf'ya*; *Ol'o(i), Ol'ona* < *Olyona* < *Alyona*. This phonetic feature of Northern Russian dialects is also visible in the anthroponymic material from cognate Finnic nations, as well as among the Saami population of the Kola Peninsula: cf. Veps. *Okšu* < *Akulina*, *Ogroi* < *Agrafena, Onoi* < *Anis'ya*; Seto (Estonia) *Ouda* < *Avdot'ya*, *Oka* < *Agaf'ya*; Saami *Oggišk* < *Agaf'ya*.

Another phonetic trait of Northern Russian dialects discernible in the Karelian anthroponymicon is the transition of the vowel *e* to *o* both initially and inside the word: cf. *D'ougoi, Jouki – Yevgenia*, *Ol'o(i), Ol'ona – Yelena*, *Outi – Yevdokiya*, *Opičča, Ohkimie – Ye(v)fimiya*, *Opri, Oppo – Yefrosin'ya*, *Hopo, Houri – Fevroniya*.

Female names in the Russian language end in a vowel. Names ending in a vowel, usually an *-a*, are also common in Karelian-language forms. Name variants ending like this are primarily typical of Karelian Proper. In Livvi Karelian, the Karelian-Proper final vowel *a/ä* in bisyllabic names is changed to *u/y* when the first syllable is closed or when the word begins with a diphthong or a long vowel. The same applies to vowels in the last syllables of polysyllabic names, cf. among Livvi Karelians: *Liizu – Yelizaveta*, *Muarju – Maria*, *Nikku – Nina*, *Teppu – Stepanida*, *Sofju – Sofiya*, *Vekku – Vera*, *Nadinu – Nadezhda*, *Palagu – Pelageya*, *Parasken'n'u – Paraskov'ya*, *Tat't'anu – Tat'yana*, etc. At present, however, owing to the assimilation processes and the ever wider use of traditional vernacular Russian forms ending in *-a/-ya* («а, я»), this trait among Livvi Karelians occurs mainly in the language spoken by the older generation, and is becoming rarer even among them. Note also that in the Livvi and Ludic dialects, the final vowel in polysyllabic names in the nominative case can sometimes be dropped, cf. *Jelen – Yelena*, *Nadin – Nadezhda*, *Okul'in – Akulina*, *Poluag – Pelageya*, *Tat't'an – Tat'yana*, etc.

Karelian-language female names with the final vowel *-u* are also present in the Karelian Proper dialect. It appears that at least some of these are diminutive forms of full personal names that must have been used when naming children at birth. Similar forms have also been recorded as variants of names in which the vowel *-u-* is found in the original Russian-language canonical names, wherefore, on quite many occasions, the emergence of such vernacular forms with the final *-u* in the Karelian language has nothing to do with diminutiveness. Cf. Kar.-Pr.: *Akku, Okku* – Russ.

Akulina; *An'u – Anna*; *Dar'u*, *Das'u – Dar'ya*; *Gan'u – Agaf'ya*; *In'u*, *Iru – Irina*; *Jelu*, *Jel'u – Yelena*; *Kat't'u – Yekaterina*; *Kretu – Kristina*; *Likku – Yelizaveta*; *Malu – Melan'ya*; *Man'u*, *Mar'u*, *Mašu – Maria*; *Muappu – Marfa*; *Nattu*, *Nat'u – Anastasiya*; *Nat'u – Nadezhda*; *Od'u – Yevdokiya*; *Ogru – Agrafena*, *Agrippina*; *On'u – Alyona*; *Onu – Anis'ya*; *San'u – Aleksandra*; *St'epu – Stepanida*, etc.

Diphthongization and elongation of vowels

One of the phonetic traits of the Karelian onomasticon is the elongation and diphthongization of the original stressed vowels in names. This process occurs because stressed vowels in the Russian language are pronounced slightly longer than unstressed ones, wherefore Karelians perceive them in Russian names as long or, at least, semi-long. Hence, the stressed vowel in the first open syllable is rendered by a long phoneme, and in some cases monophthongs are diphthongized. When the first syllable is closed, the vowel is usually not elongated, possibly owing partly to consonant gemination, cf. Kar. – Russ. *Akuliina – Akulina*; *Alfiiza – Anfisa*; *An'uusa – Anyusa (Anis'ya)*; *Auvuusa – Avgusta*; *Daarju – Dar'ya*; *Hiekla – Fyokla*; *Iiro – Ira (Irina)*; *Jeeva – Yeva*; *Juulia – Yuliya*; *Leena – Lena (Yelena)*; *Liiska*, *Liiza – Liza (Yelizaveta)*; *Lyyti, Lyyči – Lyuda (Lyudmila)*; *Liidä – Lida (Lidiya)*; *Miila – Mila (Lyudmila)*; *Maarie*, *Muarjo(i) – Mar'ya (Mariya)*; *Niija – Agniya*; *Poluaga – Palaga (Pelageya)*; *Riitta – Rita (Margarita)*; *Sarafiina*, *Siima – Sima*, *Serafima*; *Sveet(t)a – Sveta (Svetlana)*; *Sooja, Zooja – Zoya*; *Souhja*, *Šouhja – Sof'ya (Sofiya)*; *Šuura – Shura (Aleksandra)*; *Toon'a – Tonya (Antonina)*; *Tyyne – Dunya (Yevdokiya)*; *Veera*, *Vieruška – Verushka (Vera)*; *Viija*, *Fiijo – Sofiya*; *Vuassa, Vuašši – Vassa*, etc.

Rendering of the Russian final *-eya* (*-ея*), *-iya* (*-ия*), *-'ya* (*-ья*)

The Russian word-ending combinations *-eya* / *-iya* / *-'ya* in female names can be rendered in the forms borrowed by Karelians in different ways. As demonstrated by the examples below, the exact ending of the original Russian name was reflected in the rendering of the names; cf.

-eya* as *-ei: *Joutokei – Евдокея*; *Klaudei – Клавдея*; *Lukerei – Лукерея*; *Oksei (*Oksenei) – *Аксенея*; *Parasei – *Парасея (Парасковья)*; *Taisei – Таисея*; *Tuarei – ? *Дарея*;

-iya* as *-ia, -ie: *An'usie – Анисия*; *Jeudokia – Евдокия*; *Hodenia*, *Hetenie – Фетиния*; *Hourenia – Ховрония*; *Joukenia*, *Jougenie*, *Joukenie – Евгения*; *Klaudia*, *Klaudie – Клавдия*; *Lukerie – Лукерия*; *Maaria*, *Muarie – Мария*; *Malania*, *Melania*, *Malanie – Малания*; *Nastasia*, *Nastas(s)ie – Анастасия*; *Kseenia*, *Oksenie – Ксения*, *Оксения (Аксинья)*; *Orefie – Арефия*; *Natalia*, *Natalie – Наталия*; *Ohkemie*, *Ohkimie – Ефимия*; *Okahvia*, *Okahvie – Агафия*; *Omelie – Амелия*; *Parassie*, *Paraskie – *Парасия*, **Параския (Парасковья)*; *Stepanie*, *Teppania – Степания*; *Ustenie – Устиния*;

-iya* as *-ija: *Joudokija – Евдокия*; *Jougenija – Евгения*; *Niija – Агния*; *Iija*, *Viija*, *Vija – София*;

-iya* as *-i: *Agahvi*, *Kaffi*, *Okahvi – Агафия*; *Fedos's'i – Федосия*; *Hedeni*, *Hepeni – Фетиния*; *Joukeni – Евгения*; *Klaudi – Клавдия*; *Lukeri – Лукерия*; *Oidot't'i – Авдотия*; *Oksen'i – Аксения*; *Opros's'i – ? *Апросия*; *Paras's'i – *Парасия (Парасковья)*; *Ust'ini – Устиния*; *Tuari – Дария*;

-'ya* as *C'C'a (C'a) / C'C'u: *Anis's'a*, *On'us's'a – Анисья*; *Fedos's'u*, *Vetos's'a – Федосья*; *Houron'n'u – Ховронья*; *Irin'n'a*, *Irin'a*, *Irin'n'u – Иринья*; *Malan'n'a*, *Malan'n'u – Маланья*; *Nastas's'a*, *Nastas's'u – Анастасия*; *Natal'l'u – Наталья*; *Oksen'n'a*, *Oksen'n'u – Аксенья*; *Oprosen'n'a*, *Oprosen'a*, *Oprosen'n'u – Апросенья*; *Oudot't'a*, *Oudot't'u – Авдотья*; *Parasken'n'u – Параскенья (Парасковья)*, *Soloman'n'a – Соломанья*; *Tajis's'a*, *Tais'a – Таисья*;

***-'ya* as *-ja* (in Liv. also *-joi, -ju*)**: *Agafju*, *Ogafjoi*, *Ogafju – Агафия*; *Anisja*, *Onisja – Анисья*; *Duarja – Дарья*; *Fedosja – Федосья*; *Havronja*, *Hourenja*, *Hovrenja – Ховронья*; *Irinja – Иринья*; *Lukerja – Лукерья*; *Marja*, *Muarja*, *Marju – Марья*; *Natalja – Наталья*; *Malanja – Маланья*; *Ofimja – Ефимья*; *Oksenja*, *Oksenju*, *Senja – Аксенья*; *Oudotja*, *Oudotju – Авдотья*; *Sofja*, *Souhja – Софья*; *Solomanja – Соломанья;*

other cases: *An'uusa – *Анюса (Анисия or Анисья)*; *Darn'u – *Дарня (Дарья)*; *Hedossa*, *Vietossa – *Федоса (Федосия or Федосья)*; *Klaud'a – Клавдия*; *Nastaššu – *Насташа (Анастасия or Анастасья)*; *Ofimn'a – *Ефимня (Ефимья)*; *Palageja – Пелагея*; *Us't'ana – *Устяна (Устинья).*

Changes can also be seen in the consonantism. To wit, the labial *f* was for a long time missing from the Karelian language. A similar situation was observed in the Northern Russian dialects. As a result, the substitution of *f* with *kh* («x») or *p* in some names had already taken place in the Russian language, cf. e.g. Russ. dial. *Okhim'ya (Охимья) – Yefim'ya*, *Khodora (Ходора) – Fedora*, *Oprosin'ya (Опросинья) – Ye(v)frosin'ya*, etc. Thus, the original sound *f* from the canonical names was rendered in the Karelian language by various consonants or a group of consonants, although in some cases the change was apparently mediated by the Russian dialectal forms of the names:

f* → *h(h): *Hegla*, *Helka*, *Hiekla – Фёкла*; *Hoto*, *Hedora – Федора*; *Hedossa*, *Hodo – Федосья*; *Hepeni*, *Hodenia – Фетинья*; *Serahhima – Серафима*; *Sohja*, *Souhja – София*, *Софья*; **Hekka – Федора*; **Ohnuša – Афанисия*;

f* → *hk: *Ohki*, *Ohkimie*, *Ohkemia – Афимья*;

f* → *hv: *Akahvi*, *Okahvi(e) – Агафья*;

f* → *l (Ludic): ? *Soloi – София*;

f* → *p(p)* → *b: *Pebo – Федосья*; *Peти – Федосья*; *Arppina – Аграфена*; *Ampi – Анфиса*; *Mabu ← Мари*, *Mappa*, *Mappi*, *Mapoi*, *Marp(p)a*, *Миарра*, *Миарри* – Russ. dial. *Марпа – Марфа*; *Opa*, *Opi*, *Oppi*, *Oppo*, *Opiĉča – Ефимия*; *Obri ← Opri*, *Oprosen'n'u*, *Opros's'i*, *Opa*, *Oppi*, *Oppo*, *Ubri*, *Upri*, *Upro(i) – Опросинья – Е(в)фросинья*; *Pros'a* – Russ. dial. *Прося*, *Фрося – Ефросиния*;

f* → *š(š)/s(s)* → *č: *Ogašši*, *Ogaššu*, *Ogašoi* – Russ. dial. *Огаша – Агафья*; *Marčči ← Marssa Marš(š)a*, *Maršakka*, *Marši* – Russ. dial. *Марша – Марфа*; *Glaša* – Russ. dial. *Глаша – Глафира*; *? Ägräššie – *Аграсия / *Аграфия – Аграфена*;

f* → *t(t)* → *č: *Ot'ima*, **Ot'a – Ефимия*; *Martta – Марфа*; *Čokoi*, **Čekuša ← T'ekku*, *T'ekuša*, *T'oka*, *T'okki*, *T'okoi* – Russ. dial. *Тека – Фёкла*;

f* → *v: *Vannukka – Афанасия*; *Vedora – Федора*; *Veki – Федосья*; *Sv'akla*, *Vekli – Фёкла*; *Vemi – Ефимия*; *Vija*, *Viija*, *Vio – София*; *Vedossa*, *Vietos's'a – Федосья*; *Sv'akla – Фёкла*;

The frequent matches for the Russian *g* in Karelian anthroponymy are the consonants *h, k, v*. The *g – k* transition most often takes places in the northern sub-dialects of Karelian Proper, which lack voiced consonants. Cf. **Kaffi*, *Oka*, *Okaša*, *Okku*, *Okahvie – Agaf'ya*; *Auvuusa – Avgusta*; *Jouki*, *Jeuhenie*,**Jeuho – Yevgeniya*; *Palaka*, *Palakka*, *Palka*, *Pol'kka* (**Pol'akka*) – *Pelageya*; *Ahri*, *Ahrippina*, *Arhippina*, *Krippa – Agrippina*; *Kal'u*, *Kalina – Galina*; *Oka*, *Okka*, *Ol'ka*, *Ol'ko*, *Ol'ha*, *Olkuoi – Ol'ga*;

In borrowed names where *-v-* occurs in front of another consonant, it is replaced by the vowel *-u-/-y-* (sometimes *-i-*), which is paired with the vowel in front of it to form a diphthong: cf. Kar. – Russ. *Auvuusa – Avgusta*; *Feuri*, *Houra*, *Houri*, *Houro*, *Hourenia – Khavron'ya*; *Jouk(k)i*, *Joutokei*, *Joude*, *Jeud'i*, *Jeygi*, *Oudi*, *Oudei*, *Oudoi*, *Oudotta*, *Audot'ja*, *Oudot'ju*, *Oute*, *Outi*, *Outti – Yevdokiya*; *Oiti*, *Oidot't'i – Yevdokiya*; *Klaudi(e)*, *Klaud'a*, *Klaudei*, *Klaudii*, *Klaud'oi*, *Klauti*, *Klaut'a – Klavdiya*; *D'eugoi*, *Jeud'i*, *Jeygi*, *Jeuhenie*, *Jougi*, *Jouki*, *Jougenie*, *Joukeni(e)*, **Jeuho – Yevgeniya*; *Maura*, *Mauro(i)*, *Mauru – Mavra*; *Paula*, *Pauša*, *Paulina – Pavla*, *Pavlina*. A transition of the diphthong *ou* into *uo* has also been recorded, cf. *Uoti – Евдокия* (usually *Outi*).

Sometimes the Russian *v* is replaced in Karelian regions by the consonant *b* or *g*; cf. *Barbara – Varvara*; *Magra*, *Magri – Mavra*. In the first case, we are probably dealing with the influence of the Finnish language, since the name has been recorded from Karelians living in Finland, cf. *Barbara – Barbara* (Russ. *Varvara*). In the second case, one could suspect a mixing of the name variants *Mavra* and *Makrida* (cf. Kar. *Makri* – Russ. *Makrida*). This kind of transition, however, can also be seen in the appellative vocabulary, cf. Kar. *mägrä, mäkrä,* Finn. *mäyrä* 'badger'.

The consonant *-n-* inside a name can be changed to *-m-*, cf. *Ampi – Anfisa*. This transition conforms to the rule that the final consonant *-n-* in the first of two adjacent words (e.g. denoting the genitive) is replaced in the colloquial language with *-m-* if the next word begins with *-p-*. The consonant *-n-* in front of *-m-* in a consonant cluster will in some sub-dialects be assimilated, cf. *Tomma*, *Tommo – Domna*.

In contrast to male names, consonant blends at the beginning of female names are not very frequent. In fact, such word-initial combinations were

for a long time atypical of the Karelian language as well as in Northern Russian dialects. Therefore, in such borrowings from the Russian language, one of two processes could occur: one of the consonants could be dropped from the combination or a vowel emerged between the consonants: cf. *T'eppu*, *T'eppania – Stepanida*; *Sen'n'a – Kseniya*; *Parassa – Praskov'ya* (cf. also Russ. *Paraskeva*); *Kerttu – Krestina* (*Kristina*).

Later on, Karelians adopted the use of two word-initial sequential consonants and the Karelian onomasticon thus acquired variants of the names with such combinations, e.g. *Hrest'i*, *Hristoi*, *Kretu*, *Krestoi*, *Krestina – Krestina* (*Kristina*); *St'epu(kka)*, *St'oša*, *Stepanie – Stepanida*; *Gluašši*, *Klakko*, *Klan'a*, *Klaudi – Klavdiya*; *Proša – Praskov'ya*; *Glaša – Glafira*.

The reflex of the phoneme *-j-* in some Karelian dialects is the palatal *d'* (or *t'* in anthroponymy), which can be found in quite a number of female names. This pattern occurs also inside the name: cf. *D'eli – Yelizaveta*; *D'eli*, *D'el'u*, *D'elä*, *D'elkä – Yelena*; *D'eugoi – Yevgeniya*; *Aksen'd'a – Aksin'ya*, *Muard'a – Mar'ya (← Maria)*; *Šoft'a – Sof'ya*, *? Lid'd'i – *Lid'ya – Lidiya*; *? Tad'd'ana – Tat'yana*.

The general pattern in the northern sub-dialects and some southern sub-dialects of Karelian Proper in borderland Finnish Karelia is that the names have unvoiced instead of voiced consonants (*d* → *t*; *g* → *k*; *b* → *p*): *Tomma – Domna*; *Tuarie – Dar'ya*; *Kalina*, *Kal'a*.

Another distinctive feature of the vernacular female onomasticon is that there appeared the forms in which the usually strongly palatal consonant *d'*, *t'* or *s'* was changed to the affricate[24] *č*, *dž* (cf. Kuzmin 2016, 71–73):

***t'(t')V, d'V → č(č)V* (name-internally):** *Ančoi*, *Ančuri – *An't'V – An'tya ← Anna*; *Klaučči – *Klaut't'i – Klavdiya*; *Lyyči – Lyyt'i – Lidiya*; *Načči – Nat't'i – Natal'ya*; *Nadžoi – Nad'oi – Nadezhda*; *Ouči – Out'i – Yevdokiya*; *Tačči – Tat't'i – Tat'yana*; *Maččuri – Matrena (Matyona)*;

***t' → č* (name-initially):** *Čokoi*, *Čekuša – T'oka, T'ekuša – Текa ← Fyokla*;

***s, s' → č* (name-initially):** *Čikki – S'ikli – Sinkletikiya*, *Čolo – Solo – Solomanida*;

***s' → č* (name-internally):** *Očči – *Os's'oi – Oks'oi – Oksen'ya ← Aksin'ya*;

***s't'V → č(č)V* (name-internally):** *Načči*, *Načču – Nas't'i – Anastasiya*.

In summary, it is safe to say that the modern names of Karelian women fit quite well into the general Karelian naming system, which emerged during the second millennium in close contact with the system of personal baptismal names of the Russian population. We believe that further study of the female onomasticon of the Karelian population, both pre-Christian and Christian, is a promising step on the way to a comprehensive description of the Karelian anthroponymic system. Furthermore, a systemic study of Karelian female names, as well as the naming systems of other nations, both cognate and unrelated, offers a unique opportunity to reconstruct the Russian forms of female names used in the Russian-speaking territories at least in the 16th century and probably even earlier.

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Notes

1 University of Helsinki: "Personal name systems in Finnic and beyond: reconstructing the concepts of name giving in cultural layers of prehistory"; ILLH: tema AAAA-A18-118012490344-5 "Pribaltijsko-finskije jazyki Severo-Zapada Rossijskoj Federatsii: lingvisticheskije issledovanija v sotsiokul'turnom kontekste".

2 From more to less common: *Yevdokiya* (var. *Avdot'ya*), *Anna, Praskov'ya, Matryona, Mariya, Marfa, Irina, Kseniya, Dar'ya, Yekaterina* (Nikonov 1971: 138–139).

3 The Kondushi sub-dialect of Livvi Karelian in the Leningrad Region and the Vesjegonsk sub-dialect of Karelian Proper in the Tver Region have the back vowel *į* «ы» as the first component of the diphthong *įa* (**ua*): cf. *mįa* (**mua*), *litrįe* (part. **litrua*).

4 In the Padany sub-dialect of Karelian Proper, the diphthong oa has developed into a long *ō* (**oa* > *oo*), which we relay using the symbol *åå*. This rendition was suggested by the Finnish researcher Pertti Virtaranta and is based on the Swedish graphic system. In the Swedish language, this symbol represents a vowel with similar characteristics. At the same time, we see that historically this word had a long *ā*.

5 * An asterisk marks the names reconstructed relying on co-existent forms.

6 Cf. also Karelian traders in Port of Oulu in 1553: *Ignatta Sixtuksenpoika*, *Nousia Rionpoika*, *Musta*, *Vaseli Ihanpoika* (Nevalainen 2016: 15).

7 Cf. *libero* 'small fish', cf. also *liberö* 'adulatory person; unreliable person' (KKS).

8 Cf. in Kalevala: the spirit of the forest, the god of hunting *Nyyrikki* Tapionpoika; cf. also Dimitrejko *Nyrakof* (1637) (IK 1991: 300).

9 Cf. house name in Aunus Karelia: *Maimankodi* (family name – *Maima*, surname – *Mal'kov* (Tekaččula, Tuuksi).

10 One can suppose, however, that the number of identified female names has somewhat increased since then.

11 SKVR, or Suomen Kansan Vanhat Runot 'the ancient poems of the Finnish people', is a 34-part work in which the majority of the original sources of Kalevala-type poetry are published.

12 See also Aspelin 1886: 3, Forsman 1891: 190–192.

13 Cf. Rus. pre-Christian male name *Odinets* (*Одинец* 'single': blacksmith *Odinets* Ivanov, 1568, fortress town of Korela) (IK 1987: 62), surname *Odintsov* (Čuppu, Martniemi).

14 Cf. the contemporary name given to cows by Livvi Karelians *Kozočka* (**Vuohikki*) (cf. Kar. *vuohi* 'she-goat').

15 In some cases, it also could be a nickname. The documents contain i.a. examples of names where the determinant *-poika* appears as a substitute for the name with a *-nen* suffix that has been mentioned in the connection with the same person. In this case it does not necessarily refer to a patronymic.

16 Cf. Karj. lamb name *Musturi* 'the name of a black lamb' as well as Ivanko Mikiforov *Mustar* (1563, Shunga pogost) (PKOP: 149), Sauka *Mussarin* = Savka *Muzurin* (IK 1991: 309, 678) → personal name **Musari*, **Musuri*, **Musturi*.

17 Cf. *Subotka* Koreljanin (= Karelian) (1597, Puanajärvi pogost), *Subotka* Petrov (1597, Puanajärvi pogost) (IK 1987: 217).

18 Cf. Ivanko *Enčojev* ← **Enčo(i)* (IK 1991: 636).

19 Cf. deserted space *Änsikass* Ödhe ← **Ensikkä* (IK 1991: 430).
20 Cf. ? village *Toinino* Korbassa (1500, Korela province) ← **Toine* (PKVP: 549).
21 Cf. Juško Dmitriyev syn *Kolmoyev* (1678, Roukkula, Repola pogost) ← **Kolmoi* (PK 1678: 127).
22 Since the relationship between modern cow names and female names is a hypothesis, this should be proven as far as possible. It requires special research in which, among other things, it is necessary to highlight the content of the animal names and reflect on why such a name was given to a calf and whether the same name could in fact be given to a girl. It seems that not all known cow names were used as female names. Some of them emerged at different times and in different areas, according to the *-kki*-model. On the other hand, a good example might be the cow name Karj.
23 *Okanye* is a phonetic feature intrinsic to a number of the East Slavic dialects. It exists to distinguish the vowel quality of an unstressed [o] and [a].
24 One can also mention here that the female onomasticon contains several trisyllabic names with affricates in the final syllable, which takes the form *ččV*. Such suffixal variants are likely to be the diminutive forms of Karelian-language Christian names, cf. *Anničča – Anna*, *Heglačču – Fekla*, *Matričča – Matrena* (*Matryona*), **Olličča – Ol'ga*, *Opičča – Yefimiya*. It is less probable, although possible, that such variants appeared under the influence of Russian-language forms such as *Annitsa* (*Анница*), *Olitsa* (*Олица*), etc.

Abbreviations referring to languages and dialects

Ch.	Old Church Slavic language
Finn.	Finnish language
Kar.	Karelian language
Kar.-Pr.	Karelian Proper
Liv. Kar.	Livvi Karelian
North Russ.	Northern dialects of the Russian language
Russ.	Russian language
Saami	Saami dialects of the Kola Peninsula
Veps.	Vepsian language

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KKS = Karjalan kielen sanakirja 1–6. Lexica Societatis Fenno-Ugricae XVI. Helsinki: Suomalais-Ugrilainen Seura.

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Anthroponymic material

Ainikki	Ainikko	Aino	Enčikki	Enčoi
Endžikki	Endžoi	Ensikki	Ensoi	Gostikki
Halikki	Haluna	Hamukki	Hanhikki	Helmi(kki)
Heluna	Hermikki	Herukki	Hiilikki	Joučikki
Joučči	Joučikoi	Joučuoi	Kauni(kki)	Kirjo
Komi	Kortikki	Kostikki	Kylli(kki)	Lemmikki
Liipakko	Lindoi	Lokka	Lysti(kki)	Mairikki
Mielikki	Mučukki	Mussikki	Mustikki	Muštikoi
Onnikki	Orvikki	Orvokki	Peipo	Pienikki
Piirikki	Piäsköi	Piäštikki	Piätkö(i)	Päivikki
Sorokki	Suobikki	Suopo(i)	Tikki	Toičikki
Toinikki	Toijo	Toirikki	Toivikki	Toivoi
Tiähti	Tähikki	Valikki	Valk(k)o	Vuohikki

Table 2: Livestock names → *pre-Christian female names

Russian Christian names	Karelian-language forms of Christian female names
Августа	Auvuusa
Агафья	Agafju, Agahvi, Gan'u, Kaffi, Okahvi, Ogafjoi, Ogafju, Ogašši, Ogaššu, Ogašoi, Ogo, Ogoi, Ogoššu, Okahvia, Okahvie, Oka, Okaša, Okoi, Okku
Агния	Niija
Аграфена	Arppina, Ogru, Ägräššie
Агриппина	Ahri, Ahrippina, Arhippina, Arppina, Krippa, Ogru
Аксинья	Aksen'ď'a, Kseenia, Oččoi, Oks'oi, Oksei, Oksen'i, Oksenie, Oksen'n'a, Oksen'n'u, Oksenja, Oksenju, Senja
Акулина	Akku, Akuliina, Okki, Okku, Okul'in
Александра	San'u, Šuura
Алёна	Ol'o(i), Ol'ona, On'u
Амелия	Omelie
Анастасия	As'o, Načči, Načču Nas't'i, Nastas's'a, Nastas's'u, Nastaššu, Nastasia, Nastas(s)ie, Nattu, Nat'u
Анисья	Anisja, Anis's'a, An'uusa, An'usie, On'us's'a, Onisja, Oni, Onu
Анна	An'u, Ančoi, Ančuri
Антонина	Toon'a
Анфиса	Alfiiza, Ampi
Арефия	Orefie
Афанасия	*Ohnuša, Vannukka
Варвара (Барбара)	Barbara
Василиса	Vuašši
Васса	Vuassa
Вера	Veera, Vieruška, Vekku
Галина	Kalina, Kal'a, Kal'u
Глафира	Glaša
Дарья	Darn'u, Dar'u, Das'u, Daarju, Duarja, Tuarei, Tuari, Tuarie
Домна	Tomma, Tommo
Е(в)фросинья (Опросинья)	Obri, Opri, Oprosen'n'a, Oprosen'a, Oprosen'n'u, Opros's'i, Opa, Oppi, Oppo, Opri, Pros'a, Ubri, Upri, Upro(i)

Russian Christian names	Karelian-language forms of Christian female names
Ева	Jeeva
Евгения	D'eugoi, D'ougoi, Jeud'i, Jeygi, Jeuhenie, *Jeuho, Jougi, Jouki, Jougenie, Jougenija, Joukeni, Joukenia, Joukenie
Евдокия (Авдотья)	Audot'ja, Jeudokia, Jeud'i, Jouk(k)i, Joutokei, Joude, Joudokija, Od'u, Oidot't'i, Oiti, Ouči, Oudi, Oudei, Oudoi, Oudotta, Oudot't'a, Oudot't'u, Oudotja, Oudot'ju, Oute, Outi, Outti, Tyyne, Uoti
Екатерина	Kat't'i, Kat't'u
Елена	D'eli, D'el'u, D'elä, D'elkä. Jelen, Jelu, Jel'u, Leena, Ol'o(i), Ol'ona
Елизавета	D'eli, Liiska, Liiza, Liizu, Likku
Е(в)фимия (Афимья)	Ofimja, Ofimn'a, Ohki, Ohkimie, Ohkemia, Ohkemie, Ohkimie, Opa, Opi, Oppi, Oppo, Opičča, Ot'ima, *Ot'a, Vemi
Зоя	Sooja, Zooja
Иринья (Ирина)	In'u, Iiro, Iru, Irin'n'a, Irin'a, Irin'n'u, Irinja
Клавдия	Gluašši, Klakko, Klan'a, Klaučči, Klaud'a, Klaudei, Klaudi, Klaudia, Klaudie, Klaudii, Klaud'oi, Klauti, Klaut'a
Крестина (Кристина)	Hrest'i, Hristoi, Kerttu, Kretu, Krestoi, Krestina, Kretu
Ксения	Sen'n'a
Лидия	Liidä, Lid'd'i Lyyči, Lyyt'i
Лукерея	Lukerei, Lukeri, Lukerie, Lukerja, Lukki
Людмила	Miila
Мавра	Magra, Magri, Maura, Mauro, Mauroi, Mauru
Макрида	Makri
Маланья	Melania, Malania, Malanie, Malanja, Malan'n'a, Malan'n'u, Malu
Маргарита	Riitta
Мария	Moarie, Maču, Maija, Maikki, ? *Mairi, Maka, Maki, Man'a, Man'ka, Man'ke, Manni, Man'oi, Man'u, Man'ukka, Man'ukki, Manu, Mar'a, Mar'aša, Maraša, Mar'o, Mar'u, Mari, Maria, Marija, Marie, Marikka, Marikko, Marina, Mariška, Marja, Marju, Marjuška, Maru, *Mas'a, Masa, Maša, Mašoi, Massa, Mašši, Mašukki, Mjarjuška, Muarjuška, Maarie, Mååria, Muari, Muarie, Muarii, Muarja, Muarjo, Muarjoi, Muarju, Muard'a, Muaša, Muaški, Marja

Russian Christian names	Karelian-language forms of Christian female names
Марфа (Марша)	Mabu, Mapu, Mappa, Mappi, Mapoi, Marpa, Marppa, Marčči, Marssa, Marša, Maršša, Maršakka, Marši, Martta, Muappa, Muappu
Матрена	Maččuri
Надежда	Nadžoi, Naď oi, Nadin(u), Nat'u
Наталия	Načči, Natalia, Natalie, Natalja, Natal'l'u, Nat't'i
Нина	Nikku
Ольга	Oka, Okka, Ol'ka, Ol'ko, Ol'ha, Olkuoi, Ol'o Ol'oi
Павла (Павлина)	Paula, Pauša, Paulina
Парасковья	Paras's'i, Parassie, Paraskie, Parasei, Parasken'n'u, Parassa, Proša
Пелагея	Palageja, Palagu, Palaka, Palakka, Palka, Pol'kka, Poluag(u), Poluaga
Светлана	Sveeta, Sveetta
Серафима	Sarafiina, Serahhima
Синклетикия	Čikki, S'ikli
Соломанида	Čolo, Solo, Solomanja, Soloman'n'a
София	Fiijo, Iija, Sofja, Sofju, Sohja, Soloi, Souhja, Šoft'a, Šouhja Viija, Vija, Viija, Vio
Степанида	St'epu, St'epukka, Stepanie, St'oša, T'eppu, T'eppania
Таисья	Tais'a, Taisei, Tajis's'a
Татьяна	Tačči, Taď ď ana, Tat't'an, Tat't'anu, Tat't'i
Устинья	Ustenie, Ust'ini, Us't'ana
Федора	*Hekka, Hoto, Hedora
Федора	Vedora, Vetora
Федосья	Fedosja, Fedos's'i, Fedos's'u, Hedossa, Hodo, Pebo, Pemu, Vedossa, Vetos's'a, Vietos's'a, Vietossa, Veki
Фёкла	Čokoi, *Čekuša, Hegla, Helka, Hiekla, Sv'akla, T'ekku, T'ekuša, T'oka, T'okki, T'okoi, Vekli
Фетиния	Hedeni, Hepeni, Hetenie, Hodenia,
Ховронья (Хавронья, Феврония)	Feuri, Hopo, Havronja, Hourenia, Hourenja, Hovrenja, Houron'n'u, Houra, Houri, Houro
Юлия	Juulia

Table 3: Christian female names

Minerva Piha
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Combining Proto-Scandinavian loanword strata in South Saami with the Early Iron Age archaeological material of Jämtland and Dalarna, Sweden[1]

In this article, I will examine South Saami prehistory from the perspectives of archaeology and historical lexicology. I will present a theoretical model that can be applied to a multidisciplinary research that uses methodologies from both the sciences and test it using South Saami material. My linguistic data consists of North-West Germanic and Early Proto-Scandinavian loanwords in South Saami. These loanword strata can be dated to 1–550 CE. I will make an inventory of the semantic categories of the words in the loanword strata to see from which domains words were borrowed. I will also examine the prominent individual words that might have significance as intercultural markers. The archaeological material used in the research includes hunting ground graves, iron manufacturing sites and dwelling sites in Dalarna and Jämtland, Sweden. I will consider remain types, artefact finds and remain structures dated to 1–550 CE. Only those sites that have been excavated will be included in the data. I will correlate the lexical finds with the archaeological find groups in order to examine what the datasets together reveal about contacts between the South Saami and Scandinavian speakers. The combination of archaeological and lexical research offers new advantages and perspectives to the study of prehistory. The study brings new evidence for the prior hypothesis about South Saami speakers as domestic animal herders. The combination of these sciences also reveals that the earliest hunting ground graves should be considered to have belonged to a non-Saami speaking Paleo-European people.

1. Introduction
    1.1. Archaeological and linguistic background of the research
    1.2. The datasets
2. The theoretical model
    2.1. Perspectives on categorization in linguistics and archaeology
    2.2. A hypothetical example of the use of the model
3. The lexical material
    3.1. Semantic categories
    3.2. Language and cultural contacts in the light of the loanwords
4. The archaeological material
    4.1. Remains in the hunting grounds
    4.2. The archeological categories and find groups
    4.3. Summary
5. Combining the lexical and archaeological material
    5.1. The uncorrelative semantic and archaeological categories
    5.2. The correlative semantic and archaeological categories
    5.3. Problematic categories, find groups and lexical finds
    5.4. Summary
6. New perspectives on the Early Iron Age in the hunting grounds in Jämtland and Dalarna
    6.1. Domestic animals among Southern Proto-Saami speakers
    6.2. Reindeer pastoralism
    6.3. Southern Proto-Saami contacts with Paleo-European of central Scandinavia
    6.4. Iron manufacture
7. Conclusions

Appendix 1
Appendix 2
Appendix 3
Appendix 4

1. Introduction

In this article, I will examine South Saami prehistory from the perspectives of archaeology and historical lexicology, which both seek to study the human past. I have sketched a new theoretical model applicable to multidisciplinary research that uses methodologies from both of these sciences. I will test the model using material connected to the South Saami language and its speakers. The combination of archaeology and historical lexicology provides a wider and more detailed picture of the past: the disciplines reveal different prehistoric phenomena and different aspects of the same phenomena. My interest in this article lies in studying the contacts between the predecessors of South Saami and Scandinavian speakers in the Early Iron Age (1–550 CE). I will try to answer the question of what the combination of archaeology and historical lexicology can tell us about South Saami prehistory concerning the contacts between the two language groups.

1.1. Archaeological and linguistic background of the research

In recent years, the consensus that archaeologists and linguists had constructed in the 1980s about the immigration and diffusion of Finnic and Saami speaking groups has come under criticism. Late Neolithic cultures in Finland were previously thought to belong to Finnish- and Saami-speaking groups (e.g. Carpelan 1999: 258; Koivulehto 1999c). New results in linguistics strongly indicate that these cultures are too old to be Finnic- or Saami-speaking (e.g. J. Häkkinen 2010a). Instead, it has been proposed that the Finnic and Saami languages arrived in the Baltic sea area around the end of the Bronze Age or beginning of the Iron Age (500 BCE) (J. Häkkinen 2010b: 57–58; see also e.g. Parpola 2017: 259). The modern understanding is that the Proto-Saami language has its *Urheimat* in the southern parts of Karelia and Finland, from whence it spread to other parts of Fennoscandia, disintegrating into dialects (e.g. Aikio 2006: 43–47; Aikio 2012: 77; J. Häkkinen 2010b: 57).

Even though the expansion of Finnish and Saami languages has been dated much later than traditionally believed, the immigration of Saami – whether it was the language or its speakers – into inland Scandinavia is suggested, especially by linguists, to have occurred earlier than previously thought. Some archaeologists in Sweden propose that the ancestors of South Saami had already arrived in inland Scandinavia by the beginning of the Common Era, or even earlier (e.g. Zachrisson 1997, 2009; Hansen & Olsen 2006: 103). Some researchers do not acknowledge the presence of the Saami in the inland areas before a very late dating (e.g. Stedingk & Baudou 2006). Nevertheless, since the 1970s, the general view seems to be that it is not important to ask when or from where the Saami immigrated into Scandinavia (Simonsen 1973: 181–182) but how the Saami ethnicity was adopted (Storli 1986, 46). Since the 1980s, archaeologists (e.g. Zachrisson 1997) have discussed the emergence of the Saami ethnicity as having taken place in the Iron Age.

However, the Saami ethnicity is not the same thing as the Saami language, although they are deeply connected. The question of when and from where the language came to Central Scandinavia and how it affected the emergence of the Saami ethnicity has not been discussed by archaeologists to any significant extent (although see Gjerde 2016: 54), even though language should be an important factor in creating ethnic identity. In this article, I speak of languages and language speakers, not ethnicity, ethnic

identity or ethnic groups. I will address the question of language, material culture and ethnicity elsewhere in my PhD work. (On Saami ethnicity in archaeology, see e.g. Gjerde 2016: 29–33; Hansen & Olsen 2006, 29–44.)

Linguists, in turn, have traditionally viewed the expansion of the Saami languages as having reached inland Scandinavia around 800–1000 CE (e.g. Saarikivi 2011: 114). J. Häkkinen (2010b: 59), Heikkilä (2011: 68–69) and Aikio (2012: 77–78) have suggested, based on Saami toponyms that have been borrowed from Proto-Scandinavian, that the predecessor of the modern South Saami language must have already been in Scandinavia around 400–500 CE at the latest. I am inclined to support this hypothesis.

The hypothesis is, however, problematic from the perspective of archaeological interpretation. The very early archaeological remains from before the Common Era or right around the beginning of the Common Era that are suggested by archaeologists to have belonged to the ancestors of the South Saami people may very well have belonged to them, but these ancestors would not have spoken any form of Saami language, as it arrived slightly later. Here, I will present a hypothesis of who these ancestors might have been linguistically (see chapter 6 of this article).

The predecessor of modern South Saami in the Early Iron Age is called the southwest dialect of Proto-Saami by Aikio (2012: 77). It is not the predecessor of South Saami alone, but also of Ume Saami and perhaps Pite Saami. I will call this dialect Southern Proto-Saami, and although this article deals mainly with South Saami vocabulary, I acknowledge that Southern Proto-Saami is also the predecessor of at least Ume Saami. At first, Southern Proto-Saami was a variety that diverged from Common Proto-Saami sometime between 1–500 CE (Aikio 2006: 43; 2012: 77), but gradually it developed into a separate protolanguage and then into Ume and South Saami.

1.2. The datasets

My linguistic data consists of North-West Germanic (NwG) and Early Proto-Scandinavian (PScand) loanwords in South Saami (SaaS). The loanwords are defined as NwG or PScand by examining regular sound changes in the words (about sound changes and etymologies see e.g. Campbell 1998; K. Häkkinen 1997: 9–74). These loanword strata can be dated, with the help of runic inscriptions, to the Roman Iron Age (1–400 CE) and Migration Period (400–550 CE) (J. Häkkinen 2010b: 55). I will do a Wörter und Sachen

inventory on the semantic categories of the words in the loanword strata to see from which life domains words were borrowed. I will also examine prominent individual words that might have significance as intercultural markers. I have aimed at including all the words etymologized to NwG and early PScand loanword strata in the data but decided to limit my data to words borrowed into early PScand (which has hypothetically been spoken around 200–550 CE). Limiting the lexical material to NwG and early PScand makes it possible to keep the archaeological material of this small study manageable. (On PScand sound changes and sound changes leading to Late PScand, see e.g. Heikkilä 2014; Koivulehto 2002, 589.)

Many of the Proto-Scandinavian loanwords in South Saami are found in several other Saami languages, some even in all. However, there are more than 30 Proto-Scandinavian loanwords that have been borrowed separately into South Saami. These show phonological and semantic differences compared to the same words in other Saami languages. Some of the words cannot be found in any Saami languages other than South (and often also Ume) Saami. (Aikio 2012: 77–79, 110–111; Piha & Häkkinen forthcoming). These words suggest that there was a distinct Southern Proto-Saami dialect in the Early Iron Age that borrowed words from Proto-Scandinavian. Because of the disintegration of Southern Proto-Saami dialect and its presence in central Scandinavia by 400 CE (or earlier, as I will suggest in chapter 6), it is necessary to study the dialect and its language and cultural contacts separately from those of other Saami languages. The same applies to the archaeological material: the remains in the southern part of Saepmie (the land of the Saami, the area inhabited by the Saami) should not be interpreted on the basis of research done in the northern areas, as the contexts of the remains in southern Saepmie differ from those in the north (Gjerde 2016: 222). However, comparing the southern and northern material is fruitful and necessary in order to examine how the cultures in the areas differ. There have undoubtedly been many similarities, which can also be seen in the common PScand loanword strata in the Saami languages.

The archaeological material includes those remains in Dalarna, Härjedalen and Jämtland, Sweden[2] from the Roman Iron Age and Migration Period that can, according to previous research, be connected with an Iron-Age Southern-Proto-Saami-speaking culture. I will take into account remain types, artefact finds and to some extent remain structures dated to the Roman Iron Age and the Migration Period. I will classify the

archaeological material into archaeological categories and find groups. Only those sites that have been excavated will be included in the data. I have collected the material from archaeological field work reports and published literature.

In chapter 2, I will introduce the theoretical model, after which I will present and analyze the lexical (chapter 3) and archaeological (chapter 4) data. I will combine these data in chapter 5 and discuss the benefits and problems of combining archaeological and lexical research. Finally, I will give new perspectives on the South Saami prehistory in chapter 6.

2. The theoretical model

Attempts to combine archaeological and linguistic evidence are not a new phenomenon, but most of the major studies thus far have been conducted on Indo-European languages and prehistory (e.g. Anthony 2007; Mallory 1989; Renfrew 1987). Prior research has led to the creation of large syntheses on the origin of modern (language) groups (Saarikivi & Lavento 2012: 178). However, similar syntheses on the origin of the Uralic languages and peoples have been carried out as well (e.g. Carpelan & Parpola 2001; J. Häkkinen 2007; Kallio 2006; Parpola 1999; 2012; 2017.), although the nature of linguistic study regarding Finno-Ugric languages is completely different from Indo-European studies. There is written evidence concerning the Indo-European languages dating back thousands of years, whereas the starting point of Finno-Ugric studies is the modern language forms, since no written records older than the Middle Ages are known.[3] In this article, I will examine the linguistic and cultural contacts between groups over a designated period of time in a restricted geographical area rather than create a synthesis of the origin of a language and its speakers.

Not many detailed theoretical models have been presented for combining archaeological and linguistic material. One such model has been sketched by Janne Saarikivi and Mika Lavento (2012). Their model is applied to an extensive set of data: from the perspective of linguistics, all language features, from phonetics and layers of vocabulary to toponyms and language contacts, are taken into account. An archaeological feature is given for all the language features, e.g. a phonetic feature of an individual speaker would hypothetically correspond to a vessel made by a particular individual, and a layer of vocabulary is cognate with artefacts and artefact types (Saarikivi & Lavento 2012: 206). The model I present here

concentrates on a layer of vocabulary that relates to a specific time period, contact network, artefacts and structure remains.

Four main concepts are used within the theoretical model: archaeological find groups, archaeological categories, lexical finds, and semantic (lexical) categories (Figure 1). Archaeological find group is a concept encompassing artefacts and other remains found in archaeological excavations, such as knives, awls or bones of sheep/goat or elk. It subsumes the term artefact type but is broader: it also includes structures such as hearths or house remains. These find groups can be classified in archaeological categories such as tools, animal bones or buildings. Lexical finds are the separate words of a lexicon under examination: words like *axe*, *knife*, *sheep* and *elk* are examples of lexical finds.[4] These words can be classified in semantic categories based on their meaning. Tools would be one semantic category, animals another. When using the theoretical model, the archaeological categories are most often examined in parallel with the semantic categories and the archaeological find groups are contemporaneous with the lexical finds (Figure 1).

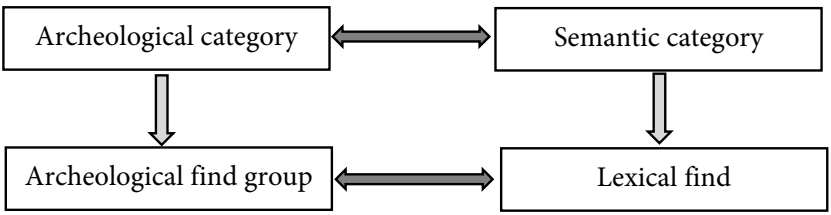

Figure 1: The theoretical model to combine archaeological and lexical material

2.1 Perspectives on categorization in linguistics and archaeology

Categorization is a way of construing existence and is thus a question of ontology. Within an ontology it is possible to classify phenomena into hierarchical categories different in their degree of generality or detailness. For examples animals can be classified into a very ambiguous category of animals which can, in turn, be devided into the categories of wild animals and domesticated animals. Within the category of wild animals, one could classify categories of e.g. predator animals and prey; domesticated animals might include words for sheep, cow, swine and dog, while the more exact

category of livestock includes only the first three animals. In different cultures and within different livelihoods different animals might be included in the category of livestock; in some cultures, there might not be division between wild and domestic animals.

Archaeological and lexical finds refer to phenomena within an ontology, and to understand their existence within the ontology, one can classify them in categories. However, categorization is an etic perspective of the researcher and is therefore a tool of research (e.g. Hill & Evans 1972: 232). But people in the past would also have had a need to categorize things, to understand which things are connected and belong together or which are not part of a certain phenomenon or area of life. Still, the etic categories do not necessarily fully coincide with the emic system of the users of the language and phenomena seen in the archaeological material.

As K. Häkkinen (1999: 163) states regarding semantic categorization and Hill & Evans (1972: 232, 237, 252–255) on archaeological categorization, classification is always based on the purpose for which the categorization is to be used, and there is thus no universal categorization method. I have constructed the categories according to the aims of this research: to combine the archaeological data of Jämtland and Dalarna, Sweden, and the lexical data of South Saami. Another study carried out using the same general model with different data should construct the categories differently depending on the aims of that research. Nevertheless, even if the categorization is a question of perspective, the words and archaeological objects in the research material were known and used in the emic system of the period under examination. Thus, their existence within the emic (and etic) ontology should not be questioned, even if their meaning should. (See also Hill & Evans 1972: 261–262.)

Archaeological categorization with consideration to the lexical data

In archaeology, a common method for bringing order to the data is to create typologies of it. The materials are first grouped by their functions or materials (e.g. tools versus weapons or iron objects versus stone objects) and then classified within each group based on morphological and functional characteristics (e.g. within the group of weapons, artefacts such as swords are classified into a different group from spearheads) and, finally, the artefacts are identified as types according to their morphological characteristics (e.g. different types of swords) (Sørensen 2015: 88–89; for

further research on typologies in archaeology, see also e.g. Hill & Evans 1972). A similar classification, or categorization as it will be called here, for the archaeological material can be applied within the theoretical model presented here but adjusted to the needs of combining archaeological and lexical material.

Even if categorization of archaeological finds is a much-used method, it is nonetheless a complicated task. The context of finds should be considered: if an axe is found in a grave, is it only a tool or does it have other meanings, for example more symbolic ones that are related to death or the person buried with it? Works e.g. by Hodder (1982) and Hodder & Hutson (2003) stress the symbolic and social meanings behind the material culture. Taking this sort of perspective into account, it is not easy to define into which category an archaeological find group should be placed. Olsen (2003; 2010), in turn, emphasizes the significance of the archaeological material itself. He states, "[w]hatever symbolic roles [objects] may play are residues of the primary significance of their own being" (Olsen 2010: 153; see Hodder 1982: 11). Thus, an axe is an axe even if it was found in a ritual or any other context. Here, I will categorize the archaeological data mainly by examiming the finds themselves and not their symbolic meanings to such an extent as e.g. Hodder (1982) deems significant. This is due to the aims of the model as a tool of research for combining archaeological and lexical material: as the denotative – not connotative, or born in the pragmatic context of the speech situation – meanings of words will be examined, it is more practical to examine the archaeological material as it is without its symbolic meanings. However, in the interpretation of the data, I will consider the symbolic, contextual and other possible meanings the objects may have when necessary. It should be noted, after all, that functional and symbolic (as well as other) meanings are not contradictory – an archaeological object may have both or all (Hodder & Hutson 2003: 175).

Iron axes, iron knives and stone knives are all examples of archaeological find groups. Find groups consist of all the individual finds in the data that can be subsumed under the concepts. They fall within two different archaeological categories: axes and knives. The artefacts in these find groups are often interpreted as tools, and therefore they belong to a more ambiguous category of tools. This interpretation is, however, a strongly etic view of the artefacts, and, as stated above, other interpretations can be made according to e.g. the context of the find. The category of tools can be supported by function. Even if the emic understanding of the objects is

broader and more complex than the etic, the objects have also had functional properties as tools or symbols for tools. This is, at least, a possible etic interpretation if words referring to axes and knives were known during the period under scrutiny. Thus, there are two layers of categories: the category of tools as the main category and the categories of axes and knives as subcategories of tools.

However, axes and knives can also be regarded as find groups. Artefacts can be divided into find groups according to their type, the material they are made of, the function they have or perhaps the context in which they were found. If there are many knife or axe types in the data and it is necessary to examine them as separate find groups, the knives and axes are seen as subcategories and the different knife and axe types as find groups. If there are not many artefact types or it is not necessary to divide them into separate find groups, they can be understood as a single find group. The boundary between a category and find group thus depends on the perspective and aims of the research.

If there are many lexical finds referring to knives and axes, it is particularly important to examine the knife and axe types as separate find groups: the question of the relation between the different lexical finds and different artefact types should be pondered. Such examination is not always needed as there might be only one word for knife or axe. In such a case, all the different knives could be handled as a general find group of knives. Nevertheless, even if there is only one word referring to knives, one should discuss whether the word refers to knives in general or to a particular knife type.

Osteological material is another archaeological category that is often in need of division into main categories and subcategories. The material can be categorized, for example, into subcategories of human bones, animal bones and undetermined bones, or they could be classified, as I have done in this research, into the main categories of animal bones and human boness. The animal bones are further divided into the categories of wild and domestic animal bones. As mentioned above, these categories can be divided into even more specific categories, such as livestock and pets. The decision on how to categorize archaeological material should be made research-specifically according to the ontological criteria, research questions, data and contexts.

Semantic categorization of lexical finds with consideration for the archaeological data

As for the semantic categorization of lexical finds, this is done by examining the synchronic, denotative meanings of the word. Even though the semantic-pragmatic perspective has been addressed in recent studies on historical semantics (Durkin 2009: 227; see also K. Häkkinen 1997, 37), the connotative meanings are difficult to determine for words without the speech context. Furthermore, the connotative meanings are connected to the denotative meanings: connotation fits the word into the context it is used in, but it is associated with the denotative meaning (K. Häkkinen 1997: 39). Then again, many words are polysemic and have two denotative meanings, some even three. All of the denotative meanings of the words should be considered, but usually one primary denotative meaning can be detected by, for example, examining the etymology of the word or the concreteness of the meaning.

One challenge is the study of changes in the semantics of words, as it is often difficult to carry out a systematic analysis of these (Durkin 2009; 222). The synchronic meaning of a word is not always the same as the diachronic: a word that has, for instance, a religious meaning today, might not have had one before and vice versa. The semantics of words change when the world changes, and thus meanings that were relevant in history might not be so anymore. Such changes are strongly connected to extralinguistic factors (Durkin 2009: 260–265). Nevertheless, there is a connection between the old and new meaning (K. Häkkinen 1997: 52), and therefore it is often possible to draw conclusions on the nature of the semantic change when uncovering the etymologies of words. Sometimes it is impossible to obtain information on the semantic changes if the old changes cannot be seen in the word in any way. In such cases, we can only make assumptions on the words' possible, extinct meanings. (On semantic change, see e.g. Campbell 1998: 256–273; Durkin 2009: 222–265; K. Häkkinen 1997: 33–56.)

However, combination of archaeological and lexical material might reveal aspects that can help in interpreting the archaeological material and semantic changes of words. If some artefacts are repeatedly found in a religious context but the word referring to the artefact does not have a religious connotation, it might be possible to interpret the word as having had a religious meaning at the time when the religious phenomena occurred – it could thus be classified in the category of religion. As these are more or

less speculations, I have decided to categorize the lexical data according to their synchronic meaning but to address the possibility of other categories in my interpretation of the datasets.

In general, similar methods of categorization to those used for archaeological data can be used in categorizing lexical finds in semantic categories. There are semantic categories of different levels: names of animal species form the main semantic category of animals, which contains subcategories such as wild animals and domestic animals. These could be divided into another set of subcategories, e.g. domestic animals into pets and livestock. Again, the number of hierarchical layers used to divide the categories depends on the aims and perspective of the research.

Once the categorization is complete, it is possible to combine the two datasets at the level of categories and lexical finds and archaeological find groups. However, while the categories are used to understand the areas of life to which the lexical and archaeological finds might belong, as discussed above, categorization is a complex and even ambiguous task. It is the actual data – lexical and archaeological finds – that are central to the analysis.

It should be noted that, when utilizing the theoretical model, there must be previous knowledge or an existing hypothesis about the language(s) spoken within the research area or archaeological culture. When applied to a suitable set of material, the model can, at its best, verify or refute the hypothesis of an archaeological culture, remain type or other entity having belonged to a people who spoke a certain language. If enough reliable counterparts are found, the hypothesis can be verified; if not, it will be refuted.

2.2. Hypothetical example of how to use the model

The material for this hypothetical example (archaeological find groups of knives, axes, bones of sheep/goat and elk; lexical finds *knife*, *awl*, *sheep*, *elk*) is presented in Table 1. The lexical finds are loanwords in language A from language B, and the archaeological material is from the area where language A is known to have been spoken. The aim is to examine the language and cultural contacts between languages A and B and their speakers.

The archaeological find groups of iron axes, stone knives and iron knives form the main archaeological category of tools. As there are knives made from two materials (stone and iron), it is necessary to create a subcategory of knives within the main category of tools. The subcategory is

made up of two archaeological find groups: stone knives and iron knives. In the example, iron tools are a novelty among the culture of language A speakers, and the distribution of iron knives suggests that they come from the nuclear areas of the culture of language B speakers. Stone knives are already known from earlier periods.

There is also a main semantic category of tools on the lexical side of the example. It is made up of two lexical finds: *knife* and *awl*. No necessary subcategories have been detected for these lexical finds. In modern language A, *knife* is a general word referring to any kind of knife. This fact is of interest because there are two different archaeological find groups to which the lexical find might refer.

Combining the two datasets reveals that a category of tools is present in both the archaeological and lexical material. Within this category, there are archaeological counterparts for the lexical find *knife* but not for *awl*. There is an archaeological find group of iron axes without a corresponding lexical find. If we looked at only the archaeological material, we would have proof of usage of tools such as knives and axes, but we could say nothing of awls. If we looked at only lexical material, we would have proof of usage of awls and knives but would know nothing of axes. The archaeological and lexical material thus complete one another: we can say that axes, awls and knives were all known to the people of the culture in question.

The archaeological material suggests that iron axes along with other iron objects came from the culture of speakers of language B, but it is curious that the word was not borrowed from language B. The etymology of the word *axe* in language A should be examined in order to draw information on where the word comes from and, perhaps, to find out why it was not borrowed from the same source as that from which the concept was adopted. As for the word *awl*, it is a loanword from language B. It is probable that the concept it refers to is a novelty that came from the speakers of language B. For one reason or another, the data contain no archaeological material on awls.

The question of knives in the data is more complicated. As mentioned above, there are knives made of two materials in the archaeological data, but only one word referring to knives. As *knife* is a loan from language B, it is possible that the word was borrowed along with the knives made of a material previously unknown to speakers of language A, i.e. iron. The people using the word and the knives had, perhaps, a different word for stone knives, which disappeared once the stone knives fell out of use and the

word was no longer needed. The meaning of *knife* might have expanded only during modern times to include the stone knives found in the archaeological excavations.

As for the bones, the archaeological find groups of sheep/goat bones form an archaeological subcategory of domestic animal bones. The bones of elk form a subcategory of wild animal bones, and together these subcategories form the main archaeological category of animal bones. The find groups of sheep/goat and elk correlate with the lexical finds *sheep* and *elk*, which form the main semantic category of animals. There are two semantic subcategories within the main category: domestic animals for *sheep* and wild animals for *elk*.

It is difficult to say why a new word for elk was borrowed from language B. The area where language A was spoken during the period under scrutiny did have elks even before contacts with language B. This can be seen in osteoarchaeological material of elk from previous periods. Perhaps the new word had something to do with trade concerning elk products, such as the hide or antlers. The lexical find of *sheep* can be of assistance to archaeologists: because there is a word for sheep in the example language borrowed from language B, it is more likely (but not certain) that the bones in the archaeological material come from sheep and not goat, as there is no word for goat that could be used in reference to the archaeological material in the research.[5] The sheep bones and word for sheep might indicate that sheep herding has come to language A speakers from language B speakers.

In this hypothetical material, knives have been found in graves. In table 1, the knives are classified as tools, but clearly, considering their find context in graves, they might have ritual or religious meanings as well. However, there are no words in the data suggesting this interpretation; instead, there is a general word without any connotations for a tool called knife, and it can be connected to archaeological finds of knives, which also are tools. This much is obvious from both datasets. The archaeological find context suggests that there is more to the knives than merely a function as sharp tools meant for cutting or whittling, and therefore the question of whether the word *knife* also had a religious connotation during the time of usage of the graves and knives should also be discussed. Thus, the archaeological material may reveal past connotations or usage contexts of the words. The knives may also be indicators of other phenomena, such as the identity of the buried.

The same applies to other archaeological objects. For example, even if animal bones are found in garbage pits at dwelling sites, they may be indicators of more than just animals and disposal: they may indicate food habits and livelihoods, or even rituals. As for the awls, the lexical material indicates that an awl has been an object known to the language speakers, perhaps even one used by them, but the contexts in which it was used are not known as there are no archaeological finds of awls in the data. Because the knives and axes have been found in graves, the question arises as to whether awls have also been placed as grave goods.

Archaeological category		**Archaeological find group**	**Lexical find**	**Semantic category**	
Main	**Sub**			**Sub**	**Main**
Tools		iron axes			Tools
	knives	stone knife	*knife*		
		iron knife			
			awl		
Bones of animals	domestic animals	bones of sheep/goat	*sheep*	domestic animals	Animals
	wild animals	bones of elk	*elk*	wild animals	

Table 1: Hypothetical examples for using the theoretical model

3. The lexical material

The lexical material of my research consists of SaaS words that are etymologized as being of PScand origin. I have included only those words that have been given a proper etymology with reconstructed PScand forms. As a general rule, I have not etymologized any new words, choosing instead to collect all my material from literature[6]. However, some of the PScand forms have been reconstructed for other purposes (such as for etymologizing Finnish words). In cases where I have judged the sound changes between the reconstructed PScand form and the SaaS word to be regular, I have included the etymology in my material.

3.1. Semantic categories

The material consists of 163 SaaS words borrowed from NwG and PScand language strata. Approximately 30 of the words in the material seem to have been separately borrowed into Southern Proto-Saami (Piha & Häkkinen forthcoming). This means that they are not found in the other Saami languages, or that they require a different PS form from those in the more northern languages.

Semantic category	**Number of words**
Action processes (verbs)	8
Adjectives	19
Agriculture and domestic animal husbandry	12
Animal handling	1
Body parts	9
Buildings and constructions	6
Clothing	4
Conditions and changes	2
Flora	13
Food and cookery	11
Humans and humans as members of society	10
Hunting and fishing	2
Natural phenomena	4
Reindeer and reindeer husbandry	9
Relations in space and time	4
Religion and beliefs	5
Terrain and landscapes	8
Water and watersystems	6
Wild animals	11
Work-related words	10
Vehicles and travelling	6
Other words	3
Total	**163**

Table 2: Semantic main categories of the NwG and PScand loanword strata in SaaS

The semantic categories and the numbers of words in each are presented in Table 2 on the previous page. The words, etymologies and semantic developments are presented in detail in Appendix 1. There are 22 primary semantic main categories in the research material. In addition to this, there are two semantic main categories that occur only secondarily: fire (2 words) and trade (1 word). Some of the main categories are divided into subcategories if such a division is necessary.

The largest category in the material is that of adjectives with 19 words. It is followed by flora (13 words/1 with secondary meaning), agriculture and animal husbandry (12/6), food and cookery (11/1), wild animals (11/0), work-related words (10/3), humans and humans as members of society (10/2), body parts (9/1) and reindeer and reindeer husbandry[7] (9/2). The rest of the categories contain eight or fewer words. Adjectives, action processes and conditions and changes are not semantic categories in the same sense as the other categories that generally refer to concrete objects around one semantic domain. I have classified words into these categories if another suitable, more precise category could not be found. It should be noted that the categorization of words has been made according to the modern meanings, not to the reconstructed meanings of the Southern Proto-Saami words at the time of borrowing.

The categories are partly based on K. Häkkinen's articles (1999, 2001) concerning lexical categories of prehistoric Finno-Ugric culture, however, as K. Häkkinen notes, it is difficult to classify words into semantic categories. As stated above, it is the etic perspective of the researcher's aims that define the categorization. In my data, for example, I have detected a vast vocabulary of domestic animal names. Because the Saami speakers in the hunting ground areas of Jämtland and Dalarna have not traditionally practiced domestic animal husbandry, it is in my interest to examine words referring to domestic animals. I have decided to classify the words into the category of domestic animals (and agriculture), not to place them e.g. into an ambiguous category of animals. The aims and nature of my research are different from those of K. Häkkinen's, which is why her work is more of a model and source of inspiration for me.

3.2. Language and cultural contacts in the light of the loanwords

In this chapter, I will summarize the analysis of the lexical finds and the semantic categories made up of the lexical finds. The material is provided in detail in Appendix 1.

Nature and animals

The semantic categories that refer to nature and natural phenomena are flora, natural phenomena, terrain and landscape, water and water systems and wild animals. Altogether, the number of words in the categories is 42, or more than one quarter of all the words.

The data contain no words referring to wild terrestrial mammals. The wild animal vocabulary includes names for marine animals, birds and insects. Bird names include the predatory birds *aarhtse* 'eagle' and *haepkie* 'falcon', but also *svaaloe* 'swallow'. The marine animal vocabulary is notable, and all of the marine animal names are found in all or almost all the Saami languages. It seems that PScand speakers have been involved in (Southern) Proto-Saami speakers' exploitation of marine resources. In addition, two words referring to fishing have been borrowed from PScand: *nuehtie* 'seine net' and *staavra* 'pole, fishing rod'. The latter word's reference to fishing might be secondary: the ON meaning is 'pole', and in other Saami languages the cognate words have the meaning of 'staff, long stick'.

The vocabulary for flora is more scattered than that of wild animals. However, all of the words for flora refer to plants that grow in the boreal forest of Scandinavia. Seven of the words refer to forests or trees, while only one refers to smaller plants. In addition, the word for grass in SaaS was borrowed from PScand.

The rest of the words with a connection to nature describe the environment that was significant to the Southern Proto-Saami speakers: they refer to places where the speakers dwelled or where their contacts with the PScand speakers occurred. Many of the terrain and landscape words refer to mountaneous terrain. In the semantic category of water and water systems, there is further evidence for the importance of the sea in the contacts between the Southern Proto-Saami and Proto-Scandinavian speakers: the word *aepie* 'open sea, high seas' is borrowed. Additionally, the word *fierve* 'low tide' – a significant word for all seafarers – is borrowed from PScand.

Sources of livelihood

The sea as an important source of livelihood was mentioned in the section on nature and animals. According to the loanword data, Proto-Scandinavian speakers were involved in other means of livelihood of the Southern Proto-Saami speakers as well: agriculture and animal husbandry as well as reindeer and reindeer pastoralism. Clothing or food and cookery are not sources of livelihood, but they are direct results of a livelihood.

The semantic category of agriculture and animal husbandry is one of the largest in the lexical material, and the contacts around these phenomena must have been intensive. The vocabulary referring to animal husbandry contains names of domestic animals: *täjhkoe* '(female) dog', *saavhtse* 'sheep', *laampe* 'lamb', *gaajhtse* 'goat', *vïerhtse* 'ram', *vuaksa* 'ox', *govse* 'cow' and *gaelpie* 'calf of a cow'. Furthermore, clothing vocabulary referring to fabric and commodities made of wool and linen (*lijnie* 'shawl', *vaanhtse* 'mitten', *vaarese* 'homespun fabric', *vaarjoeh* 'clothes') are borrowed from PScand and could be categorized secondarily under agriculture and domestic animal husbandry.[8] It should be deduced that the Southern Proto-Saami speakers of the Roman Iron Age and the Migration Period were not only familiar with animal husbandry but also practiced it themselves. If they had only known about it, the domestic animal vocabulary adopted from PScand would not be so extensive. As I will later discuss, the archaeological material also supports this hypothesis.

The vocabulary referring to cultivation is much scarcer than that of animal husbandry. There is only one word with a primary meaning of cultivation: *aegnieh* 'chaff, husk'. Nonetheless, in the semantic category of food and cookery, there are four words that very well might be connected to cultivation: two words for bread, one for dough and one for porridge. It is possible to make porridge and even bread out of seeds and grains from wild plants, but as the words are borrowed from a language whose speakers practiced agriculture, it is probable that these words referred to food made from cultivated plants. However, it should be kept in mind that the Proto-Scandinavian speakers might have traded flour and grain with the Southern Proto-Saami speakers. Therefore, the Southern Proto-Saami speakers did not necessarily practice cultivation themselves.

Additionally, the word *aernie* 'hearth (in a Saami hut)', classified in the category of buildings and constructions, might have been connected to agriculture and cookery. In one Swedish dialect, the word *ären*, *arne* refers

to the bottom of baking oven (SSA 1 s.v. *arina*). The meaning of the PScand word **aʀina* has been reconstructed as flagstone. Heated flagstones were used to bake flatbread during the Iron Age in Scandinavia. It seems that the word *aernie* might have referred to this sort of baking oven, which would have been a novelty among the Southern Proto-Saami speakers, adopted from Proto-Scandinavian speakers. The meaning expanded only later to refer to hearths in general.

The words referring to humans who practice agriculture or animal husbandry are more complicated than the names of animals, food or other agricultural terms. One example is the term *laedtie* 'farmer; person with a fixed residence'. The word has no connotation of language or ethnic affiliation, which means that *laedtie* could have referred to either Proto-Scandinavian or Southern Proto-Saami speakers. Nevertheless, small-scale animal husbandry could have been practiced as some sort of side livelihood in addition to the more traditional way of life: the people took their sheep or goats with them when they moved from the winterlands to their summer camps and back. Slash and burn fields would also have allowed the traditional seasonal migration for a population with hunting and gathering as its main livelihood. In Pite Saami there is a loanword from PScand for slash and burn fields: *assko* (Qvigstad 1893: 94; Koivulehto 2003: 289–290; LÄGLOS 1 s.v. *ahku*). Another word that refers to a farming person is *svaajnes* 'farm worker'. The meaning in ON is 'boy, lad; male servant'. It might have referred to a Southern Proto-Saami speaking person who started working, for example, at a farm of Proto-Scandinavian origin. There is also a name for non-Saami people in the PScand loanword strata: *daatje* 'Norwegian, Swede'. This word does not, however, make reference to the livelihood of the non-Saami person. Words referring to a house (*ståapoe*) and storage building (*buvrie*) have also been borrowed from PScand, and it is likely that they were borrowed in connection with agriculture and domestic animal husbandry.

In addition to agriculture and animal husbandry, it seems that Proto-Scandinavian speakers would have influenced the Southern Proto-Saami speakers' livelihood of reindeer pastoralism during the Iron Age. However, ON and the modern Scandinavian languages show that the semantics of the words have changed quite drastically from their original meanings to the Saami meanings. In fact, none of the Scandinavian source words refer to reindeer. They have more general meanings as in ON *hauss* 'skull' (< PScand **hausa* > SaaS *aevsie* 'the part of a reindeer's skull that comes

away with the antlers when they are cut off; the part of the skull that is between and around the antlers (of a living reindeer)'), or a meaning that describes the Scandinavian culture as in ON *reið* 'riding; cart'; S *rida* 'riding, cart' (< PScand **rāiđō* > SaaS *raajroe* 'reindeer caravan'), or ON *kru* 'a small corral for cattle' (< PScand **kreu(h)* > SaaS *krievvie* 'reindeer herd (that is herded by a reindeer shepherd)').

In the light of the semantic development of the reindeer vocabulary borrowed from PScand, it seems that Scandinavians did not necessarily have an influence on the livelihood of reindeer pastoralism. At the time of borrowing, the words had more general meanings that did not refer to reindeer in the Southern Proto-Saami. Reindeer pastoralism should be seen as an internal development in the Saami speaking culture that has, perhaps, been influenced by an unsuccessful attempt at animal husbandry and cultivation. The transition to reindeer pastoralism would have taken place during the Viking Age at the earliest (Storli 1993: 3, 20). (For a short introduction to the genesis of reindeer pastoralism, see also Hansen & Olsen 2006: 198–209.) As my anonymous referee kindly noted, some of the loanwords might also be explained by Saami speakers having kept a few tame reindeer already during the Early Iron Age to transport trade products by reindeer caravan to Scandinavian speaking groups. This hypothesis requires a semantic change in the Saami words almost immediately after borrowing.

Work and travelling

The meanings of work-related words do not differ much from those in the Scandinavian languages. Many of the words referring to work, tools and materials are connected to iron. First, many of the tools with names borrowed from PScand can be associated with iron, including the words for axe, knife, edge of a knife and perhaps also sheath. Artefacts with similar functions to axes and knives were certainly known among Proto-Saami speakers before Southern Proto-Saami diverged into its own dialect, but they might have been made of other materials than iron or have otherwise differed from the ones I connect to the PScand words. The old tool types might have had different names that disappeared from the modern language when they fell out of use. At any rate, new names for tools with at least a partly familiar usage context were borrowed from PScand. This indicates new material, new processing methods or new types of familiar

tools that were referred to using PScand word among the Southern Proto-Saami speakers. The word for iron (SaaS *ruevtie*) is a borrowing from Proto-Germanic (Koivulehto 1976: 247) so the Saami speakers were familiar with the material hundreds of years before borrowing the PScand words (see e.g. Piha 2016: 73). Therefore, the appearance of a new material is an unlikely event. Second, the word *aassjoe* 'hearth in a smithy' refers to iron processing. The word is classified primarily as a fireplace within the category of buildings and constructions, but it could also be categorized as a work-related word.[9]

Another interesting group of words is also those referring to materials: tin, silver and blubber oil. Even though words referring to the trading act itself are scarce in the research data, these commodities as well as the iron tools and previously mentioned marine animals and predatory birds could be interpreted as merchandise, perhaps through exchange trade or gift exchange between the chieftains of the tribes. I have not categorized them as trading words because no connotations related to trade can be seen in the words.

Two of the words in the category of vehicles and travelling refer to boats: *aajroe* 'oar' and *dälja* 'sitting board in a boat'. Seafaring vocabulary had already been borrowed from the earlier, Germanic loanword strata into Proto-Saami (Piha 2016: 43 and the references there) so the Proto-Saami speakers very likely learned new techniques for passing through the waters from the Germanic and Scandinavian speakers. Larsson (2007: 123–124) states that according to written sources, Saami boat-building was famous among the neighbouring people, and there was boat trading between the Saami and the Scandinavians during the Middle Ages and probably already during the Late Iron Age. The PScand loanwords in SaaS indicate that the roots of the boat trade already date back to the Early Iron Age.

Religion

The semantic category of religion and beliefs consists of five words and it is not possible to say much about PScand speakers' effect on Early Iron Age religion of the Southern Proto-Saami speakers from those words. The ON cognates of the words *saajve* 'a mythical creature living inside mountains' and *aajmoe* 'the other world' have no visible religious meaning. The last three words in the category (*raavke* 'apparition', *aejlege* 'holiday, Sunday', *faastoe* 'fast') have not undergone any drastic semantic changes.

The PScand loanword *faastoe* 'lent; fast' had nothing to do with Christian Lent at the time of borrowing; it most likely referred to (non-religious) fasting in general. I have placed the word in the semantic category of religion because, as stated earlier, I have made the the categorization according to the modern meanings of the words. In modern South Saami, the word refers to religious lent (Bergsland & Mattson Magga 2007 [1993] s.v. *faastoe*).

Human, human body and humans as members of society

There are some names for humans in different phases of their lives and their status in the society borrowed from PScand. Of great interest from the perspective of contacts are the words alluding to relatives: *provrese* 'bride' and *maake* 'man married to an aunt'. Both words strongly indicate marriages between a Southern Proto-Saami-speaking woman and Proto-Scandinavian-speaking man. In addition to these, the word *aerpie* 'legacy' is borrowed from PScand and might also be connected to the institution of marriage and the children born within intercultural marriages. The borrowed word *baernie* 'boy, son' is significant in this light as well. In ON, however, the word referred to a child in general.

The semantic category of body parts could, of course, refer also to animals. It is interesting that three words for throat were borrowed from PScand, two of them exact synonyms of each other and one that means 'palate'. It is difficult to guess the need for so many words. Perhaps one of the synonyms for throat and larynx was meant for the human throat, while the other was used for animals. However, there is no evidence of such a separation in the later Scandinavian or South Saami languages.

Missing and other categories

One of the most notable semantic categories missing from the data is that of trade. I have classified the word *laajkoe* 'debt' secondarily into the category of trade, but it does not reveal much about the trading customs between the Proto-Scandinavian and Southern Proto-Saami speakers. There is also the adjective *dovres* 'expensive', which could be connected to trade. However, if the trading was mostly exchange-based, there might not have been much need for vocabulary referring to the value of commodities, although perhaps *sïlpe* 'silver' might count as a currency in trade. Trading vocabulary is also

scarce in the PG loanword strata of the Saami languages (Piha 2016: 69). However, many of the other PScand loanwords in SaaS might provide insight into what was traded or exchanged, as discussed above.

The other semantic categories in the material are action processes, adjectives, conditions and changes, relations in space and time and other words. Words referring to time (week and month) provide information about the periodization and seasons of the year.

4. The archaeological material

In Swedish archaeology, the inland areas of Dalarna and Norrland in Sweden are known as the hunting ground areas (Sw *fångstmarker*). Sedentary residency is scarce or nonexistent in these areas and the majority of the archaeological remains point to hunting and gathering as the main source of livelihood. As the Southern Proto-Saami speakers have dwelled in the hunting ground areas from a very early date in the Iron Age, it is certain that there are traces of them there, and the material used for this research has been selected with that in mind.

The Saami archaeological material from the Early Iron Age in Dalarna and particularly southern Jämtland is rather scarce. The most intensive period for excavations in the hunting ground areas of Dalarna, Härjedalen and Jämtland was from the 1960s to the 1980s, partly also in the 1990s. (For a short introduction to the research history of the hunting grounds, and especially the graves, see Gustafsson 1995: 7–11.) Since the turn of the millennium, only minor excavations have been conducted. However, the old material stored in the archives has also been studied and discussed in recent years by Fossum (2006), Gjerde (2016), Hansen & Olsen (2006), Olofsson (2010), Stedingk & Baudou 2006, Wehlin (2016) and Zachrisson (2009, 2014), among others.

The three remain categories included in my research are the so-called hunting ground graves (Table 3), iron manufacturing sites (Table 4) and dwelling places (Table 5). I have limited the archaeological material to those sites that have been excavated totally or partially and have been dated to the Roman Iron Age or Migration Period. The other remains from those periods consist of hunting pits and Scandinavian sedentary sites around Lake Storsjön. These will be only briefly introduced. All of the reference literature, archaeological field work reports and osteological reports used as material for my research are listed in Appendix 3.

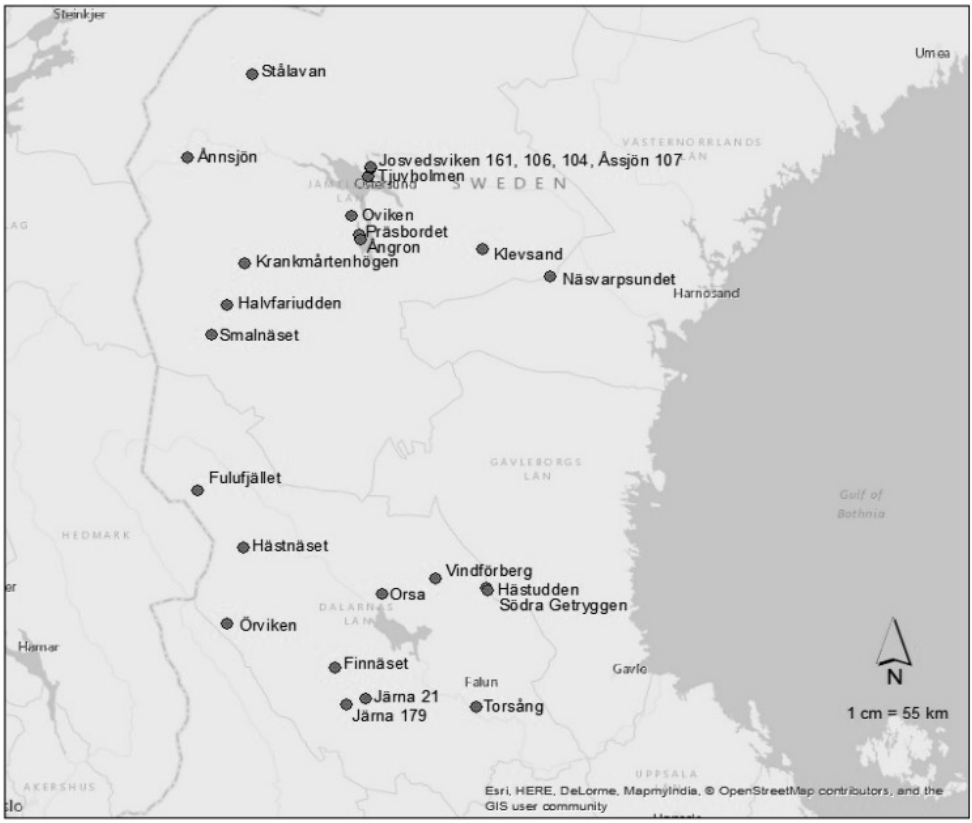

Figure 2: The map of the archaeological remains used as material

4.1. Remains in the hunting grounds

Hunting ground graves

The graves are the best known archaeological remains from the hunting grounds of Jämtland, Härjedalen and Dalarna. The most valuable information the graves provide for this research are the artefacts and osteological material. Therefore, I will mostly concentrate on these. The number of graves included in my research material is 137 (see Table 3).

The hunting ground graves (Sw. *fångstmarksgravar*), also called lake graves (Sw. *insjögravar*) or mountain graves (Sw. *fjällgravar*), are the largest and best-researched remain category in my research material. In Jämtland

and Härjedalen, 64 hunting ground grave sites are known. The sites hold 230 graves in total. (Sundström 1997: 22.) The number of grave sites in Dalarna is not clear, but at least 12 cemeteries are known, as well as several smaller groups of graves (Wehlin 2016: 221 table, 233–224). Hunting ground graves can also be found in Gästrikland, Medelpad and Ångermanland in Sweden (Fossum 2006: 90), but the heartland of the burial custom lies in Härjedalen, Jämtland and Dalarna. The total number of hunting graves is approximately 600 (Olofsson 2010: 99).

Hunting ground graves were in use for 1500 years, from 300 BCE to around 1200 CE (e.g. Fossum 2006: 90; Hansen & Olsen 2006: 102; Zachrisson 2009: 137). The datings are often conducted using the radiocarbon method, but artefact-based dating is also common, particularly in the richer graves in Dalarna. The structures, grave goods and numbers of graves in cemeteries have varied over time, but they can, nevertheless, be related to each other in many ways.

The graves are located in forest and fjell areas, a long distance from sedentary settlements. Most of them are found near lake shores or other water systems. (Sundström 1989a: 155.) Additionally, an integrative factor is the placement of the graves and cemeteries at old dwelling sites of a Stone Age character. There may be thousands of years between the use of the dwelling site and the graves, but the meaning of burying the dead at old dwelling places is vastly debated among researchers (see e.g. Gustafsson 1995: 13–14; Fossum 2006: 141).

The graves are constructed as stone settings. They are often round or triangular, but square and irregularly shaped stone settings are also known. Stone chains bordering the graves are common throughout the timespan of the grave custom. The filling soil is most often made up of sand and small stones. Artefacts and other finds from the Stone Age layer can be detected in the filling. It is also quite usual to find flat boulders on or under which the cremated bones of the dead have been replaced. Grave goods vary from site to site and grave to grave, but animal bones, clothing assessories, tools and weapons are common. Rich grave goods, both in quality and quantity, are more common in Dalarna than in Jämtland and Härjedalen.

Grave site	The number of graves	Excavated graves	Dating
Krankmårtenhögen, Härjedalen	30	30	350 BCE–200 CE
Smalnäset, Härjedalen	34	34	500 / 100 BCE–200 CE
Örviken, Dalarna	4	4	0–200 CE
Fulufjället, Dalarna	4	1	0–550 CE
Finnäset, Dalarna	16	1	200(–400) CE
Vindförbergs udde, Dalarna	43	43	100–550 CE
Klevsand, Jämtland	8	1	200–500 CE
Näsvarpsundet, Jämtland	4	1	280 +/- 125 CE
Tjuvholmen, Jämtland	10	1	273–571 CE
Örviken, Dalarna	1	1	400–550 CE
Södra Getryggen, Dalarna	30	5	400–550 CE
Hästudden, Dalarna	1	1	400–550 CE
Josvedsviken, Jämtland	1	1	441–665 CE
Hästnäset, Dalarna	25	5	500 CE
Halvfariudden, Härjedalen	8	8	515 +/- 70 CE
Total number of graves	**239**	**137**	

Table 3: Cemetery and grave material of the research

The phases of hunting ground graves

The hunting ground graves in Jämtland and Härjedalen can be divided into three phases (Sundström 1989a: 163). The oldest hunting ground graves are dated to 300 BCE–200 CE. These are found in large cemeteries of about 30 graves in Krankmårtenhögen in the parish of Storsjön and Smalnäset in the parish of Tännas. The stone settings are large, low and triangular or round in form. There are stone chains bordering the graves and the triangular graves have had erect cornerstones. The human bones are cremated and covered with a flat stone. Sometimes the human bones are found in small caskets that have been sealed with resin. Grave goods in the form of artefacts are not common during the first phase. Instead, bones of wild fauna inside the graves and antlers of elk and reindeer on top of them are abundant. (Ambrosiani et al. 1984; Sundström 1989a: 163–164; Zachrisson

2009: 138–139.) This has been interpreted as a continuation from the Stone and Bronze Age culture of Norrland (e.g. Stedingk & Baudou 2006: 186). A certain portion of the animal bones found in the graves might come from the Stone Age layers under the graves, and it is not easy to determine whether they are, in fact, connected to the graves. The antlers on the graves are either contemporaneous with the graves or younger (Olofsson 2010: 100; Welinder 2008: 36, 60).

The next phase begins around the beginning of the Late Roman Iron Age (200 CE) and continues until the end of Migration Period (550 CE). The grave locations are now spread out over a broader area than the cemeteries of the first phase. During this phase, the cemeteries are not as big as in the first: each contains 4–10 stone settings. There are also individual stone setting graves. The graves are round in shape or, exceptionally, square. They are still rather large and bordered with stone chains. The cremated human bones are now scattered in the fire layer. (Sundström 1989a: 164.) The second-phase grave sites in my research material are Halvfariudden, Josvedsviken, Klevsand, Näsvarpsundet and Tjuvholm (see Table 3).

The artefacts are more abundant than during the first period, although not if compared to the amount of grave goods from the same period found in Dalarna. Iron knives, glass, bronze and bone artefacts have been found, as well as iron spearheads and a piece of a shield boss. In addition, bones of domestic animals appear in the graves along with those of wild fauna.

The third phase begins at the beginning of the Merovingian Period and continues all the way to the 1200s. The graves are located in small groups or individually and are no longer necessarily confined to the lake shores and water systems. They still consist of stone settings but are smaller in size and not as regular in form as before. They are not marked in any way and are therefore not visible on the ground. The cremated bones and other finds are scattered within the grave construction. The grave goods are richer than during the first two phases. (Sundström 1989a: 164–165.) Graves from the third phase will not be included in my research.

Although Hansen and Olsen (2006, 103) note that the hunting ground graves cannot be regarded as Saami until the beginning of the Viking Age, I regard the graves of the second phase as being connected to Southern Proto-Saami speakers. The Saami ethnicity as we know it from historical times may have arisen during the Viking Age, but the language was there before that (see chapter 6).

In Dalarna, the division into phases differ slightly from that in Jämtland. The graves can be divided into two phases according to the number of graves in the cemeteries. The time of the large cemeteries with more than 15 graves extends from the beginning of the Common Era until the end of Migration Period (Wehlin 2016: 236). The cemetery of Vinförbergs udde in Ore is the best known and largest of the hunting ground cemeteries in Dalarna (Wehlin 2016: 221). The second phase is characterized by smaller cemeteries with 5–12 graves. It should be noted that small cemeteries and lone graves are known also during the first phase. (Wehlin 2016: 236–237.)

According to Wehlin (2016: 237) the form of the graves does not differ from the first phase to the second, though the nature of grave goods changes, with domestic animals and iron artefacts becoming more common. I have included only the following graves from the first phase in my research: Finnäset, Fulufjället, Hästnäset, Hästudden, Södra Getryggen, Vindförberg and Örviken (see Table 3).[10]

Language and ethnic affiliations of the graves

There is no consensus among archaeologists concerning whether all or any of the hunting ground graves belong to the South Saami past. There are archaeologists who see the hunting ground graves as being of Germanic or Scandinavian origins (e.g. Baudou 1987; Dalin 1995; Stedingk & Baudou 2006) while some archaeologists (e.g. Sundström 1989a; 1994; Ramqvist 2007: 165) do not wish to draw any conclusions on the language, ethnic or cultural identity of the grave makers. In her analysis of the hunting ground graves in southern Norway, Gjerde (2016: 224, 228) concludes that the graves are far too heterogeneous to form a unified category, and thus lack the cogency that archaeologists have given to them. She states that no (modern, as I see it) ethnic affiliation can be assigned to them. She proposes that the terms pre-Saami (Norwegian *førsamisk*)[11] and pre-Norwegian or pre-Scandinavian (Norwegian *førnorsk*) be used in connection with archaeological material that cannot be defined as affiliated with a specific ethnic group. (Gjerde 2016: 235.) Gjerde (2016: 234) proposes that even though ethnic identity cannot be seen in the hunting ground graves, the grave goods might reveal other kinds of identities, such as those connected to professions. Later, however, she states that the Pre-Saami remains should also be seen as part of South Saami prehistory, as everything that led to the formation of the South Saami culture is part of the South Saami past (Gjerde 2016: 238–239).

However, many researchers do interpret the hunting ground graves as belonging to the Saami people (e.g. Serning 1966a; Ambrosiani, Iregren & Lahtiperä 1984; Sundström 1997; Zachrisson 1997; Fossum 2006). To some extent, the geographical locations and remain structures are indicative of non-Scandinavian sites. The genetic data and language history, as well as the lack of characteristic Germanic jewelry and a continuation from old hunting and gathering culture also point to non-Scandinavian graves. (Hansen & Olsen 2006: 103.) Hansen and Olsen (2006: 103) state that the graves are Saami and date from the Viking Age onwards; the graves older than the Viking Age belonged to hunter-gatherers whose "hunter identit[ies]" have varied. In other words, Hansen and Olsen (2006) do not comment on the ethnic affiliation of the graves though they do note that the graves might show cultural variation that can be seen in the dwelling area of the Saami during historical times.

I shall not comment on the ethnic affiliation of the graves here but will instead concentrate on the language. I do acknowledge that language is closely connected to ethnicity, but it is only one aspect of ethnicity, albeit a strong one. As I have stated in the introduction, it is known from toponymy (Heikkilä 2011: 68–69; J. Häkkinen 2010b: 59; Aikio 2012: 77–78) and historical lexicology (Piha & Häkkinen forthcoming) that a form of Saami language was spoken in central Scandinavia during the Early Iron Age. A spoken language requires people who speak it, and it is certain that these people left behind traces of their existence, e.g. graves or remains connected to their livelihood. Therefore, I regard the language affiliation to the graves and other archaeological remains handled in this research as plausible, although it is possible that not all of the graves are affiliated with the Southern Proto-Saami speakers (see chapter 6).

Iron manufacturing sites

Intensive iron manufacturing has taken place in Dalarna, Jämtland and Härjedalen since the Early Iron Age, and, according to C14 datings, the most intensive phase before the Middle Ages dates to 300–550 CE (Magnusson 1986: 168 fig. 95, 173 fig. 96). The total number of iron manufacturing sites might be more than 2500, but most of these remain unexamined and are therefore not dated. Of those excavated, six are dated to the Roman Iron Age or Migration Period.[12] They are all located in Jämtland. (Magnusson 1986.) In addition to this, four sites in Dalarna have been dated to

these periods (Hyenstrand 1974: 193 table 2), but they have not been further studied. (Table 4.)

RAÄ number	Site	Dating
106b	Josvedsviken	263–634 CE
104	Tomte 1:2, Josvedsviken	195 BCE–207 CE
107	Tomte 1:1, Åssjön	120–510 CE
81	Myre 2:1, Myrviken	390–707 CE
36	Präsbordet	294–526 CE
40	Ångron	408–771 CE
24	Torsång	20–430 CE
141	Orsa	355–555 CE
21	Järna 1	365–565 CE
179	Järna 2	280–630 CE

Table 4: Iron manufacturing sites in Dalarna, Härjedalen and Jämtland

Iron manufacturing sites can be located in two different types of environments: forest locations and lake shore locations. The lake shore locations are the older ones, and all the sites from the Early Iron Age fall within the lake shore group (Magnusson 1986: 144 fig. 88). The structures found in Early Iron Age iron manufacturing locations include furnaces for manufacturing iron, charring pits and places to throw the slag and store the iron ore. (Magnusson 1986: 239–261.) The artefacts found in Early Iron Age iron manufacturing locations are few and always connected with iron manufacturing (Magnusson 1986: 58–127).

The iron manufacturing sites are not often interpreted as relating to the Southern Proto-Saami speakers; only Fossum (2006, 143) has recently proposed that the Southern Proto-Saami speakers were widely involved in iron manufacture in southern Norrland. She argues convincingly that iron manufacture and domestic animals are connected to and belong to the Southern Saami past. In addition, because of the geographical location of the iron manufacture sites within the traditional South Saami area, I have decided to include them in my material. However, it should be noted that not all the sites were necessarily used by the Southern Proto-Saami speakers. I will discuss iron manufacturing among the

Southern Proto-Saami speakers of Jämtland and Dalarna in more detail in chapter 6.

Dwelling sites of hunter-gathering character

All of the known Early Iron Age dwelling sites of hunter-gathering character in the research area are found near lakes and come in form of hearths. The structures resemble dwelling places from the Stone Age and Bronze Age. The artefact finds are different, however. The dwelling sites from the earlier times are usually abundant in stone tools, but artefacts decrease after the transition to the Iron Age, although the structures of the sites stay the same. During the Roman Iron Age and Migration Period, artefact finds are rather rare. (Sundström 1994: 109–111.) Sundström (1994: 111) claims that iron artefacts can be connected to the hunting ground dwelling sites from the Early Iron Age, but I have not been able to detect such a phenomenon from my dwelling site material: no iron artefacts are listed as having been found during the archaeological excavations.

Dwelling sites of hunter-gatherers from the Early Iron Age on are extremely few in number (see Table 5). Only four sites have been excavated: one in Härjedalen[13], three in Jämtland and none in Dalarna. To my knowledge these sites are the only known dwelling places – new archaeological inventories have not revealed any new ones. The cultural belonging of the dwelling sites has not been discussed much at all.

RAÄ number	Site	Dating
163	Ånnsjön, Åre kn	260–435 CE
309	Stålavan, Juvuln sjö, Kall sn	~200 CE
161	Vike 2:1, Josvedsviken, Rödön sn.	322–536 CE

Table 5: Dwelling sites of the hunting ground areas

The way of life of hunter-gatherers is a mobile one. They did not dwell in the same place for long, and this may explain the few finds of dwelling sites. Even if the hunter-gatherers practiced iron manufacturing and stayed near the iron manufacturing sites, they might not have left behind detectable traces if the stay was not long enough or if they did not regularly return

to dwell at the same location. Nevertheless, it is possible that the reason for the lack of dwelling sites is that we have been looking in the wrong places. Are the lake shores the only possible locations for dwelling during the Early Iron Age, or could there be other functional places as well?

Dwelling sites with asbestos-ceramic finds have been found in the northern part of Jämtland and in Swedish Lapland (e.g. Sundström 1994: 110–111). Asbestos-ceramics were already in use during the Bronze Age and Pre-Roman Iron Age, and Sundström (1994: 111) sees a continuity from the Bronze Age to the Roman Iron Age in the use of asbestos-ceramics. However, the asbestos-ceramic sites in northern Jämtland have been dated to the Merovingian Period (Sundström 1994: 110) and are therefore not included in my research.

Other remains

Other Early Iron Age remains in Dalarna, Härjedalen and Jämtland include hunting pits and remains connected with the Scandinavian culture in the southern parts of Scandinavia and on the shores of the Gulf of Bothnia. The Scandinavian remains consist of grave mounds of the Scandinavian type and sedentary dwelling sites with house remains. The grave mounds are always connected with the sedentary dwelling sites. Even some of the iron manufacturing sites are connected with the Scandinavian dwelling locations. These remains first appear in the research area around 200–400 CE. (Hemmendorff 1989a: 16–17.)

Hunting pits are the most common archaeological remains in the research area. In Jämtland alone there are 10,000 hunting pits of different ages (Melander 1989: 115). They occur as individual pits or in large systems of tens, even hundreds of pits. There is no doubt that many of them have been used by Southern Proto-Saami speakers.

The problem is that the hunting pits are difficult to date. Artefacts suitable for dating have not been found (Melander 1989: 120), and the C14 method is problematic. The same hunting pit can give dates that differ by thousands of years (Wehlin 2016: 240). In addition, the hunting pits often have no datable constructions. (On the dating of hunting pits, see e.g. Halinen 1996.) Some quite reliable datings has been done, however. Most of the C14-dated hunting pits in Jämtland fall between 300 and 1100 CE. (Melander 1989: 122.) Four pits have been dated to the Roman Iron Age and two to the Migration Period (Sundström 1994: 111).

I have decided not to include hunting pits in my research data as they do not contribute much significant material for the purpose of this research. I do acknowledge, however, that the groups who dwelled in and exploited the hunting ground areas – among them Southern Proto-Saami speakers – would have used hunting pits in the area.

4.2. Archeological categories and find groups

Most of the artefacts in the data come from graves. Here I will describe the archaeological categories and the find groups in them.[14] They are also presented in Appendix 4. I have classified the objects into find groups based on the interpretations and discussions of the archaeologists who have performed excavations or other research on the sites included in my research data, e.g. if an object is interpreted as a knife, I have classified it as belonging to the find group of knives; if a structure is interpreted as an iron furnace, it belongs to the find group of furnaces. The archaeological find groups are, in turn, classified into archaeological categories based on the more general function of the find: knives are tools, and thus categorized as tools, while furnaces are structures, slightly more specifically iron manufacture structures, and thus categorized as such. The categorization of the finds is mine, but Serning (1966a), for instance, has categorized finds on basis of their function in her description of the Iron Age in Dalarna.

The fact that the objects that make up the find groups may have meant more than they seem to modern researchers should not be ignored. They may have had a symbolic status or religious meaning, or they may have represented power or professions, among other things. Finds in graves are particularly difficult to interpret as they are found in a religious context: are they or do they represent commodities used in everyday life, or is their function solely religious? In this research, I will interpret them as commodities that are or represent artefacts required in everyday life. Even if they had only religious or ritual meanings, they may have been referred to using similar words as those used for the corresponding everyday artefacts: if there is a knife-like artefact in a grave, it could have been called a knife despite its sacred or profane nature in the society. (For more details, see chapter 2.1.)

Artefacts connected with animal handling

The only artefact connected to animal handling other than hunting is a horse shoe fragment from the cemetery of Vindförbergs udde. It was found in grave number 29.

Clothing and jewelry

I have decided to place the find groups of clothing and jewelry together, as it is not easy to tell the difference between a clothing accessory and a piece of jewelry. Furthermore, actual clothes are rarely found during archaeological excavations. The main category of clothing and jewelry is divided into three subcategories: clothes with a find group of fabric, jewelry and accessories, and other artefacts, which includes a bird-shaped bone artefact.

In the data, there are only two pieces of fabric, one from the cemetery of Smalnäset (grave number 18) and the other from Krankmårtenhögen (grave 37). They were both found in the same context with bronze artefacts. As far as I know, no analysis has been made of the fabric to determine its material composition.

Eight brooches, fibulas and belt buckles have been found in the following cemeteries in Dalarna: Örviken (three cross-shaped bronze fibulas in grave 5), Södra Getryggen (grave 6) and Vindförberg (an iron brooch from grave 2, fibulas from graves 16 and 34, an iron belt buckle from grave 8). The fibulas have a western distribution and therefore show contacts with Norway (Hyenstrand 1987: 120). A round bronze brooch has been found in Södra Getryggen. The brooches and fibulas are often a very good indicator of the age of the grave, as there is an established brooch typology.

Along with bronze brooches and fibulas, the research data contains other bronze jewelry. In Smalnäset (grave 18) and Hästnäset (grave 4), bronze spirals have been found. In addition to these, one of the beads is a bronze spiral bead, found in grave 37 in Krankmårtenhögen. Bronze rings or ring fragments have been found in Örviken (graves 1 and 5), Hästnäset (grave 1) and Vindförberg (graves 3a and 8). Buttons made of bronze are known from Hästudden, as well as a half of a bracelet from Vindförbergs udde. A bronze pin was found in Örviken grave 5. The iron clothing accessories other than buckles, brooches and fibulas are mountings of a belt from Vindförberg (graves 16 and 17) and iron pins from Vindförberg (grave 39).

Jewelry and accessories made of bones include combs, a hairpin, a bird-shaped artefact and pendants. The bird-shaped artefact in Hästnäset (grave 3) may not be a piece of jewelry at all – it is difficult to determine in which category it should be placed. Two pendants were found, also in Vindförberg. One of the pendants was found in the same grave (number 16) as a bone comb. The hairpin is from Klevsand.

Bone combs are a common grave good find: fragments have been found in 14 graves in four grave sites and cemeteries. Most of them, 11 in total, are from the cemetery of Vindförbergs udde. The other find places are Klevsand, Smalnäset and Örviken.

Beads come in glass, amber and, as we have seen, bronze. Glass beads are found in Finnäset and in two graves in Örviken (1 and 5). The Örviken graves have been mentioned many times above, and they are rich in grave goods. In grave 1, the beads are colored blue. The beads of grave 5 are in fragments. They are made of frit and glass.

Glass artefacts

The glass beads were discussed above, and no other identified glass artefacts are known from the grave sites or other locations included in the data. However, in the excavated grave of Klevsand, smelted green glass was found. It is unidentifiable, but it is possible that it has also been a bead or beads.

Hunting tools

Hunting tools are rare in the data. Some of the weapons might have been used as hunting tools, but it is difficult to determine which ones. Here, I shall list only the arrowheads as hunting tools. It is likely that they were first and foremost meant for hunting (Lipping 1981: 22). I have, however, listed them as weapons as well. Arrows of different material or size and shape may have had different purposes, e.g. different animals could have been hunted using different kinds of arrows (Lipping 1981: 12). I will not discuss the different functions here in further detail as it is not relevant from the perspective of the aims here: the PScand loanword stratum does not have a word for any type of arrow, and therefore it seems that arrows were not central artefacts in contacts between Proto-Scandinavian and Southern Proto-Saami speakers.

The arrowheads come in three materials: flint, bone and iron. The only flint arrowheads in the material were found in Finnäset. The iron arrowheads are more common, as nine have been found in three locations. Two from Fulufjället have been found with a spearhead. The one from Hästnäset was the only grave good found in the grave 2 besides bones and antlers. The rest come from Vindförbergs udde (graves 15, 19, 21, 25, 34 and 35b). Most of the graves with iron arrowheads are very rich in other artefacts.

Arrowheads of bone are the most frequent type. They come from 16 graves but have been found only in the cemetery of Vindförbergs udde. Most of the graves contain more than one arrowhead, but they are often the only grave goods.

Iron manufacture and forging

Archaeological material connected to iron manufacture and forging could be classified under two main archaeological categories: structures or tools and working materials, but as it is in my interest to examine the relation of the Southern Proto-Saami speakers to iron manufacture, I have decided to classify iron manufacture and forging as a separate main category and divide it into two subcategories: iron manufacture and forging-related structures and tools.

The structures at iron manufacturing sites consist of furnaces, charring pits, iron ore storage locations and slag dump areas. The artefacts found at the sites consist of iron slag (Josvedsviken 106b and 104, Åssjön, Myrviken, Präsbordet and Ångron) and iron ore (Josvedsviken 104, Åssjön, Myrviken, Präsbordet, Ångron).

The grave finds that can be classified in this category are a hammer, plier fragments and possibly iron bars found in the grave of Hästudden. These are more likely related to iron forging than to iron manufacturing.

In addition to the above-mentioned, another grave must be considered in relation to iron manufacture. The lone grave of Josvedsviken is located near the iron manufacturing sites of Josvedsviken. One of the iron manufacturing sites, Josvedsviken 106b, is contemporaneous with the grave. The grave is located near an old hunting ground dwelling site. It is possible that the actual dwelling site is not contemporaneous with the grave, but there is an asynchronous fireplace that dates to the Migration Period along with the grave. The filling of the grave is iron slag and burnt iron ore, and it makes the grave blaze red. No artefact finds were detected, only bones of swine and capercaillie. No human bones were found either. (Magnusson 1986: 71.)

Osteological finds

I have decided to divide the osteological material into four archaeological categories instead of handling it as one general category. This renders the analysis of the bones within the theoretical model simpler. The categories are human bones, animal bones, unburnt elk and reindeer antlers, and those bones for which it is not possible to determine whether they are animal or human. Animal bones are divided into three subcategories. (Appendix 4.) I will not look at the human bones more closely here.

Unburnt antlers

Elk and reindeer antlers and the cranial parts to which the antlers are attached make up the most common of the osteological finds after the human and indeterminate bones. Instead of including them as one of the subcategories of animal bones, they are classified as a separate archaeological category. The antlers in this category are unburnt and are not found in the graves but rather on them. Those (burnt) antlers that are found in the graves are classified in the find group of elk or reindeer in the subcategory of wild animal bones.

Unburnt antlers have been found on 18 graves in three different cemeteries. They are most common in Krankmårtenhögen, as 15 of the graves with antlers are found there. All of the graves with antlers are from triangular stone settings. Only in one case in Krankmårtenhögen (grave 37) were any grave goods other than bones found in the grave, although some of the elk bone graves also had resin from a box where the human bones had been placed. As mentioned earlier, the antlers are dated to be either contemporaneous with the youngest graves in the cemetery or younger than the cemetery (Olofsson 2010: 100; Welinder 2008: 36, 60).

At Smalnäset, antlers were found on two graves (23 and 31). Both graves are triangular in form. No finds other than bones were detected. There are also antlers in one grave in Halvfariudden (grave 2), but the find context is uncertain as the antlers and cranial parts were found in the grave's filling. The grave is round in shape and did not contain any artefacts. Graves with antlers deposited on them are also found in Swedish Lapland, namely in Tärna parish in graves near Lake Abelvattnet and Lake Gräsvattnet (Zachrisson 2009: 139). They date to around 1 CE (Gräsvattnet) and 500 CE (Abelvattnet) (Zachrisson 2009: 139).

Animal bones

The archaeological category of animal bones consists of three subcategories and 13 find groups. One of the subcategories is indeterminate animal bones. These are bones that can be identified as animal bones, but for which no more precise analysis is possible. Indeterminate animal bones are found in 14 graves in three cemeteries (Smalnäset, Halvfariudden and Vindförberg). The two other subcategories are bones of wild animals and bones of domestic animals. In some cases, it is challenging to detect whether the (wild) animal bones are from the graves or from earlier Stone Age layers under the graves (e.g. Zachrisson 2011: 198).

Elk bones make up the most common find group in the subcategory of wild animals. Elk is found in 14 graves in four cemeteries: Hästnäset (graves 1, 2 and 3), Krankmårtenhögen (graves 1, 2, 10, 28, 33 and 50), Smalnäset (graves 9 and 16) and Vindförberg (graves 3a, 4 and 24). In Hästnäset, the elk bones also include burnt antlers and cranial parts. In grave 50 in Krankmårtenhögen, a cranial part without antlers was found. In Smalnäset and Krankmårtenhögen, no grave goods other than bones were detected, but in Hästnäset some artefacts were found.

Reindeer bones are rather rare in the data with only two occurrences, one in Smalnäset (grave 16), the other in Krankmårtenhögen (grave 1). They both come from graves with elk bones, and the Smalnäset grave is rich in other animal bones as well. None of the bones in the Smalnäset grave have been identified as human. Both graves with reindeer bones lack artefacts.

Bear bones are another common find group. Bones of bear were detected in nine graves at the cemeteries of Krankmårtenhögen (graves 2 and 28), Smalnäset (12) and Vindförberg (3a, 6, 7, 12a, 12c and 15). In Vindförberg, the bear bones were, in fact, bear fangs in three cases. In Smalnäset, the bear bones were the only identified osteological find, and the grave lacked artefacts. The graves in Krankmårtenhögen contained other animal bones as well as human bones.

Bones of beaver (Smalnäset 16, Vindförberg 3a), capercaillie (Josvedsviken 161), fish (Vindförberg 3a, 7, 41 Hästudden), loon (Krankmårtenhögen 2), red deer (Krankmårtenhögen 2) and an unidentified ruminant (Smalnäset 16) were detected in graves. All the graves contained other animal bones, and the graves in Dalarna were quite rich in other grave goods as well.

Bones of domestic animals were found in eight locations. The bones include dog (Hästudden, Vindförberg 3a), horse (Hästnäset 2, Hästudden?), sheep/goat (Klevsand, Krankmårtenhögen 10, Ånnsjön), and swine (Josvedsviken 161, Tjuvholmen). Jensen (1989: 66) notes that the sheep/goat bones at the dwelling site of Ånnsjön are connected to relatively recent animal husbandry in the area. He does not, however, provide any explanation for this hypothesis. In many cases, artefacts were found in connection with the domestic animal bones. The only other artefact that might indicate animal husbandry and agriculture in the data is the spindle whorl from Vindförberg 12a. It may tell us about the spinning of wool or linen (see below).

Tools and working materials

The archaeological category of tools and working materials consists of 14 find groups, which are categorized into three subgroups: working material, tools and parts of tools or artefacts. Knives are the most common tools: they have been found in nine graves located in Finnäset, Hästnäset (grave 1), Tjuvholmen, Vindförbergs udde (graves 1, 5, 6, 14 and 19) and Örviken (5). The other artefacts in these graves range from hunting tools and weapons to clothing and jewelry. All the knives have been found in Dalarna except for the one in Tjuvholmen.

Awls have been found in three graves, one in the same grave as the knife at Örviken (5) and two at Vindförberg. Sockets have also been found in three graves, all from Vindförberg. The rest of the tools include a scraper, a hammer, pliers, scissors, a bronze chisel and firesteel. They were all found in one grave.

Bushings are made of bronze or iron and have been found only at Vindförbergs udde. Staples are also found in iron and bronze, and they come from Södra Getryggen, Hästudden and Vindförberg. Bushings, staples and sockets do not necessarily belong to the archaeological category of tools and working materials. They could be parts of jewelry, weapons or other artefacts that have not been detected in the data because they have decayed before the archaeological excavations. However, most bushings and sockets likely belong, for example, to knives, and staples could be seen as working material.

The only tool connected to agricultural activities is a spindle whorl. It was found in grave number 12a in Vindförbergs udde along with a bone comb.

The stone tools that are included in the data come from the dwelling site of Annsjön. They are scarce in comparison to older Stone Age dwelling sites and consist of two scrapers made of quartz, one made of flint and stone waste. Jensen (1989: 66) argues that most of the dwelling site is much older than the dated fire place (260–435 CE), but again, he does not provide any explanation for why he thinks so.

Weapons

Weapons have not been popular finds in hunting ground graves or other sites connected with the hunting-gatherer societies of Dalarna, Härjedalen and Jämtland. Arrowheads are the most frequent find group. I have described them above as hunting tools.

In addition to the arrowheads, there are four iron spearheads, one shield boss and one bronze pommel. Two of the spearheads are from Vindförbergs udde (graves 8 and 15), while the other two are from Fulufjället and Tjuvholmen. The Fulufjället spearhead was found with arrowheads of iron, and the Tjuvholmen spear was found in the same context as the only shield in the data. It must be noted that the spearheads are not similar to one another in form. Spearheads can often be used to date graves as the form of the spearhead has varied over time. The bronze pommel is from Vindförbergs udde (grave 19).

4.3. Summary

Even though the hunting ground graves in Dalarna, Härjedalen and Jämtland are considered to be related to each other, it is clear that they differ a great deal. Their geographical contexts are similar, and the structures resemble each other from cemetery to cemetery, but the grave goods vary from grave to grave and cemetery to cemetery. It seems to me that the people who used the cemeteries had similar ideas about life after death and how to ensure that the deceased is able to enter the realm of the dead. The same ideas about items needed in the realm of the dead are seen in Dalarna, Härjedalen, Jämtland and generally in pre-Christian graves: the dead seem to have received goods that they likely needed during their life. The livelihood was also likely quite the same: hunting, fishing and gathering. Iron manufacture and domestic animals also gain significance during the Early Iron Age, perhaps because of the growing iron industry (Fossum

2006: 143; see also chapter 6).[15] The grave makers in Dalarna were closer to the Scandinavians in the south and possibly had more (trading) contacts with them. These would result in more products coming their way, which would explain the richer grave goods. Scandinavian speakers might also come to Dalarna for hunting rather than go further to the north. Hunting activities would also result in more intensive contacts and goods coming to the area.

Closeness to another people and intensive contacts with them would probably also lead to an increased number of conflicts. Weapons are not abundant in the finds, but most of them – all but one spearhead and a shield boss from Tjuvholmen, Jämtland – are found in Dalarna. They would indicate contacts and conflicts with others within or close to the area. The spearheads and shield boss from Vindförberg point to (southern) Scandinavia, and the bronze pommels have counterparts in Öland but also in Ostrobothnia, Finland (Lipping 1981: 9, 10). The weapon finds from Tjuvholmen were in bad shape and no comparison with finds from other areas can be made (Magnusson 1986: 74). Perhaps the rich grave goods and especially the Scandinavian jewelry, such as those items found in the cemetery of Vindförberg, also indicate stronger assimilation between the Scandinavian and Saami speakers at an early date.

The animal bones in the graves are more difficult to explain. Perhaps it was believed that the dead would take them to the realm of the dead as sacrifices or as a kind of payment to deities, or perhaps it was food for their journey to the underworld. It might also have something to do with a kind of animal totemism or forefather beliefs: The bear cult and beliefs about humans transforming into animals such as bears and wolves are known from later Saami folklore (e.g. Pentikäinen 1995: 95, 97–104) and can also be seen in the form of bear graves in the archaeological material (e.g. Myrstad 1997). They may well have their roots in the Early Iron Age culture: perhaps the animal bones would in some graves indicate the dead's close contact with the buried animal. The graves with animal bones but without human bones are particularly interesting from this perspective. If it was, for some reason, impossible to bury the person, perhaps an animal was buried instead (Ambrosiani 1984: 54; Zachrisson 1992: 111). However, there is not much proof that animal bones were buried in an immediate context with human bones. Further, most animal bones might have been from the Stone Age dwelling site layers, for example in Krankmårtenhögen. Olofsson (2010, 110) suggests that the antlers and cranial parts of reindeer and

elk are a way of "communicating a message of regeneration towards the animal persons with whom the human persons constantly interacted".

It is not easy to determine the language spoken by the buried or the grave-makers based on the archaeological material. However, it is not realistic to interpret them (only) as graves belonging to Proto-Scandinavian speakers when we know that there were other people on the hunting grounds too. What is more, grave customs described as belonging to Scandinavian-speaking culture are already known, even from areas close to the hunting ground graves. The inland hunting ground areas of Jämtland and Dalarna have traditionally been an area utilized by the Saami speakers and their (non-Saami-speaking) ancestors, probably already before the Scandinavian speakers. I will next combine the two data sets – archaeological and lexical – to see what the combination reveals about the Southern Saami past.

5. Combining the lexical and archaeological material

The combination of lexical and archaeological material is presented in Appendix 4. First, I will discuss the uncorrelative material and then proceed to the correlative archaeological and semantic categories. Then I will consider the problems that arose when I applied the theoretical model to my data. Finally, I will evaluate the functionality of the theoretical model.

5.1. Uncorrelative semantic and archaeological categories

The lexical finds in the categories of action processes, adjectives, conditions and changes, flora, natural phenomena, relations in space and time, terrain and landscape, trade, water and water systems, as well as the category of other words, refer to phenomena that cannot be detected in the archaeological material. I have included these semantic categories in the model (Appendix 4) but I have not specified the lexical finds within them. The semantic categories of food and cookery and religion and beliefs could also be listed here. There are no archaeological categories that could correspond to these semantic categories unless animal bones are counted as food and cookery and grave structures as part of religion and beliefs.

The semantic category of flora might correspond with archaeological material if there had been any palaeoecological investigations performed at the archaeological sites or near them. Unfortunately, to my knowledge,

none have been taken from the sites in the research data, or if they were taken, they did not provide any valid information.[16]

Terrain and landscapes as well as water and water systems can also be detected in the archaeological material from the perspective of landscape archaeology or spatial analysis of the remains: how the remains are located in relation to one another and the landscapes of the area. In this research, landscape archaeology or spatial analysis was not applied in a specific enough manner and therefore the archaeological perspectives connected with these two semantic categories are not discussed.

The semantic categories of humans as members of society, trade and vehicles and travelling can hypothetically be seen in the archaeological material. Humans as members of society can be detected in graves: some of the grave goods can be interpreted as status symbols. Artefacts showing connections to the southern Scandinavia may even speak of status symbols that were affected by the Proto-Scandinavian speakers. In my combined material, however, there are no straightforward correlations that could reveal structures of the Southern Proto-Saami-speaking society and the Proto-Scandinavian speakers' influence on it. The semantic category of trade is only secondary, and has one word, *laajkoe* 'debt', an abstract concept that cannot be seen in the archaeological material. However, many of the words with a primary meaning in other semantic categories might indicate trading with the Proto-Scandinavian speakers, e.g. *aarhtse* 'eagle' and *faala* 'whale'. In the archaeological material of this research, no remains have been detected that can be correlated with these words. No archaeological remains for vehicles have detected in this research either.

Three of the archaeological categories (glass artefacts, iron manufacture structures and weapons) do not have counterparts in the semantic categories. Glass artefacts include only the find group of beads, and these are mostly made of frit. The PScand loanword stratum in SaaS does not have a word referring to beads. The same applies to all of the artefacts that are identified as weapons in the data.

5.2. Correlative semantic and archaeological categories

All of the archaeological categories that were not mentioned in chapter 5.1 correlate with at least one semantic category and vice versa. However, there are many correlating categories in which not many or any of the finds correlate with one another. Thus, not many conclusions can be drawn on the

basis of categories alone, with the exception of the idea that the linguistic data generally represents the same domains of life as the archaeological data. The best correlations are drawn from the following combinations (semantic category / archaeological category): domestic animals / domestic animal bones; pieces of clothing / clothes; reindeer (and elk) / unburnt antlers and cranial parts of reindeer (and elk); tools, pieces of clothing, fabric / tools.

In addition to these, there is a hypothetical correlation between body parts and human osteological material. However, to correlate them does not provide any relevant information on the contacts between the Southern Proto-Saami and the Proto-Scandinavian speakers. I have not analysed the human osteological material to any extent. Therefore, I have not listed the lexical finds and archaeological find groups here.

Work-related data

The semantic main category of work-related words coincides with the archaeological main category of tools and working materials (and all of its subcategories). The archaeological and semantic subcategories also coincide but for two exceptions: On the archaeological side, there is no counterpart for the semantic subcategory of working, as the only word in the category is the verb *aalhtedh* 'to prepare; to work with animal skin'. In turn, there is no counterpart for the archaeological subcategory of parts of tools or artefacts. There are no archaeological or semantic categories that would fully coincide, meaning that all of the lexical finds in the category would correlate with all the archaeological finds of the corresponding category.

There is no multidisciplinary evidence of iron manufacture in the research material: no words implying iron manufacture have been borrowed from PScand into SaaS. However, it is not entirely out of the question that the word *aassjoe* 'hearth in a smithy' could be connected to the archaeological remains of furnaces. At least the iron hammer, pliers and iron bars found in the grave at Hästudden can be related to the hearths in smithies.

The words *nejpie* 'knife' and *aavtjoe* 'edge of a knife' correlate with the (iron) knives that appear in the grave material of the archaeological data right after the first hunting ground grave phase of the Krankmårtenhögen and Smalnäset cemeteries. Flint tools might be connected to the possible

PScand loanword *dytnije* 'flint; flintstone used as a firesteel' discussed by e.g. Qvigstad (1893: 129) and Sammallahti (1998: 128). However, no PScand reconstruction is given for the word and therefore it is not included in my data.

The rest of the lexical finds and archaeological find groups within the categories of tools do not correlate. It is no surprise that e.g. *rïejhpe* 'rope, cord' is not detected in the archaeological sites, as artefacts of organic material are not usually preserved for long in the ground. However, it is interesting that the data includes words for axe, tin and silver, while the corresponding archaeological find groups are missing. Most of the artefacts in the data are found in graves. It is possible that axes, tin and silver were not objects used as grave goods. Axes, for example, might have been in use at dwelling sites only, and as the dwelling site material is scarce, no axes are found in the data.

In turn, the lexical finds for e.g. scissors and chisels are lacking, but the archaeological find groups are present. These were not very common tools at the time, as there is only one pair of scissors and one chisel in the data. It is possible that there were words for them that disappeared once the tools were no longer used among the (Southern Proto-)Saami speakers. Yet another conclusion could be drawn from examining where the SaaS words for the objects originate and what the etymology might tell about them.

Agriculture and animal husbandry

The archaeological subcategory of domestic animal bones can be connected to the semantic category of agriculture and animal husbandry. Many of the find groups in the archaeological category are reflected in the lexical finds: Bones of sheep/goat are referred to using the words *gaajhtse* 'goat', *saavtje/saavhtse* 'sheep', *laampe* 'lamb' and *vïerhtse* 'ram'. The words *täjhkoe* 'female dog' and *svijnie* 'swine' and the archaeological find group of dog and swine bones can be also correlated. There is no reference to horses in PScand loanword strata in SaaS, but horse bones and a part of a horseshoe are among the archaeological data. In turn, there are words for cow and calf of a cow but no archaeological material of cows.

Agriculture cannot be seen in the archaeological material of the research: there are no artefacts connected to planting or harvesting, and no palaeoecological samples have been taken. However, there is a spindle whorl in the archaeological material, which points to agricultural

activities. The words referring to cultivation are scarce, though the words for food produced by agricultural means are plenty. These might indicate either agricultural activities among the Southern Proto-Saami speakers or the purchase of agricultural products from Proto-Scandinavian speakers. The word *aernie* 'hearth' in the semantic category of buildings and constructions, as mentioned before, might be an indicator of agriculture or exploitation of agricultural products such as flour for baking bread. However, there is no archaeological material about baking ovens of this sort in the data used in the research.

There are lexical finds in other semantic categories that might point to sedentary life among the Southern Proto-Saami speakers: *ståapoe* 'house, cottage' and *buvrie* 'storage building' in the semantic main category of buildings and constructions. Unfortunately, no archaeological evidence for house or storage remains is present in the data. However, there are house remains traditionally connected to the the Scandinavian culture very close to the hunting ground areas. Further, Stedingk and Baudou (2006: 194) mention that shielings are found in the southern parts of the hunting ground area of inland Scandinavia, but I have no knowledge of those in the research area.

Clothing and jewelry

It is notable that there is a large variety of jewelry and accessories in the archaeological data but no PScand loanwords that refer to them. As stated above, Hansen and Olsen (2006: 103) mention that there is a lack of Germanic/Scandinavian jewelry in the archaeological material. However, Lipping (1981: 12–16) notes that some of the artefacts are Scandinavian types, although she concentrates mainly on the cemetery of Vindförberg in Dalarna; the lack of jewelry is apparent in Härjedalen and Jämtland.

The vocabulary for clothing is larger and is reflected in the archaeological find group of fabric. One of the words, *vaanhtse/faahtse* 'mitten' refers to woolen clothing; *vaarese* 'homespun fabric' and *vaarjoeh/vaarjese* 'clothes; fabric' do not specify the material. *Lijnie* refers to shawls and scarves but the cognate in ON, *lín*, means linen. The two pieces of fabric found at the archaeological excavations at Smalnäset and Krankmårtenhögen have not, to my knowledge, been analyzed. They are also problematic from the linguistic perspective because of the early dating (see chapter 6). There is, however, a tool connected to weaving: a spindle whorl. Southern

Proto-Saami and Proto-Scandinavian contacts certainly involved weaving, as there is both archaeological and lexical data referring to it. The lexical finds and the archaeological find group can also be seen as further evidence of domestic animal husbandry among the Southern Proto-Saami speakers. It is likely that the Proto-Scandinavian speakers sold shawls made of linen to the Southern Proto-Saami speakers, which influenced the semantic change of the SaaS word to shawl.

Reindeer

The bones of (female) reindeer may be connected with the lexical find *råtnoe* 'female reindeer'. *Aevsie* 'cranial parts around reindeer (or elk) antlers' has straightforward counterparts in the antlers and cranial parts found in the hunting ground graves.

The rest of the lexical finds do not have counterparts in the archaeological find groups. Many of the words refer to phenomena and concepts that are impossible to detect in archaeological data, e.g. *eajma* 'reindeer doe who wanders where it wants'. In theory, it would be possible to find remains of *gaertie* 'reindeer corral' and *haame* 'antler-less reindeer'. It should be kept in mind when combining the reindeer vocabulary with archaeological material that the semantic development of reindeer-related words has been drastic, and it is possible that the modern meanings of the words differ from those of the Roman Iron Age and Migration Period.

Wild animals

There is evidence in the lexical data pointing to marine animals having been part of the contacts between the Southern Proto-Saami and Proto-Scandinavian speakers. It is probable that marine mammals, such as whales and train oil, as well as seashell pearls and even fish, were significant as trading goods – but the Proto-Scandinavian loanwords in SaaS do not reveal whether the Southern Proto-Saami speakers were the sellers or purchasers of these marine products. Similarly, eagles and falcons might have been desirable trading goods, but again, it is difficult to determine the direction of the trade. The archaeological material of my research on marine animals and birds is scarce – there are remains of (unidentified) fish, but falcons, eagles, whales, seashells and pearls are missing. However, there is some analogical material elsewhere in Saepmie indicating, for

example, exploitation of whale train oil (e.g. Nilsen 2016), and some of the material should undoubtedly be connected to Saami speakers.

Other lexical finds in this category refer to insects, and it is no surprise that these are not found in the archaeological material. Most of the animal bone find groups found in the data do not coincide at all with the lexical finds.

5.3. Problematic categories, find groups and lexical finds

There are some problems with the basic theoretical model. The biggest flaw is – and this does not have anything to do with the model itself but with the different nature of archaeological and lexical data – presented above in the form of semantic categories that are impossible to detect in archaeological material. There are other problems as well, but the theoretical model is quite flexible and can be applied to problematic material.

One of the problems is the correlative semantic and archaeological categories in which none of the lexical finds or archaeological find groups correlate. The hypothetical category correlations are (semantic category / archaeological category): animal handling / artefacts connected with animals; hunting and fishing / hunting tools. In addition, the categories of buildings and constructions / structures; wild animals / wild animal bones do not correlate except in the case of a few words. This same challenge is faced even within those categories that correlate better. For example, the semantic subcategory for domestic animals correlates very well with the archaeological subcategory of domestic animals, but there is no counterpart for every single word or find group.

Lacking lexical finds or archaeological find groups – if they can even be called lacking – are not an actual problem, as we get additional information about the culture: we do not have a word for horse but there are archaeological remains of horses. Because the lexical data prove the presence of other domestic animals and there is archaeological evidence of horses in the data, it is convenient to assume that Southern Proto-Saami speakers knew of horses.[17] The words referring to cows prove that the Southern Proto-Saami speakers were familiar with cows as well.

It is also essential to consider the fact that the categories including domestic animal names and archaeological finds are etic categories of the researcher. It is entirely possible that the emic category of the Southern Proto-Saami did not include cows: the words were known because of the

intensive contacts with Proto-Scandinavians who kept cattle. The same applies to many other words without counterparts in archaeology: The Southern Proto-Saami speakers may have needed words for e.g. whales or houses because they were an important part in the neigbouring Proto-Scandinavian culture.

The lexical finds within the categories that mostly do not correlate with the archaeological find groups reveal that the Proto-Scandinavian language did have some kind of influence on the phenomena around the word. That said, it is impossible to detect the nature of that influence. If there is, in turn, archaeological material referring to a phenomenon, but no word found among the PScand loanwords, this may indicate that the contacts did not involve the phenomenon seen in the archaeological material. Or, if there is solid evidence in the archaeological material about contacts towards a Proto-Scandinavian-related culture, it might mean that there has been a PScand loanword referring to the phenomenon, but it has disappeared from SaaS at some point during the history of the language. It is also possible that no new word was borrowed because there was already a suitable word in Southern Proto-Saami for the new phenomenon. An interesting phenomenon is the furnace structures found in the archaeological data. There is no word for a furnace in the PScand loanword strata, and according to the SaaS dictionaries, no word for the structure is found in the language at all. Has it disappeared, or has there never been a word for furnaces? The latter seems unlikely, as iron manufacture was very intensive in the dwelling areas of South Saami speakers from the Early Iron Age all the way to historical times (Magnusson 1986: 168–178).

There are also cases in the data in which an archaeological find group or even (sub)category coincides with a lexical find but the semantic and archaeological categories do not coincide. One case is *aajmoe* 'the other world (i.e. the realm of the dead)'. If the word *aajmoe* had a very concrete meaning of cemeteries and graves being the realm of the dead, or at least the passage to the realm of the dead, there could be a correlation between the subcategory of grave structures and the lexical find *aajmoe*. Nevertheless, the correlation is vague, as neither the archaeological category nor the word reveals anything specific about the phenomenon, and the word may have a more abstract meaning as the realm of the dead. In addition, in Scandinavian languages, the cognate word has the meaning of 'home', and in PScand the reconstructed meaning is thought to be 'village' (> Sw *hem* 'home') (Sammallahti 1998, 227[18]). The change in the semantics towards a religious meaning

may have taken place internally within the (Southern Proto-)Saami culture; the word might have been borrowed in its original meaning. The example shows that it is necessary also to compare lexical finds with archaeological find groups and categories regardless of semantic category. These sorts of problems only concretize how the categories are strongly an etic system.

Another problematic case concerns the word *aevsie* and the semantic category of religion and beliefs. There is no archaeological data in my research that could be easily detected as religious other than the grave structures (and the finds in the graves because of their context). *Aevsie* and the reindeer antlers are one possible religious correlation, but as the word does not have religious connotation in modern SaaS, I have classified it within the semantic category of reindeer and reindeer husbandry. Perhaps here the archaeological material can reveal a lost, emic religious (connotative) meaning that cannot be seen in the modern semantics of the word.

There is no example of a correlation between a semantic category and a single archaeological find group. However, it does not mean that such a phenomenon would not exist in other data, especially because the hierarchy of semantic categories within an ontology is flexible.

Finally, most of the more precise correlations are made between subcategories. Therefore, main categories also correlate because the subcategories are always included in main categories. This raises the question of whether the main categories are needed in the model at all. However, there are some cases where, for example, a meaning of a lexical find is so broad that it best correlates with a main category, e.g. *bearkoe* 'meat for food' correlating with animal bones. Categorizing finds into main categories and subcategories also makes it easier to perceive the phenomena around the lexical finds and archaeological find groups.

5.4. Summary

There are clear advantages to the theoretical model for combining archaeological and lexical material. The model reveals correspondences and uncorrelative objects within the two sets of data and can be used to verify some matters that cannot be concluded with certainty based only on archaeological or lexical data. The material associated with domestic animals is a strong example of the functionality of the model.

It seems that, when comparing lexical strata to contemporaneous archaeological material, the strong trends that spread by contacts stand out.

Along with the domestic animals, iron products – particularly knives – are detected in both materials of this research. Those objects and words that seem to relate to these phenomena but are seen only in one of the two sets of data add to the reconstruction of the culture and language contacts of the Early Iron Age.

Sometimes the correspondence between a word and an archaeological object can be misleading. Therefore, a careful analysis of all the correspondences must be made: the spatial and temporal contexts should be considered for the material remains, and the language historical contexts for the words. As an example from my material, one can consider the problems with *aevsie* 'antlers and cranial parts of reindeer/elk' and the corresponding archaeological material (see chapter 6).

In the majority of cases, the archaeological and lexical data do not correspond with one another. This should be seen not as a problem, however, but as an advantage. The two sciences coincide in the nuclear areas of contacts. The more peripheral areas are not represented in both sets of data, but they bring more knowledge to the general view of the prehistorical period under examination.

Also, when combining a loanword stratum with archaeological material, not everything in the simultaneous archaeological material necessarily refers to contacts with those from whom the words are borrowed. There are areas of life seen in the archaeological material which the loanword donor language did not affect at all. Those areas reveal nothing of the cultural and language contacts under scrutiny. Nevertheless, they do provide information about the culture of the speakers who have received the loanwords. It is also possible to have cultural contacts without borrowing words. An artefact type could be new but there could already be an old word suitable to refer to the new artefact type. Some of the uncorrelative objects in the material might very well be phenomena of this kind, for example the uncorrelative data of jewelry.

However, it would be essential to examine the uncorrelative material in more detail. From where do the words referring to jewelry and accessories, weapons and other archaeological material originate? In this article, I concentrate on the contacts between Proto-Scandinavian and Southern Proto-Saami and will not discuss these questions further here, but they are certainly of interest for the holistic picture of the South Saami prehistory.

6. New perspectives on the Early Iron Age in the hunting grounds in Jämtland and Dalarna

Combining the lexical material of North-West Germanic and (early) Proto-Scandinavian loanword strata and the archaeological material of the hunting grounds in inland Scandinavia reveals new perspectives on the prehistory of today's South Saami speakers. The results presented here will concern matters of livelihoods and trade that were affected by contacts with Proto-Scandinavian speakers. In addition, a new theory about an extinct Paleo-European language in southern Norrland during the Early Iron Age will be tentatively discussed.

6.1. Domestic animals among Southern Proto-Saami speakers

A few years ago, Stedingk & Baudou (2006: 194) stated in an article based on their study on pollen analysis that the "inland subsistence in central Norrland [Jämtland, Härjedalen, Ångermanland] during the Iron Age was characterised by diversity and flexibility, not by a uniform and static hunter-gatherer culture" and that "extensive forest grazing was widespread throughout central Norrland". The archaeological material and NwG and PScand loanword strata of my research clearly supports their statement. The ethnic and language affiliation Stedingk & Baudou assign to the archaeological material is, however, problematic. They are not straightforward concerning matters on ethnicity and languages, but they do indicate that the grazing lands, graves with domestic animal bones and iron manufacture sites, as well as the shieling finds in Dalarna and Jämtland, could not have belonged to a Saami-speaking culture (see also Fossum 2006: 90, 140).

However, linguists (e.g. Heikkilä 2014: 240) have already proposed that the predecessors of South Saami speakers in the Early Iron Age in Scandinavia practiced animal husbandry. Even archaeologist Fossum (2006: 143) agrees with this. Aikio (2012: 80) has noted that the domestic animal vocabulary borrowed from PScand is a result of the trade network. As my study has shown, the vocabulary referring to domestic animals, borrowed from NwG and PScand, is large, and the words correlate with the domestic animal bones found in the hunting ground graves. Furthermore, SaaS has borrowed a word for a shieling or storage building (*buvrie*) from PScand, and even a word for a house or cottage (*ståapoe*) originates from PScand. These concepts were clearly received from Proto-Scandinavian speakers,

but they do indeed suggest that Southern Proto-Saami speakers practiced some sort of agrarian way of life in the Early Iron Age. Some of them might have settled down in houses in order to concentrate on domestic animals as their main livelihood (see also Heikkilä 2014: 240).

6.2. Reindeer pastoralism

In addition to domestic animals, particularly the lexical data of my research reveal another important livelihood: reindeer pastoralism. Reindeer have been important animals to the Saami speakers throughout their history in Scandinavia. As far as it is known, the South Saami were not domestic animal husbandry practitioners later in history; they practiced large-scale reindeer husbandry. The question is why practitioners of domestic animal husbandry ended up as reindeer herders.

Even though it seems that several reindeer words were borrowed from the Scandinavians, it should be noted that there have been semantic shifts from the original PScand word to the SaaS word in the case of every single word referring to reindeer. One such word is *krievvie*. The original meaning of it has nothing to do with the SaaS meaning 'reindeer herd (that is herded by a reindeer shepherd)' as the word was used to refer to 'a small corral for cattle' in ON. In the light of the lexical and archaeological evidence of Southern Proto-Saami speakers as animal husbandry practitioners, it is probable that the word preserved its original meaning after it was borrowed into Southern Proto-Saami. Only once the transition to reindeer pastoralism had taken place in the Viking Age (Aronsson 1991: 102; Hansen & Olsen 2006: 99–100; Storli 1993: 3, 20; see below), and the meaning of 'cattle corral' was no longer needed, did the semantics of the word develop into the current meaning. The same applies to other reindeer words originating from this vocabulary.

It is certainly possible that only some of the Southern Proto-Saami speakers adopted domestic animal husbandry and the others continued as hunter-gatherers. Fossum (2006: 143) states that animal husbandry was connected to the Saami (speakers) who were involved with the iron production network. Reindeer pastoralism perhaps emerged after the most intensive iron manufacture phase was over and iron-related trade had decreased. Perhaps the (Southern Proto-)Saami speakers needed to find new ways of livelihood that profited them better both in trade with neighbouring groups and in providing food and other commodities to their own

society. Reindeer pastoralism and hunting fur animals was the answer to that need (e.g. Aronsson 1991: 113; Hansen & Olsen 2006: 99). The transition from livestock to reindeer pastoralism was gradual, as bones of livestock have been found from as late as the Middle Ages (Sundström 1989a: 159). Zachrisson (1997: 227) sees a pattern in graves that indicates a change from agrarian grave types to hunter-gatherer grave types in the upper parts of the river Ångermanälven during the Viking Age. The site is outside of the geographical area of this research but close to it. This pattern might be proof of (Southern Proto-)Saami speakers' gradual change from domestic animal herding to reindeer pastoralism and hunting. It is also possible that some of those (Southern Proto-)Saami speakers who practiced animal husbandry gradually assimilated into the Scandinavian speakers.

6.3. Southern Proto-Saami contacts with Paleo-European of central Scandinavia

The oldest hunting ground graves of Smalnäset and Krankmårtenhögen show unburnt elk and reindeer antlers and cranial parts deposited on the graves. This has no doubt been a religious or ritual affair, but it also reveals the importance of these animals as livelihood (e.g. Stedingk & Baudou 2006: 187; Fossum 2006: 141). Recent datings from the antlers and cranial parts of Krankmårtenhögen suggest that the antlers and cranial parts are younger than many of the graves. It seems that the antlers were deposited on the graves up until the 500s CE, during the 300 years after the burying had ceased. (Olofsson 2010: 100; Welinder 2008: 36, 60.)

There are no antlers and cranial parts found on any other hunting ground graves, with one uncertain exception (Halvfariudden). After the depositions cease in Krankmårtenhögen and Smalnäset, there is a gap of at least 200 years without antler depositions. They appear again in the archaeological material of the research area at the end of Merovingian Period and during the Viking Age – now as offers on sacrificial sites (Zachrisson 2009: 142). These sites have long been considered an important feature of a culture connected to the Saami (speakers).

The correlation between reindeer antlers and cranial parts found at the early cemeteries and the PScand loanword *aevsie* is quite striking. One would be tempted to connect the word with the antlers found on graves in Smalnäset and Krankmårtenhögen. However, the dating of the graves to Pre-Roman Iron Age (500–1 BCE) is a little too early for PScand or even

NwG loanwords in Southern Proto-Saami. The predecessor of the modern South Saami language did not arrive in Scandinavia until after the beginning of the Common Era; maybe already as early as 100–200 CE but in 400/500 CE at the latest (see also Aikio 2006: 43; 2012: 77; J. Häkkinen 2010b: 59). Therefore, in theory and according to their dating, the depositions of antlers and cranial parts could have been made by Southern Proto-Saami speakers, but I would rather see a continuity from the grave-makers in the depositions. Even Stedingk and Baudou (2006: 186–187; see also Fossum 2006: 90) agree that in Krankmårtenhögen and Smalnäset a continuation from earlier hunter-gatherer cultures of the area is visible.

Who, then, were the grave-makers and what is their role in the South Saami prehistory? I propose that the graves were made by a Paleo-European speaking people who dwelled in the area before the Southern Proto-Saami and the Proto-Scandinavian speakers. Aikio (2004, 26) notes that the substrate influence has been partly contemporaneous with PScand loanwords in Saami. Paleo-European languages on Finnish soil have been studied (e.g. Aikio 2004; 2012; Saarikivi 2004), but no studies have yet been conducted about extinct languages in central and northern parts of Scandinavia as far as I am informed (however, see the map in Aikio 2012, 66 and Parpola 2017). Archaeologists have been reluctant to accept the presence of a third group in southern Norrland and Dalarna as a valid option: Stedingk and Baudou (2006) do not even consider the idea, and Zachrisson (2011: 198) seems to be against such an interpretation. However, Carpelan (2004: 82) has suggested that this hypothesis should be explored, and Olofsson (2010: 111) mentions it briefly.

When the Southern Proto-Saami language arrived in Scandinavia, it came in contact with the Paleo-European language. Very recently, Parpola (2017: 260) has proposed that a West-Uralic language form[19] arrived in the area of Lake Mälaren along with Akozino-Mälar axes. Stedingk & Baudou (2006: 187) and Fossum (2006: 140) note that the cemeteries of Krankmårtenhögen and Smalnäset are strongly influenced by the Mälaren area. It is possible that there is a connection between the Paleo-European language that would have been spoken in southern Norrland and the West-Uralic language spoken in Mälardalen. What kind of connection – whether the Paleo-European speakers of southern Norrland were not, in fact, Paleo-Europeans at all but West-Uralic speakers – cannot be defined yet, and therefore I have decided to refer to the makers of the cemeteries of Krankmårtenhögen and Smalnäset as Paleo-European speakers.[20]

The contacts between the Southern Proto-Saami and Paleo-European languages became intensive, and the Southern Proto-Saami speakers adopted features from the Paleo-European culture. The hunting ground grave custom changes around 200 CE. I see this change as the immigration of Proto-Saami language (and speakers) into the area.[21] The contacts between the Southern Proto-Saami and Paleo-European speakers also changed the Paleo-European culture, and the depositions on old cemeteries might be connected to this change and the need to remember one's ancestors. (For another recent interpretation of the depositions, see Olofsson 2010).

The Paleo-European speakers gradually adopted the Southern Proto-Saami language and these two groups assimilated into one. In this light, it is sufficient to state that the makers of the Krankmårtenhögen and Smalnäset cemeteries should be viewed as the ancestors of the South Saami, but they did not speak any form of a Saami language before the language shift. Therefore, it is questionable whether the grave-makers (and the cemeteries) can be called Saami, as has often been done in research.

The term pre-Saami (Norwegian *førsamisk*) proposed by Gjerde (2016: 235) could be, in theory, used to refer to the culture of the Paleo-European-speaking people from a perspective that stresses their ancestral relationship to the Southern Proto-Saami and modern South Saami speakers. From a linguistic perspective the term in this meaning is, however, problematic, as Pre-Saami (or Pre-Proto-Saami) refers to the language form from which Proto-Saami developed. The language of those buried in Krankmårtenhögen and Smalnäset may have indeed affected Southern Proto-Saami, but it cannot be considered a Pre-Saami language form because its effect on Southern Proto-Saami would have been only substrate-like in nature.

Gjerde (2016: 224, 228), and other archaeologists who have proposed the heterogeneity of the hunting ground graves (see Gjerde 2016: 203 and the references there), do have a point: the lake and mountain graves of central Scandinavia have been in use for 1500 years, and it is a given that ethnic, cultural and language identities would change over such a long period: contacts with neighbouring people, environmental circumstances, diseases, technological developments and many other factors lead to change. From the linguistic perspective, however, the hunting ground graves could be Southern Proto-Saami from around 200 CE onwards. The influence from Paleo-European-speaking culture can still be seen, and the Proto-Scandinavian speakers influenced the grave customs for a long time after the Early Iron Age.

The reindeer antlers on later sacrificial sites were the result of development of the (Southern Proto-)Saami culture into reindeer pastoralism, which was perhaps affected by ever more intensive contacts with the Scandinavians: when the reindeer pastoralism grew into a more profitable livelihood than domestic animal husbandry, it also affected the religious life. The word *aevsie* 'antlers and cranial parts of reindeer or elk' was perhaps borrowed from PScand with the orginal meaning of 'skull' and contracted to its current meaning only when the antlers became important religious objects around the emergence of the sacrificial sites. Therefore, even though the correlation between the word *aevsie* and the antlers in Krankmårtenhögen and Smalnäset is quite convergent, I do not see that there could be a connection between the word and the phenomenon.

The Viking Age in general is a period in history when the amount of sacred and profane remains increases in number. Fossum sees the phenomenon as a strengthening of ethnic identity of the Saami caused by the intensified contacts with other groups in the area. (Fossum 2006, 175.) To me it seems that the Viking Age is the first time the Saami-speaking society develops into the culture and ethnicity we have glimpses of in written sources and perhaps even oral folklore.

6.4. Iron manufacture

The discussion above has speculated on the involvement of the Southern Proto-Saami speakers in iron manufacture. There is no correlating evidence of iron manufacture in the two datasets used for this research, however. The archaeological material is visible, but no words referring to iron manufacture are found. Therefore, it is difficult to comment on the involvement of the Southern Proto-Saami speakers in the activity in the light of this research.

Nevertheless, I agree with Fossum (2006: 143) that the domestic animal husbandry among the Southern Proto-Saami speakers was connected to the iron manufacturing in Jämtland, Härjedalen and Dalarna – early datings of iron manufacture sites indicate this. According to the earlier Proto-Germanic loanword *ruevtie* 'iron', the Proto-Saami speakers were familiar with iron long before their contacts with NwG and PScand. It should be considered that the Scandinavians may have first learned of the rich iron ore sources of the inland regions from the Southern Proto-Saami speakers. It is probable that the iron manufacturers among the Southern

Proto-Saami speakers were included in the iron production network as active operators, not passive workers as some have suggested (about the hypotheses on iron production, see e.g. Magnusson 1986; Ramqvist 2005a: 2005b, 16–17, 27 fig. 19). It is also possible that the Paleo-European people were the first ones involved in iron manufacture in the area as there is at least one iron manufacture site potentially dated to the Pre-Roman Iron Age (Josvedsviken 104 195 BCE–207 CE; Magnusson 1986: 68, 149). However, this is a highly speculative hypothesis, and further research is needed to examine it.

7. Conclusions

The combination of archaeological and lexical research offers new advantages for the study of prehistory. It can verify hypotheses about phenomena and reveal completely new insights into the manner of contacts between different language groups and cultural and economical phenomena among a group of people. It could even reveal (a) language(s) spoken within an archaeological culture. In the future, the theoretical model should be tested with other material to see what kinds of further adjustments are needed.

My research shows that there is a plausible chance that the predecessor of the South Saami language immigrated to inland Scandinavia already during the Early Iron Age and had its contacts with PScand there. In fact, I suggest that the immigration took place already around 200 CE, that is, a few hundred years earlier than suggested by other linguists.

The presence of domestic animals among the Southern Proto-Saami-speaking culture of the Roman Iron Age and Migration Period has been studied from multidisciplinary perspectives which should be further debated among archaeologists and linguists. Related to this, it would be interesting to conduct palaeoecological research in the hunting ground areas of Jämtland, Härjedalen and Dalarna to see if it can provide more knowledge about cultivation in the area during the Early Iron Age.

Much could still be done with the data presented here as well: It would give an even more holistic picture of the past to examine the etymology of words referring to the archaeological find groups that lack correlating lexical finds. Another interesting perspective would be to examine the PScand loanwords in another Saami language and the archaeological remains of the area where the Saami language in question has been (and is) spoken. The differences and similarities in the results would provide more

knowledge about the nature of language and cultural contacts of different Saami and Scandinavian speakers during the Early Iron Age.

Finally, further and thorough research is needed to examine the presence of a Paleo-European language in central and northern parts of Sweden and Norway during the Early Iron Age. Genetics combined with archaeology and linguistics might be of great interest to the language and cultural contacts that took place in the research area during the Iron Age. Ancient DNA samples from the osteological material of the later hunting ground graves with unburnt bones might bring another new perspective on the matters discussed here.

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Notes

1 I am obliged to Jaakko Häkkinen, Inga Nieminen, Ulla Moilanen, Jasse Tiilikkala, Johan Schalin, Jussi Ylikoski and two anonymous referees for commenting on earlier versions of this article.

2 I have not included Saami archaeological material from Central Norway in my research because I have based my research on the hypothesis that the predecessor of the South Saami language first immigrated into Scandinavia around the Gulf of Bothnia, along the coast or by crossing over the southern part of the Gulf of Bothnia or over Kvarken. (I will examine these different routes in a later study.) This means that the language would have first arrived in the areas in Sweden.

3 I will discuss the research history of combining archaeological and linguistic studies elsewhere later.

4 In this article, I mark lexical finds in *cursive*. The concepts behind the words are in regular font. E.g. *knife* refers to the lexical find and knife refers to the concept of a knife.

5 Recently, a new identification method for separating the bones of sheep and goat in the archaeological material has also been introduced (see Salvagno & Abarella 2017).

6 The list of references for every word in the material can be found in Appendix 2.

7 It should be noted that during the Early Iron Age there was no reindeer husbandry, not even reindeer pastoralism among the Southern Proto-Saami speakers. They might have kept a few tame reindeer to carry burdens or to lure wild reindeer into a trap (Hansen & Olsen 2006, 198–209). I have decided to call the semantic category "reindeer and reindeer husbandry" because the categorization of words has been made according the modern meanings of words. The modern meanings are undoubtedly connected to reindeer husbandry.

8 The word for wool, *ålloe*, *alla*, is a Late PScand loanword (Heikkilä 2014: 119, 119f 106), and is therefore excluded from my research data.

9 At the same time as the words referring to iron, a word for flint was most likely also borrowed. I have not included the word (*dytnije* 'flint; flintstone used as firesteel') in my analysis as the PScand form has not been reconstructed, although it has been suggested that the word is a loan from PScand. Flint may not have been a commonly used stone type before the contacts with PScand speaking people: (Southern) Proto-Saami might have been spoken earlier in areas with no flint. Additionally, as my anonymous referee has kindly pointed out, the word likely relates to firesteels that became widespread in Scandinavia during the Roman Iron Age.

10 In addition to these sites, there is one more cemetery, Södra Rullbonäset in the parish of Mora, which has 30 graves. Six of these were excavated in 1867 and 1920, but no reports of the excavations have survived. According to Serning (1966a: 163–165), the grave goods and osteological material were scarce. Only one fibula-shaped buckle was found, and this dates the cemetery to 200–550 CE. The cemetery is not among my research data.

11 In Saami linguistics, this term is used of a language form that has not undergone certain sound changes characteristic of Saami languages. For further discussion, see chapter 6.3.

12 It should be noted that there are iron manufacturing sites elsewhere in Sweden dating all the way back to the Pre-Roman Iron Age (500–1 BCE), but clear evidence

from the area of Jämtland and Dalarna is missing (Magnusson 1986: 219–221) with the exception of one site (Tomte 1:2, Josvedsviken).

13 The archaeological report or any other detailed reference for RAÄ 7 Övre Grundsjön, Härjedalen is missing so the information about the site is vague and therefore it is not listed in Table 5.

14 The reference literature for my material is listed in Appendix 3.

15 Even if the artefacts found in graves were not everyday items, something similar were probably used in everyday life, and therefore I hold it plausible to discuss livelihood and everyday life based on grave finds.

16 Pollen analyses have been carried out using samples from nearby areas, and one of the samples can be dated to the Roman Iron Age. It has given proof of forest grazing and animal husbandry. (Stedingk & Baudou 2006.) The sample site is, however, located in Ångermanland and is not further discussed here.

17 According to Heikkilä (2014: 240 footnote 200) the SaaS word *hierkie* 'horse' is a loanword from Finnish *härkä* 'ox' borrowed around the same time as the PScand words.

18 Sammallahti (1998: 227) presents the PScand loan etymology as uncertain. He holds the Finno-Saamic etymology SaaN *áibmu* (SaaS *aajmoe*) ← FS **ajmo* (cf. Finnish *aimo* 'a whole, quite a') as more certain. However, phonetically and semantically, the PScand etymology is just as likely. Lately, it has been argued that there is no common genetic Finno-Saamic protolanguage (e.g. Saarikivi & Grünthal 2005: 124; Aikio 2012: 67–70).

19 Parpola (2017: 260) speaks of a Finno-Saamic proto-language, but it is not certain that there has been a common genetic proto-language for Finnish and Saami (e.g. Saarikivi & Grünthal 2005: 124; Aikio 2012: 67–70). Aikio (2012: 70) notes that Finno-Saamic is, however, a valid areal grouping.

20 I will examine this hypothesis elsewhere later.

21 Zachrisson (1992) has studied the question of whether grave customs can be taken over by one ethnic group from another and reached the conclusion that it is possible. She uses the hypothesis to prove that the cemeteries of Krankmårtenhögen and Smalnäset in Härjedalen are of Saami origin even though they were influenced by Germanic grave customs. As I have argued, those cemeteries should be viewed as Paleo-European and as having been influenced by customs from perhaps a West-Uralic speaking people from Mälardalen, and the later hunting ground graves can be seen as belonging to Saami speakers influenced by the Paleo-European grave customs of Krankmårtenhögen and Smalnäset. Germanic grave customs have also influenced later Saami-related hunting ground graves, e.g. at Långön, Ångermanland (Zachrisson 1992: 111).

22 The category includes words referring to humans in their different ages as well as their positions or relations in a society.

23 The two words in the category are somewhat haphazard as they do not have much in common. *Aevhkie* can, however, be interpreted as a condition and *gaavnedh* as a change (rather than an action process). As there is not much point in having many categories with only one word, especially if the word is not vastly important from the perspective of the combination of archaeology and linguistics, I have decided to classify these two together.

24 All words that are related to time and space and do not fit into other categories are placed in this category.
25 This category includes all words referring to reindeer, regardless of whether they refer to reindeer as wild or tame animals.
26 This category is made up of all the words that do not fit into any other categories.
27 I am obliged to Anu Soikkeli-Jalonen for suggesting this hypothesis.

Abbreviations

dial.	dialect
E	English
I	Icelandic
N	Norwegian
NwG	Northwest Germanic
ON	Old Norse
PG	Proto-Germanic
PS	Proto-Saami
PScand	Proto-Scandinavian
SaaI	Inari Saami
SaaK	Kildin Saami
SaaL	Lule Saami
SaaN	North Saami
SaaP	Pite Saami
SaaS	South Saami
SaaSk	Skolt Saami
SaaT	Ter Saami
SaaU	Ume Saami
Sw	Swedish

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Appendix 1. The North-West Germanic and Proto-Scandinavian loanwords in South Saami

The following information is provided (if possible): other Saami languages in which the word appears; the reconstructed PS and NwG/PScand forms of the word; the word in ON, modern Scandinavian or other Germanic languages; and the primary and secondary denotative meanings. Only words with etymologies including NwG/PScand reconstruction are included in the lexical material. When a PS word is not reconstructed, it is marked with (< PS). The words are presented in alphabetical order. The semantic category is given in parentheses.

Notes

In the literature, there seem to be different ways to mark the same phonetic feature: The phonetic quality of the graphemes ð, đ and d is the same in the PScand language, and I will be using the grapheme đ even if the original source uses another grapheme. (The initial phoneme and the phoneme after a nasal have always been /d/, and it will be marked with the grapheme d. The phonetic quality of the graphemes b and ƀ is converging, and I have chosen to use the grapheme ƀ. The grapheme ɣ is replaced with g.

The qualities of the PScand phonemes /z/ and /ʀ/ are not clear. It seems that they were not two separate phonemes, but rather that their quality is converging. (Schalin 2016, 253–255; 2017, 30–31.) However, in SaaS, the PScand phoneme(s) have two different sound substitutions, /s/ and /r/ (and sometimes ø), of which the first is more common. If the sound substitute in SaaS is /s/, I have used the grapheme z in PScand; if SaaS has /r/, the grapheme used is ʀ. If there is ø in SaaS in place of the PScand phonemes /z/ or /ʀ/ (usually at the end of a word), I have used the grapheme z in the PScand form. Heikkilä (2011, 68–69) notes that the development PScand /z/ > /ʀ/ happened around 500 CE after which the sound assimilated with the alveolar tremulant r by 1000 CE. If this is correct, PScand loanwords in SaaS with the phoneme /r/ (< PScand /ʀ/) should not be regarded as early PScand, nor should they be included in my data. However, as the quality of the phoneme is uncertain, I have included those loanwords in my data.

I am grateful for the enormous help I have received from Johan Schalin, who revised every single PScand form in my data, and from Jussi Ylikoski, who offered insightful comments on the Saami words.

aajhtere 'owner' (SaaS, SaaU, SaaL, SaaN) (humans and humans as members of society[22])
(< PS) ← PScand **aihtēr* 'owner' > ON *ættingi* 'relative'

aajloe 'brain' (SaaS, SaaP) (body parts)
< PS **ājlēs* 'brain' ← PScand **hailan-* > ON *heili*, I *heili*, N *heile* 'brain'.
The word is also found in the extinct Akkala Saami.

aajmoe 'the other world (e.g. the realm of the dead); the great spirit' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (religion and beliefs)
< PS **ājmō* 'air, weather' ← PScand **haima*- > Sw *hem*; E *home*.
In other Saami languages, the meanings refer to the world, air or natural phenomena; the meaning of the SaaS word has shifted to a religious phenomenon. (However, c.f. SaaN *Jábmeáibmu* 'world of the dead'.)

aajne 'the only one' (SaaS, SaaL, SaaN, SaaI, SaaSk) (adjectives)
(< PS) ← PScand **ainagaz* > ON *einga* 'the only one'.
The PScand **aina*- is regular from the point of view of SaaS, but the PScand *-*g*- is not found in the Saami forms of the word. Semantically, the etymology is clear. The word has more likely been borrowed from Finnish *ainoa* 'the only one', unless there are derivatives of the word in PScand that could be the original source of the borrowing. A possible explanation could be that the SaaS word was borrowed from a PScand form from which ON *einn* 'one (number)' descends. The form *einn* stems from Germanic **aina*- (< PIE **oino* 'the only one') (De Caprona 2013 s.v. en), which would result in SaaS *aajne*.

aajroe 'oar' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (vehicles and travelling)
< PS **ājrō* 'oar' ← PScand **airō*- > ON *ár* 'oar'.

aaksjoe 'axe' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (work-related words)
< PS **ākšęjᵔ̄* 'axe' ← PScand *akwisjō <**akwesjō* > Sw *yxa* 'axe'.
Bergsland (1992, 7–8) has reconstructed the PS form as **ākšᵔ̄jᵔ̄* and the PScand form as **ak*^{w}*usjō* or **ak*^{w}*asjō*. Schalin (2018 pers. comm.) notes that **ak*^{w}*usjō* would have lost its glide as in ***akusjō* in PScand. He agrees with Bjorvand & Lindeman (2007 s.v. *øks*) on a reconstruction **akwisī* <**akwesī*, and the Saami forms could derive from another case form with -*jō* as the last syllable. In this light, a better form for PS might be **ākšęjᵔ̄*.

aalhtedh 'to prepare; work with animal skin' (SaaS, SaaU, SaaP, SaaL) (work-related words)
(< PS) ← PScand **altija*- > ON *elta* 'to hunt; to knead; to chase'.
The etymology is quite clear semantically as the ON meaning 'to knead' is a kind of preparing, and perhaps this could be a metaphor for 'work with animal skin'.

aarhtse 'eagle (SaaS, SaaU, SaaP, SaaL) (wild animals)
(< PS) ← ?PScand **arnuz* / ?**ar*^{t}*nuz* > ON *ǫrn* 'eagle'.
The word might have been borrowed separately into Southern Proto-Saami as there is an irregular sound change: The South Saami word would require the Proto-Scandinavian form ***artuz* in order to be regular. The Pscand form **arnuz* would result in SaaS *aarne*. Therefore, one could perhaps conceive that **arnuz* in some dialects could have been pronounced with an epenthetic -*t*-: **ar*^{t}*nuz* (Schalin 2018 pers. comm.). This form is seen in SaaP *ārdnas*; in SaaS and SaaU the nasal has disappeared. The etymology is regular at least in SaaL, perhaps also in SaaP. No PS form has been reconstructed for the word.

aarjoehtidh 'to spare' (SaaS, SaaP, SaaL) (action processes)
(< PS) ← PScand **aizijan* > ON *eira* 'to spare'.

aarmoes 'wretched, unhappy' (SaaS, SaaU, SaaL) (adjectives)
(< PS) ← PScand **armaz* > ON *armr* 'nasty, poor, wretched'.

aartege, haartege 'shoulder' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (body parts)
< PS **ārtijā* / **hārtijā* 'shoulder' ← NwG **harđijō* / ?Pscand **harđiju* > ON *herðar* 'shoulder'; Old Sw *hærþ*.
The word in the western Saami languages usually has an initial *h*, while in eastern Saami the forms are without the *h*. The South Saami word is interesting as it has both forms: one without *h* and one with it. The Saami word has been borrowed either from North-West Germanic or Proto-Scandinavian.

aassjoe 'hearth in a smithy' (SaaS, SaaL, SaaN) (buildings and constructions)
< PS **āšō* ← PScand **asjō-* > Sw *ässja* 'hearth in a smithy'.
There is no consensus on the age of borrowing of the Saami word: SSA 1 (52) claims that the word stems from PG, while Sammallahti (1998: 128) deems it to be from the NwG stratum. Kallio (2012: 230) notes that it might be from either of these Germanic word strata, and Aikio (2006: 20) considers it to be PScand. Semantically, there are no complications. The secondary categories for the word are work-related words and fire.

aavtja 'forest' (SaaS, SaaU, SaaP, SaaL, SaaN) (flora)
< PS **āvčë* ← NwG **hagja* > ON *heggr*; Sw *hägg* 'bird cherry'.
The word that refers to a specific tree in the Scandinavian languages has the general meaning of forest in SaaS. It seems that the meaning has expanded in SaaS, but the more northern Saami languages have kept the original meaning of 'bird cherry'. (See also *awča*.) The word is rather old, as even the SaaS form is without the initial *h*-. In SaaS, *h*- has developed earlier than in any other Saami languages, and it seems that the *h*- was adopted into SaaS sometime before it developed in the more northern Saami languages. The secondary category for the word is terrain and landscape.

aavtjoe 'edge of a knife' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (work-related words)
< PS ?**āvčō* ← PScand **agjō* > ON *egg* 'edge of a knife'.

aegnieh (plural) 'chaff, husk' (SaaS, SaaL, SaaP) (agriculture and animal husbandry)
< PS **āknē* ← PScand **aganu* > ON *ǫgn* 'chaff, husk'.
The word could also be classified in the category of flora.

aejlege, aejlies 'holiday; Sunday' (SaaS, SaaU, SaaP, SaaL, SaaN) (religion and beliefs)
(< PS) ← PScand **hailagaz* > ON **heilag(r)* > Sw *helig* 'holy'.

aepie 'open sea, high seas; (vast) swamp, bog' (SaaS, SaaN, SaaU, SaaP, SaaL, SaaI, SaaSk) (water and water systems)
< PS **āpē* ← PScand **haba-* > ON *haf* 'sea'; N, Sw *hav* 'sea'.
The secondary category for the word is terrain and landscape.

aerkie 'scared' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (adjectives)
< PS **ārkē* 'timid, shy' ← PScand **argaz* > ON *argr* 'bad; angry; Sw *arg* 'angry'.
It's been assumed that the word is a loan from Fin *arka* 'timid, shy' (e.g. Lehtiranta 1989 s.v. *ārkē*) but the sound changes towards PScand and even PG (**arga-z*) are regular. The meaning of Finnish *arka* is perhaps closer to the meaning of the SaaS word than the Scandinavian meanings, although a scared person can appear to be angry, which may have motivated the semantic change.

aernie 'hearth (in a Saami hut)' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (buildings and constructions)
< PS **ārnē* ← PScand **aʀinaz / *aʀina* > ON *arinn*, Old Sw *arin* 'fireplace'.

aerpie 'legacy' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (humans and humans as members of society)
< PS **ārpē* 'legacy' ← PScand **arba* (or PG **arba-*) > ON *arfr*; Sw, N *arv* 'legacy'.
In SaaN there is another word, *vuorbi* 'lot, die; destiny' that stems from PG *arba-* (Koivulehto 1976: 249–251; 2002: 587) but the SaaS word *aerpie* could be borrowed also from PScand. Also, SaaN *árbi* 'legacy' is borrowed from this later form of **arba*.

aevhkie 'benefit; happiness' (SaaS, SaaL, SaaN, SaaI, SaaSk) (conditions and changes[23])
< PS **āvkē* ← PScand **aukan-* > ON *auki*, cf. Sw *öka* 'to increase'.
The semantics of the etymology is somewhat complicated. Perhaps the SaaS meaning has shifted to 'benefit' and 'happiness' as the increase (of goods) was understood as increase in happiness and benefits.

aevlerge 'the pole in a Saami tent that holds the pot' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (food and cookery)
< PS **āvlē* ← PScand **hāhilaz / *hāhlaz*.
The etymology is uncertain as it is phonologically irregular. ON or modern Scandinavian cognates are not found so the comparison of the meanings is impossible. In Finnish, the word *haahla* 'trammel hook' stems from Germanic languages. The word could also be classified in the category of buildings and constructions.

aevries 'desolate place' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (relations in time and space[24])
(< PS) ← PScand **auþa- / *auþija* > ON *eyði*; Sw *öde* 'desolate'.
Sammallahti (1998, 228) states that the word could be a PScand loan from **auþa-* or PG loan from **auþija*. However, according to Schalin (2018 pers. comm.), no additional syllable -ja is needed in the PG form.

aevsie 'the cranial part of reindeer that is attached to antlers the and detaches when the antlers are cut off; the part of the skull that is between and around the antlers of a living reindeer' (SaaS, SaaU, SaaL, SaaN, SaaI) (reindeer and reindeer husbandry[25])
< **āvsē* < NwS *āksē* ← NwG / PScand **hausa-* > ON *hauss*; Sw *hös* 'skull'.
The lacking initial *h-* in the SaaS word indicates that the word is an old loan from NwG rather than the PScand stratum. The semantics of the etymology is flawless, but there has been a contraction of the meaning in SaaS from the original general meaning of 'skull' to a specific part of a specific animal's skull. The word belongs also to the category of body parts.

àr^{aH}kuč 'chest, coffin' (SaaS, SaaN, SaaI) (buildings and constructions)
(< PS) ← PScand **arku* < **arkō* > ON *ǫrk* 'chest, coffin'; Old Sw *ark*.
The word has an old orthography used by Lagercrantz (1926: 36), and it cannot be found on newer dictionaries.

asspa 'aspen' (SaaS, SaaN) (flora)
(< PS) ← PScand **aspu* > ON *ǫsp*; Sw *asp* 'aspen'.
The orthography of the SaaS word is old, and the word is not found in newer dictionaries.

awča 'bird cherry' (SaaS, SaaU, SaaP, SaaL, SaaN) (flora)
< PS **āvčë* ← NwG **hagja-* > ON *heggr*, N *hegg* 'bird cherry'.
Awča is written in the old orthography, and the word cannot be found in the newer dictionaries in this meaning. The word stems from the same NwG word as the word *aavtja* 'forest'. (See *aavtja*.)

ä̀ẉjiɛ 'hay' (SaaS, SaaL, SaaN) (flora)
(< PS) ← PScand **hauja-* > ON *hey* 'hay'.
The orthography is old, and the word cannot be found in newer dictionaries. As the initial *h-* seems to be lacking, the word is rather old a loan. The word could secondarily be placed in the category of agriculture and animal husbandry.

baante 'band (e.g. in a cassette)' (SaaS, SaaP, SaaL, SaaI) (work-related words)
(< PS) ← PScand **banda* > ON *band* 'knot, band'.

baarhkoe 'bark' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (flora)
< PS **pārkkə̄* 'bark' ← PScand **ƀarku-* > ON *bǫrkr*; Sw *bark*.

baaroe 'wave' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (water and water systems)
< PS **pārō* 'wave' ← PScand **ƀārōn-* > ON *bára* 'wave'.

baernie 'boy, son' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (humans and humans as members of society)
< **pārnē* 'boy, child' ← PScand **ƀarna* > ON, N, Sw, I *barn* 'child'.
The semantics of the etymology is clear, although in Saami languages, the word usually refers to a boy child. In eastern Saami languages, the meaning is also 'child'.

bearkoe 'meat; food meat' (SaaS, SaaU, SaaP, SaaL, SaaP, SaaI, SaaK) (food and cookery)
< PS **pērkō* / **pērkō* / **pierkō* 'meat; food' ← PScand **bergō-* > ON *bjǫrg* 'help, rescue; food'.

betnie 'bottom (of a lake)' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (water and water systems)
< PS **ponnē* 'bottom' ← Pscand ?**butna-* (< G **budma-* / **butma-)* > ON *botn*; N *botn*; Sw *botten* 'bottom'.
Bjorvand and Lindeman (2007 s.v. *botn*) give a Germanic reconstruction for a word referring to 'bottom': **budma-* / **butma*. There is no more detailed explanation about the strata to which the word belongs. As there is an internal *-(t/n)n-* in the Saami words, the PScand reconstruction, from the SaaS perspective, should be **butna-*. As for the first syllable vowel, the other Saami languages seem to be phonetically regular, but the SaaS first-syllable *-e-* is irregular.

buvrie 'storage building' (SaaS, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (buildings and constructions)
< PS **puvrē* < **puvrā* 'shed' ← PScand **būra-* > ON *búr* 'a storage building' N, Sw *bur* 'hutch, jail, cage'.

daajje 'dough' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (food and cookery)
(< PS) ← PScand **daigaz*, **daigiz-* > ON *deigr* 'soft; watery', N *deig* 'dough'.
PScand **daigiz-* is the stem used with cases other than nominative or accusative. The form **daigiz* is regular with the vowel in the last syllable of the SaaS word. It should be noted that the internal *k* is missing in the SaaS word and therefore has an irregular correspondence to PS **tājkę* (the *k* is found in other Saami languages).

daatje 'Norwegian or Swede' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (humans and humans as members of society)
< PS **tānčę* ← PScand **daniz* /?**danjV-* > ON *Danir* (pl.) 'Danes'; Sw *dan* 'Dane', *dansk* 'Danish'.
Sammallahti (1998: 236) suggests that the Saami words originate from PScand **danjV-*, and Aikio (2009: 281) marks the form with a question mark. Schalin (2018 pers. comm.) notes that there should not be *-j-* in the PScand form. He suggests an i-stem, e.g. *daniz* (pl). The semantic shift from Danes in Scandinavian to Norwegians and Swedes in Saami is understandable, as it is probable that the Saami had much more contact with Norwegians and Swedes than with Danes. In SaaN and the more eastern languages, the word refers to Norwegians, as the speakers probably did not have much to do with Swedes who lived farther in the South. In Lule Saami, it can mean any person who is not Saami.

daerpies 'useful' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (adjectives)
< PS **tārpę* / **tārвęśśę-* 'need' ← PScand **þarbō* > ON *þǫrf* 'need, necessity'.

dahpe 'sheath' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (work-related words)
< PS **toppę* ← NwG **duppā*.
Aikio (2006: 24) notes that the word is borrowed from PG (<**duppa-z*). Sammallahti (1998, 128) gives NwG as the donor language. Phonetically both donors are possible. I have not been able to find cognates in ON or modern Scandinavian languages, though there are some from e.g. Middle Low German (*dop(pe)* 'sheath') (Koivulehto 1981: 77–78; Aikio 2006: 24).

davgh 'sure; however; though' (SaaS, SaaU, SaaP, SaaL, SaaN) (other words[26])
< ?PS **tāvk / *dāvk* ← PScand **þauh* > ON *þág*, *þó* 'then, on the other hand'.
The word cannot be found in newer dictionaries in any form. Jussi Ylikoski (2018 pers. comm.) suggests that *davgh* could be connected to the interrogative word *dagke, dagkh*. The word has a somewhat skeptical nuance, e.g. *Dagke dïhte båata?* 'She is not coming, is she?' (cf. Finnish *tokko*).

deemedh 'to tame (esp. a reindeer stag into a draught animal)' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (reindeer and reindeer husbandry)
?< PS **tāmę* 'to tame' ← PScand **tamja-* > ON *temja* 'to tame'.
The word seems irregular in SaaS, as PS **ā* usually corresponds to SaaS *aa / ae*. The word is regular in the other Saami languages. The SaaS word might be a later, separate loan from ON.

ditnie 'tin, pewter' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (work-related words)
< PS **tęnē* 'tin, pewter' ← PScand ?**tina-* > ON *tin*; Sw *tenn*, N *tinn* 'tin, pewter'.

dovres, dovrehke 'expensive' (SaaS, SaaU, SaaP, SaaL, SaaI) (adjectives)
< ?PS **diuvręs* ← ?PScand **diurijaz / *diuriz* > ON *dýrr*; Sw *dyr* 'expensive'.
The etymology is unclear. It is phonetically regular in other Saami languages, e.g. SaaN *divrras*, but SaaS form is irregular. It might have been separately borrowed. Semantically the etymology is flawless.

eajma 'reindeer doe who wanders where it wants' (SaaS) (reindeer and reindeer husbandry)
< PS **eajmēs / *eajmā* 'a fool; one who likes to be alone; a lone animal' ← PScand **haimiskaz* > ON *heimskr* 'stupid, foolish, silly'; I *heimskur* 'stupid, ignorant'; Sw *hemsk* 'awful'.
The Saami word has been borrowed from an intermediate state of the PScand **ai* > ON **ea* (Aikio 2009: 184). For the semantics of the etymology, see *eajmeske*.

dälja 'sitting board in a boat' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (vehicles and travelling)
< PS **tiljā* 'thwart' ← PScand *þiljōn* > ON *þilja*, N *tilje* 'deckboard on a ship'.
The word is written in the old orthography and cannot be found in newer SaaS dictionaries.

eajmeske 'one who wants to be alone (human or reindeer)' (SaaS, SaaN) (adjectives)
< PS **eajmāskę* ← PScand **haimiskaz* > ON *heimskr* 'stupid, foolish, silly'; I *heimskur* 'stupid, ignorant'; Sw *hemsk* 'awful'.
In other Saami languages, the meaning is closer to that of ON and modern Scandinavian languages, but Aikio (2009: 184) notes that the PScand word is a derivative of **haima-* 'home', and the semantic development of the word has been: 'one who stays home all the time' > 'an odd, reclusive person' > 'fool'. The SaaS word has kept the earlier meanings of the PScand word. The secondary categories of the word are humans and humans as members of society, or reindeer and reindeer husbandry. (See also *eajma*).

faala, faelies 'whale' (SaaS, SaaU, SaaP, SaaL, SaaP, SaaI, SaaSk, SaaK, SaaT) (wild animals)
< PS **vālēs* / **vālās* 'whale' ← PScand **hwalaz* > ON *hvalr*, Sw *val* 'whale'.

faaroe 'trip; party; travelling company' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (vehicles and travelling)
< NwS **fārō* 'travelling companion; trip' ← PScand **farō-* > ON *fǫr* 'journey, journeying'.
The word was borrowed into SaaS after PS had been divided into three dialects: Southwest Saami, Northwest Saami and East Saami (Aikio 2012, 77). The ES word form would be **vārō*.

faastoe 'lent' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk) (religion and beliefs)
(< PS) ← Pscand **fastōn-* > ON *fasta*.
The word has not been previously etymologized, but the etymological connection to Proto-Scandinavian is phonologically and semantically clear.

fealloe 'plank, board, chopping board' (SaaS, SaaP, SaaL, SaaN) (work-related words)
< PS **fēllō* / **fiellō* ← PScand **felhō* / **felhu* > ON *fjǫl* 'plank; board, table'; N *fjøl*; Sw *fjöl* (dial *fjäl*, *fjel*).
PS **-ē-*/**-ie-* usually is *-ie-* also in SaaS. Germanic **-e-* developed into SaaS *-ea-* during the PG phase (Koivulehto 2002: 589), and therefore the SaaS word might be a separate loan from PScand. The SaaL and SaaN words are borrowed from PScand. The secondary category of the SaaS word is food and cookery.

fierve 'low tide; a beach that surfaces during low tide' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (water and water systems)
< PS **fiervā/ę/ë* ← PScand **ferwō(n)-* > ON *fjara* 'low tide, beach revealed by low tide'.
The secondary category of the word is terrain and landscape.

fuelhkie 'family' (SaaU, SaaP, SaaL, SaaN, SaaI) (humans and humans as members of society)
(< PS) ← PScand **folka* / **fulka* > ON, N, Sw *folk* 'people'.

gaahkoe 'bread; traditional thin unleavened bread' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (food and cookery)
< PS **kākkᵊ̄* 'bread' ← PScand **kakōn-* > ON **kaka*; Sw *kaka* 'cake, biscuit, cookie'; N *kake*.

gaajedidh 'to draw away; disappear' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (action processes)
< PS **kājtę-* / **kājętę-* ← PG / PScand **skaiđa-* > Gothic *skaidan*, German *scheiden* 'to divide, to separate'.
According to Aikio (2009: 76), the German word has an intransitive meaning 'to part, depart, leave' and Gothic has a reflexive conjugation that has the same meaning. Those meanings come close to the meaning of the Saami words. The loan is a slightly older than most PScand loans, as the initial PScand **sk-* is not preserved in the Saami languages. Perhaps it is a NwG loan.

gaajhtse 'goat' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (agriculture and animal husbandry)
< PS **kājccę* << *kājttęs* / **kājcę* ← PScand **gaitiz* (pl.) / **gaita-* / **gaitz* > ON *geit* 'vuohi'; Sw *get* 'goat'.
Koivulehto (2002: 589) states that the word is borrowed from PScand plural form **gaitiz*; Aikio (2009, 106) suggests the stem **gaita-* as the orginal. In my opinion, the nominative singular form **gaitz* could well be the original.

gaaltije 'spring' (SaaS, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (water and water systems)
< PS **kāltijā/*kāltējō* 'ice hole; spring' ← PScand **kalđiōn-* > ON *kelda* 'well, spring'.

gaavnedh 'to find'(SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (conditions and changes)
< PS **kāvnę* 'to find' ← PScand **gagnija-* / **gaganja-* > ON *gegna* 'to object, to defend; to meet, to encounter'.
The semantics of the etymology is quite understandable as the ON meanings of 'to meet' and 'to encounter' can be understood as 'to find'.

gaavnoe 'find' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (other words)
< PS **kāvnē* < **kāvnā* 'object, thing' <← PScand **gagna-* > ON *gagn* 'usage; achieve; cutlery'; Sw *gagn* 'use'; *gagna* 'to be useful'.
In Saami languages other than SaaS, the word has the meanings 'item' and 'thing'; in SaaI, even 'magic'. There has been a semantic shift in the SaaS word that is rather difficult to explain. Perhaps a find has been thought to be of good use, which would explain the shift. The word could also be derived from the verb *gaavnedh*, and thus the meaning would derive from there (Schalin 2018 pers. comm.).

gaejmie 'dusk; dawn' (SaaS, SaaL, SaaN) (natural phenomena)
< PS **kājmV* / **kājmē* ← PScand **skaimV-* > Sw dial. *skäim* 'dusk; dawn'.

gaejsie 'high and steep mountain' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk) (terrain and landscape)
< PS **kājsē* ← PScand **gaizaz* 'spear' > ON *geirr* 'spear'.
A high and steep mountain may remind a spear, so the semantic shift has a metaphorical nature. The PScand word **gaizan-* has meant a triangular stake, tip or spire or an object shaped like them, which may also have affected the semantics of the SaaS word.

gaellies 'old man' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaT, SaaK) (humans and humans as members of society)
< PS **kāllēs* 'old man, gaffer' ← PScand **karlaz* > ON *karl* 'man, old man'.

gaelpie 'calf of a cow' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (agriculture and animal husbandry)
< PS ?**kālpē* ← PScand **kalƀaz* > ON *kalfr* 'calf of a cow'.
The second syllable PScand **a* > PS **ē* is unexpected.

gaerie '(wooden) bowl' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (food and cookery)
< PS **kārē* 'dish; trough' ← PScand ?**kaʁa-* (< **kaza-*) > ON *ker*; N, Sw *kar* 'tub'; Old High German *kar*; Gothic *kas* 'vessel'.
The word was likely borrowed into SaaS after the (hypothetical) PScand change **z* > **ʁ*, but before the change Pscand **a* > ON *e*. The word refers to quite similar dish in both Saami and Scandinavian.

gaertie 'reindeer corral' (SaaS, SaaL, SaaP, SaaT, SaaU, SaaN, SaaI, SaaSk, SaaK) (reindeer and reindeer husbandry)
< PS **kārtē* < * early PS *kārtā* 'fence; curve' ← PScand **garđa-* > ON *garðr* 'fence; yard, garden; enclosure'.
The second syllable PScand **a* > PS **ē* is unexpected. The semantics of the etymology are transparent as the meaning refers to a fenced area in both Saami and Scandinavian. In SaaS, the meaning has contracted to mean a fenced area for a specific animal. In SaaI and the eastern languages the meaning is also 'trap'. The secondary semantic category is buildings and constructions.

gaessie 'colostrum, first milk' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (other words)
< PS **kāssē* 'resin' ← NwG / PScand **kāsja-* > I *kæsir*, N *kjæse*; Sw (dial.) *käs(e)* 'cheese rennet'.
The meanings of the SaaS word and modern Scandinavian languages are close enough to each other to be clear. In many Saami languages the meaning is 'resin; earwax'.

gealoe 'throat; larynx' (SaaS) (body parts)
< PS **kēlɔ̄* ← PScand **kelōn-* 'throat'.
The word is not known in Scandinavian languages.

gearhka 'throat; larynx' (SaaS) (body parts)
(< PS) ← PScand **kwerkō* > ON *kverk* 'throat'.

giehtjedh 'to see; to watch (over one's reindeer, etc.)' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (action processes)
< ?PS **kēććę* ← NwG **gātjana* 'to look after' > ON *gjæte*.
The first syllable vowels in South Saami word points to PS **e* > **ie*, but the other Saami languages require PS **ɛ* > **ea*. The word might be even earlier loan and borrowed from

Pre-NwG form where the first syllable **ē* had not yet developed into NwG **ā*. It is possible that the word is a separate loan in South Saami (J. Häkkinen 2017 pers. comm.). However, if the word is an older loan than NwG/PScand, it could have participated to the sound change **ɛ* > SaaN (and other Saami languages) **ea* / SaaS **ie*.

gïeles 'keel; long and narrow mountain ridge' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaK, SaaT) (terrain and landscape)
< PS **kieleˌs* ← PScand **keluz* > ON *kjǫlr* 'keel; keel-shaped mountain range'.

goeme, guemie, gåemie 'palate' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (body parts)
< PS **kōmē* 'palate' ← PScand *gōma-* > ON *gómr*; N, Sw *gom* 'palate'.

govse 'cow' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (agriculture and animal husbandry)
< PS **kuseˌ* < **kūse* ← NwG **küz* / PScand **kūz* > ON *kýr*; Sw *ko* 'cow'.

haajhke 'pine tree; tall and old tree (any species); rough and thick pole' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaT) (flora)
< PS **hājkkeˌ* ← PScand **aik-* > ON *eik*; Sw *ek* 'oak'
The meaning refers to a certain tree in both the Saami and Scandinavian languages, but the Saami word has shifted to mean a pine tree. This may be because in the boreal forest area where the Saami people dwelled, oak was not a common tree species. In SaaS, the word can refer to any tree species in certain contexts.

haallode 'slanting' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaSk) (adjectives)
< PS * *(h)ālˆ* 'slanting' ← PScand **halþaz* > ON *hallr* 'slanting'; Sw, N *hall*.
The PS form is irregular from the perspective of the PScand form. The PS form **ālˆ*, presented by Lehtiranta (1989 s.v. *ālˆ*) works for SaaL (*(h)allō*), SaaN (*álu-*) and SaaSk (*ällad*) words, but the more southern Saami languages require intial **h* in the proto-form. The etymology is flawless semantically.

haame 'antler-less reindeer cow' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (reindeer and reindeer husbandry)
< PS **hāmeˌ* ← PScand **hamala-* > ON *hamla* 'to cripple, to disable'; cf. also Old E *hamola* 'one whose head is shaven clean'.
The word may have been borrowed separately into SaaS, as most other Saami languages require PS form **āmē(lē)*. As also SaaU requires the PS form without initial *h-* but SaaP does not, it complicates things. Nevertheless, SaaS requires a PS form with initial **h-*. The second syllable development PScand **a* > PS *ē* is unexpected but not unheard of. Semantically, there is a connection between SaaS and ON words.

haelmie 'straw, thatch' (SaaS, SaaP, SaaL, SaaN) (flora)
< PS * *hālmē* ← PScand **halma-* > ON *halmr* 'straw, thatch'.
The second syllable development PScand **a* > PS *ē* is unexpected.

haepkie 'falcon, hawk' (SaaS, SaaP, SaaL, SaaN) (wild animals)
< PS ?**hāpaka / ?*hāpakē* ← PScand **haƀukaz* > ON *haukr* 'hawk'.
The SaaS form requires PS form **hāpakē* as PS **ē* > SaaS *ie*.

hiessjie 'wooden frame for drying hay; hay rack' (SaaS, SaaU, SaaP, SaaN) (agriculture and animal husbandry)
(< PS) ← late PScand **hesja* (< PScand **hasjō(n)*) > I *hes*, *hesja*, Sw *hässja* 'hay rack'.
Koivulehto (1999b, 14) has deduced the SaaN *ássi* to originate from PScand. SaaS *hiessjie*, however, could perhaps be a later loan as the SaaS first syllable diphthong would require PScand **-e-* (Koivulehto 2002: 589). Therefore, it is possible that the word has been borrowed separately into SaaS a bit later than into SaaN. The word could also be classified in the category of buildings and construction.

hovme 'snowfall; snowstorm'. (SaaS, SaaU, SaaP, SaaI) (natural phenomena)
< PS **humę* ← PScand **hūma-* > ON *húm* 'dim; gloomy; half dark'.
The word has been borrowed separately into SaaS. In other Saami languages, the forms require one of the following PS forms: **umV- ~omV- / *humV- ~ homV-*. (Fore more specific description, see Aikio 2009: 173–174.) Other SaaS words borrowed from the same PScand form are *humhkie ~ umhkie* (< **(h)umkkē*) 'dark snowy weather in daytime in which the terrain looks level' and *amhkes ~ åmhkes* (< **omkkęs*) 'cloudy and dark (of weather)' (Aikio 2009: 173).

ïbje 'dust' (SaaS) (natural phenomena)
< PS **ipjë* ← PScand **hiuja / *hiwja-* > ON *hý* feather, colour (of the face)'; Sw *hy* 'skin, complexion; appearance, colour (of face)'; I *hý* 'down; fine hair; small husks; dust'.
The word is rather an old loan as the initial *h-* is lacking in SaaS. Aikio (2006: 24) notes that the etymology is semantically flawless as in I there is the same meaning of dust as in SaaS.

klaajpoe 'mountain peak that peeks out of water or hangs over a fall'. (SaaS, SaaU, SaaP, SaaL) (terrain and landscape)
(< PS) ← PScand **klaiƀō*.
The word has been borrowed separately into southern Saami languages and SaaP. The SaaL form stems from a PS form without the initial *k*; the other, more southern languages require the *k* in the PS form.

klahtje 'horsefly' (SaaS, SaaU, SaaL, SaaN) (wild animals)
< PS ?**klāvčā/ę* ← PScand **klaggjan* > ON *kleggi* 'horsefly'.
The word has been borrowed separately into SaaS and SaaU. The SaaL and SaaN words require a PS form **(s)lāvčā*, but as there is an initial *k-*, it is not probable that the proto-form for the southern Saami languages has begun with *(s)l-*. (See Aikio 2012: 110.)

kraavhtse 'porridge' (SaaS, SaaU, SaaL, SaaN, SaaI) (food and cookery)
< PS **krāvccę* < **krāvttës* ← PScand **grautaz* > ON *grautr*, N *grøt*, Sw *gröt* 'porridge'.
The word has been borrowed separately into southern Saami languages (Aikio 2012: 110). From Lule Saami to Inari Saami the words require a PS form of **rāvccë* < **rāvttës*.

Koivulehto (1999b: 7) states the meaning of the Saami words to be 'soup made of fish roe'. However, the word is generally used to refer to porridge in many Saami languages, SaaS among them.

kraesie 'grass; the content of stomach or intestines' (SaaS, SaaU; SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (flora)
< PS **krāsē* 'grass; flower; plant' ← PScand **grasa-* > ON, N *gras*; Sw *gräs* 'grass.'
According to Aikio (2012: 110) other variants of the same word in SaaS are *kraessjie* and *kraassjoe*. They stem from PS **krāššē* ~ **krāššō* < PScand *grasja* > S *gräs*. The word has been borrowed separately into South and Ume Saami. The northern and eastern PS form of the word would be **rāsē*. The semantic relationship of the word to the meaning in the Scandinavian languages is transparent.

kraevies 'gray' (SaaS, SaaU, SaaP, SaaL, SaaN) (adjectives)
< PS **krāvēs* ← PScand **grāvaz* > ON *grár*; Sw *grå* 'gray'.

krievvie 'reindeer herd (herded by a reindeer shepherd)' (SaaS, SaaU) (reindeer and reindeer husbandry)
< PS **krievvē* ← PScand **kreu(h)* > N dial. *kru* 'a small corral for cattle'.
The etymology is semantically complicated. As animal husbandry was a less common livelihood for the Saami than reindeer pastoralism, it is possible that as the word was borrowed, the meaning of it shifted to refer to a more familiar phenomenon. The meaning of a reindeer herd herded by a shepherd could be seen as a metaphor of a fenced area or man-controlled animals. Bergsland (1988: 162) notes that the SaaS expression *krievvien sisnie* means 'within a reindeer herd kept in a corral or on a cape of lake'. This brings the meanings of the Scandinavian and SaaS words closer to each other.

kruana, kråånehke 'green' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, Saak, SaaT) (adjectives)
< PS **rōnę* / **ruonę* 'green' ← PScand **grōniz* > ON *grœnn*; N *grønn*; Sw *grön* 'green'.

laaffa 'flea' (SaaS, SaaP, SaaL) (wild animals)
< NwS **lāffēs* ← PScand **flauha-* > ON *fló* 'flea'.

laajkoe 'debt' (SaaS, SaaU, SaaP, SaaL, SaaN) (humans and humans as members of society)
< PS **lajkō* ← PScand **laigōn* > ON *leiga* 'rent', Sw *lega* 'rent'.
In many Saami languages, the word refers to rent, but in SaaS, the meaning has slightly shifted. The word could belong to the category of trade. However, the connection between the SaaS and Scandinavian words is clear.

laajroe 'road, route' (SaaS, SaaU, SaaP, SaaN, SaaL, SaaI, SaaSk, SaaK) (vehicles and travelling)
< PS **lājδeję* / **lājδō* 'road; to rein' ← PScand **laiđija-* > ON *leiða*, Sw *leda* 'to lead'.

laampe 'lamb' (SaaS, SaaU, SaaP, SaaN, SaaI, SaaSk) (agriculture and animal husbandry)
(< PS) ← PScand **lambaz* > Old Sw *lamb*.

laavkedh 'to join' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (action processes)
< PS **lāŋvę* 'seam; join, attach' ← PScand **laggwu* > ON *lǫgg, løgðr*; N (Norwegian) *lagg*.

laedtie 'farmer; person with fixed residence' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (humans and humans as members of society)
< PS **lāntē* 'stranger' ← PScand **landa-* > ON *land* 'land, earth'.
The semantic change from land to farmer is quite understandable. In Swedish, for example, *farmer* is *lantbrukare*, literally 'land user', and *countryside* is *landsbygd* 'land area' (with buildings as *bygd* ← *bygga* 'to build'). The word could as well be classified in agriculture and animal husbandry.

laejjies 'thin; mild (of coffee); not enough salt (on food)' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI; SaaSk, SaaK) (food and cookery)
< PS **lājvē* ← PScand **slaiwaz* > ON *slær, sljór* 'blunt, dull'.
The etymology is rather straightforward, although in Saami the meanings are related to taste and food. The SaaL word *slájvve* requires PS **slājvē*.

laejpie 'bread' (SaaS, SaaU, SaaP, SaaL, SaaN) (food and cookery)
< PS *lājpē* ← PScand **hlaiba* > ON *hleifr* 'bread, round unleavened bread'.
Again, the second syllable development PScand **a* > PS *ē* is rather unexpected.

laejrie 'clay' (SaaU, SaaP, SaaL, SaaN, SaaI) (terrain and landscape)
< PS **lāirē* ← PScand **laiRa* > ON *leirr*, N *leir*, Sw *lera* 'clay'.

laektedh 'to make thoroughly wet' (SaaS, SaaN (SaaSk)) (action processes)
?< PS **lāvttę* ← PScand **blauta-* > ON *blautr* 'soft, weak, timid'; N *bløt*, Sw *blöt* 'soft, wet'.
Phonetically it is a somewhat uncertain etymology, and the SaaS word may be a borrowing from the more northern Saami languages, e.g. SaaN láktat 'to get damp; damp' (see Aikio 2009: 191–192).

lïhtse 'joint' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (body parts)
< PS **lęδęs* ← PScand **liðuz / *liþuz* > ON *liðr* 'member; joint'.
The North Saami word *lađas* 'joint' has been borrowed from a Proto-Germanic word from which the Proto-Scandinavian and Old Norse forms have been developed (Aikio 2006: 15).

lijnie 'shawl, scarf' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (clothing)
< PS **lijnē* ← PScand **līna* > ON *lín* 'linen'.
In ON the meaning of the word is the fabric of which shawls and scarves are often made. The semantic shift in SaaS into the actual products made of linen is quite logical. The word is secondarily categorized under agriculture and animal husbandry.

liksie, livsie, lievsie, luevsie 'blubber oil; lamp, light' (SaaS, SaaL, SaaN, SaaSk) (work-related words)
(< PS) ← PScand **leuhsa-* > ON *ljós* 'valo'.
The word has been borrowed separately into SaaS (Aikio 2009: 260). The semantics of the etymology are transparent.

loeves 'loose' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (adjectives)
< PS **lōvẹs* / **luovōs* ~ *luovẹs* 'free, loose' ← PScand **laus-* > ON *lauss*; Sw *lös*; N *løs* 'loose'.

luptedh 'to lift' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (action processes)
< PS **lo̯ptẹjẹ-* / **loptẹ* 'to ascend' ← PScand **loftja-* / **luftja* > Sw *lyfta* 'to lift'.

maake 'man married to one's aunt (mother's or father's side)' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (humans and humans as members of society)
< PS **mākẹ* 'brother-in-law'
either ← PScand ?**mākan-/māka-/makan-/ maka-/māko-/mako-* > ON *maki*; Sw *make* 'husband'.
or ← PScand **māga* > On *mágr* 'a male relative by marriage; son-in-law, father-in-law or brother-in-law'; Sw *måg* 'son-in-law'
The semantic shift from husband to a man who is married to one's aunt is understandable as the Saami women who married Scandinavian men may have referred to their husbands using the Scandinavian word. The Saami society borrowed the word and began to use it to refer to a certain (more distant) relative. It must be noted that marriages between Saami women and Scandinavian men must have already been common during the Early Iron Age as the contacts have affected the vocabulary referring to family and relatives (see also *provrese*). Sammallahti (1998: 129) has determined the word to be of PScand origin but no reconstruction has been made. From the SaaS perspective, the PScand form could be one of the following: **mākan-/māka-/makan-/ maka-/māko-/mako-*.
The other suggestion for the etymology of the word (< PScand **māga*), made by Schalin (2018 pers. comm.) is, in fact, even more flawless and convincing from the perspective of the phonetics and semantics of the words.

maanoe 'month' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (relations in time and space)
< PS **mānō* 'moon' ← Pscand **mānan-* / **mānōn-* > ON *máni, mána-* 'moon'.
The Scandinavian word has shifted to refer to a month as SaaS has another word for moon: *aske*. An etymology for *aske* has not been proposed. In some Saami languages, e.g. SaaN, the Scandinavian loanword has the meaning of moon.

maarhvie 'rectum, rump, backside' (SaaL, SaaN, SaaI, SaaSk) (body parts)
(< PS) ← NwS **mārfē* > PScand **marhwa-* > ON *mǫrr* 'fat in the intestines'.
The word was borrowed into Saami, and the meaning has shifted. The original meaning referring to intestines is visible in SaaS, however, as the word has the meaning of the specific intestine, the rectum. In North Saami, *márfi* means 'sausage'. The sausage casing is often made of intestine.

maelie 'animal blood; birch sap' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (food and cookery)
< PS **mālē* 'sap' ← PScand **māla-* > ON *mál* 'meal'.
The word is a mix of Scandinavian the loan *mål* 'meal' and Finnish *mahla* 'sap' (Aikio 2009: 262–263). Animal blood refers here to blood that is used in a soup. In SaaN, SaaI and SaaSk, the meaning of the word is soup. Because of the meaning of 'birch sap', the secondary category for the SaaS word is flora.

naehpie 'milking bowl for milking reindeer' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (reindeer and reindeer husbandry)
< PS **nāppē* 'bowl' ← PScand **hnappaz* > ON *hnappr* 'bowl'; N *napp*.

nejpie 'knife' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (work-related words)
< PS **nẹjBē* < **nẹjpā* ← ?Paleo-Germanic **kneiba* > ON *knífr*; Sw, N *kniv*.
According to Heikkilä (2014: 112 footnote 97), the word is an earlier, separate loan in SaaS as the vowel in the first syllable is irregular from the point of view of the other Saami languages. The etymology for the forms in other Saami languages is: < PS **nijpē* < PScand **knība* > ON *knífr*; S, N *kniv* 'knife'. The Paleo-Germanic reconstruction for the word is **kneiba-*, but it is hardly possible for the SaaS word to be derived from there.

noerhte 'north' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (relations in time and space)
< PS **nōrttē* 'north, east, south' ← PScand **norþr-* > ON *norðr*; Sw, N *nord* 'north'.
From SaaN; towards east, the word can also refer to 'east'.

nuehtie 'seine net' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (hunting and fishing)
< PS **nōttē* / **nuottē* 'seine net' ← PScand **nōt-* / **nōtu* > Sw *not* 'seine net'.

plaahkoe 'low flat terrain' (SaaS; SaaU, SaaL, SaaN) (terrain and landscape)
< PS **plākkō* ← PScand **flahu* > ON *flǫ́* 'rock ledge; gently sloping valley up in the mountains'.
The word has been borrowed separately into Southern Proto-Saami, as the PS form in the other languages would be **lākō*. The semantics of the etymology is quite transparent, as both the SaaS and ON words refer to flat terrain in comparison with mountains and hills.

plaassa 'large rock that sticks out of ground or up from water'. (SaaS, SaaL, SaaN, SaaI, SaaSk) (terrain and landscape)
< PS **plāssā* ← PScand **flasja* / **flasjō* > ON *fles* 'flat rock'.
The word has been borrowed separately into SaaS. In the other Saami languages, e.g. SaaN *lás'sá*, the word stems from PS **lāssā*. (Aikio 2012: 77, 111.) The semantics of the etymology is transparent. The meaning has shifted from a flat rock to large rock and then become more specified to mean a certain kind of rock.

plaerie 'leaf of a plant, book; blade of a knife; (news)paper;' (SaaU, SaaP, SaaL, SaaN, SaaI) (flora)
(< PS) ← PScand **blað(a)*- > ON *blað* 'leaf of a plant; herb'.
'Leaf of a plant' is the oldest meaning of the word. The word could also belong to the category of work-related words.

plievvies 'shy; despicable' (SaaS) (adjectives)
< PS **plievvēs* ← PScand **bleugaz* > ON *bljúgr* 'bashful, shy'.
The semantics is clear, but it should be noted that the SaaS word has acquired a somewhat negative connotation.

provrese 'bride' (SaaS, SaaU, SaaP, SaaN) (humans and humans as members of society)
< PS **pruvdës* ← PScand **brūđiz* > ON *brúðr*, Sw *brud* 'bride'.
The word has been borrowed separately into the southern Saami languages (South, Ume and Pite Saami). The North Saami word *ruvddas* derives from the Proto-Saami form **ruvdës*. SaaS provrese requires, in fact, a PS form **pruvδës*.

raajne 'clean' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI) (adjectives)
< PS ?**rājnę* ← PScand **hrainiz* > ON *hreinn* 'clear; blank'.

raajroe 'reindeer caravan; series' (SaaS, SaaI, SaaK, SaaSk, SaaL, SaaP, SaaN, SaaT, SaaU) (reindeer and reindeer husbandry)
< PS **rājδō* / **rājtō* ← PScand **raiđō* > ON *reið* 'riding; cart'; Sw *rida* 'to ride'.
The etymology is semantically flawless, as both the Saami and the Scandinavian words refer to travelling. In Saami, the meaning has shifted to mean the way of travelling that was more common for the Saami people. The word could also be classified under vehicles and travelling.

raaktse 'tow rope (for a sled)' (SaaS, SaaU, SaaP) (vehicles and travelling)
(< PS) ← PScand **drahtuz* > ON *dráttr* 'drag, pull, tug; journey, voyage'.
The ON word has two meanings: on one hand, the word refers to pulling and on the other to journeying. It is possible that the SaaS meaning is a mix of these two meanings: the tow rope is a contraction of the pulling and the sled is meant for travelling.

raammaa 'frame (of a picture)' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (buildings and constructions)
< PS **rę̄męs* ← PScand **þramuz* > ON *þrǫmr* 'border, rim.'

raavke 'apparition, ghost' (SaaS, SaaS, SaaP, SaaL, SaaN, SaaSk, SaaK, SaaT) (religion and beliefs)
< PS **rāvkę* 'sea ghost' ← PScand **draugaz* > ON *draugr* 'ghost, spirit, dead inhabitant of a cairn'.

raavre 'red char' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (wild animals)
< PS **rāvδę* ← PScand **rauđiō* > ON *reyðr*; Sw *röding* 'char'.

The word has been borrowed separately into SaaS. The other Saami languages require the PS form **rāvtō*. (Aikio 2009: 272–273.) The semantics of the etymology is transparent.

raejvie '(predatory) bird nest on a tree' (SaaS) (wild animals)
< PS **rājvē* ← PScand **hraiwa* > ON *hræ* 'corpse'; *hræ-fugl* 'predatory bird', *hræ-dýr* 'predator (animal)'.

riejries 'ready; ready to be on a journey' (SaaS, SaaL, SaaP) (adjectives)
< PS **rējδē* ← PScand **raiđijaz* (or late PScand *ræiđijaz* (or *ræiđɪʀ*) > ON *reiðr* 'riding; ready'.
PScand **raiđijaz* is irregular from the PS perspective, as usually PScand first syllable **-a-* > PS *-ā-* (Koivulehto 2002: 589). It is possible that the SaaS word was borrowed from late PScand **ræiđijaz* (or *ræiđīʀ*) (Schalin 2018 pers. comm.). If this holds true, the word should not be included in my data. As the late PScand **-æi-* does not correspond regularly to SaaS *-ie-* (< PS **-ē-*), borrowing from late PScand is an uncertainty, and I have included the word in my data. The secondary category for the word is vehicles and travelling.

rïekte / rïektes 'correct; real, authentic' (SaaP, SaaL, SaaN, SaaI, SaaSk) (adjectives)
(< PS) ← PScand **reht- / *rehtaz* > ON *réttr* 'right'.

rijsie 'twig of birch' (SaaS, SaaU, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (flora)
< PS **rissē* 'twig' ← PScand **hrīsa-* > ON *hrís*; Sw *ris* 'twig'.
There has been a contraction of the meaning in SaaS.

roehtse 'root of a tree or a plant' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI) (flora)
< PS **rōccę* ← PScand **wrōtz / *wrōtiz* > ON *rót* 'root'.
Koivulehto (1999b: 10) suggests that the PScand form is *wrōtiz*, but Schalin (2018, pers. comm.) notes that the form is **wrōtz* without the vowel *-i-*. Schalin's remark constitutes a regular correspondence with the SaaS word.

råhtoe 'spruce forest; ?thicket of young deciduous trees; ?grove' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (flora)
< PS **rotō* 'thicket of young deciduous trees; grove' ← PScand **brutan-* > ON *broti* 'heap of trees felled in a wood'.
The semantics of the etymology is transparent. The secondary semantic category for the word is terrain and landscape. It should be noted that the word *råhtoe* has likely been borrowed earlier than e.g. *provrese* as the initial consonant cluster *pr-* cannot be seen in SaaS.

råtnoe 'reindeer doe' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (reindeer and reindeer husbandry)
< PS **ronō* 'reindeer doe' ← PScand **runō* > ON *runi* 'wild boar; boar'.
Semantically, the etymology is complicated. It is difficult to determine why a word that in Scandinavian refers to a (male) wild boar has shifted to mean a female reindeer in

Saami. Aikio (2009: 274) notes that the Saami word has possibly been borrowed from a hypothetical, feminine form of PScand **runan-*, so this might explain the shift to referring to a female animal. One hypothesis is that similarities in behavior have caused the semantic shift: female reindeer are aggressively protective of their offspring and their behavior could be offensive like that of boars'. Also, the noise of a reindeer and a wild boar (or swine in general) are similar, and they are both artiodactyl animals.[27]

saajve 'a mythical creature thought to live inside mountains' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (religion and beliefs)
< PS **sājvę / *sāvję* 'fresh water; mythical creature who was thought to live underground'
← PScand **saiwi- / *saiw-* > ON *sær ~ sjár ~ sjór* 'lake'.
In the other Saami languages, the meaning of the word is connected with water, for example SaaL *sájvva* 'sacred lake; sacred mountain'. The semantic development in SaaS might have been as follows: lake > sacred lake > sacred mountain (if the mountains became more important in the religion at some point and the word shifted or expanded to mountains) > a mythical creature living inside mountains.

saalje 'goat willow, great sallow' (SaaS, SaaU, SaaP, SaaL, SaaP, SaaSk) (flora)
< PS *?*sālję* ← PScand **saljōn* > ON *selja* 'goat willow, great sallow'.

saavtje, saavhtse 'sheep' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (agriculture and animal husbandry)
< PS **sāvcę* 'sheep' ← PScand **saudiz* > ON *sauðr*; N *saud, sau* 'sheep'.

saedtie 'sand' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI) (terrain and landscape)
< PS ?**sāntē* ← PScand **sandaz* 'sand' > ON *sandr*; Sw sand 'sand'.

saejrie 'wound, cut; sore' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI) (body parts)
< PS ?**sārjē* ← PScand **sairaz* > ON *sár*, *sárr* 'wound, cut, sore'.

saejrie, saejtie 'coalfish' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (wild animals)
< PS **sājðē* 'coalfish' ← PScand **saiða-* > ON *seiðr* 'coalfish'.

sïlpe 'silver' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (work-related words)
< PS **silpę* ← PScand **silbra-* > ON *silfr* 'silver'; Sw *silver*; N *sølv*.

skaaltjoe 'seashell' (SaaU, SaaL, SaaN, SaaI, SaaS, SaaSk, SaaK) (wild animals)
< NwS **skālćō* ← PScand **skaljō-* > ON *skel* 'shell'.

skaavtjoe 'beard' (SaaS, SaaU, SaaP, SaaL, SaaN) (body parts)
< PS **skāvčā* ← PScand **skagja* > ON *skegg* 'beard'.

skugkie 'shadow; silhouette' (SaaS, SaaL, SaaN) (natural phenomena)
(< PS) ← Pscand **skuggwan* > ON *skuggi* 'shadow; specter'.
Aikio (2012: 110) has discussed the SaaL word *skovve* and has reconstructed its

origins as < PS **skovē* < Pre-Pscand **skuwwan* > Pscand **skuggwan*. It is probable that the SaaS form stems from Proto-Scandinavian **skuggwan*, as there is *-gk-* in the SaaS form. Accordingly, the PS form **skovē* is irregular from the point of view of the SaaS word. The semantics of the etymology is quite straightforward.

skuvmie 'freight cover; tarp' (SaaS, SaaN, SaaI) (vehicles and travelling)
< PS **skuma-* ← PScand **skūma-* > N *skum* 'foam'.
Sköld (1986, 136), gives the PS form as **skūma-*, but as there is no long vowel **ū* in PS, J. Häkkinen (2017 pers. comm.) deems the PS form **skuma-* to be correct. Koivulehto (1992a: 93) explains that foam is a covering on a liquid and therefore the semantic development into 'freight cover; tarp' is clear. In SaaN, the meaning is 'woman's outer cap'. It too has a covering role though it is not as visible as the meaning in SaaS. The etymology is considered reliable, though Koivulehto (1992a: 93) is not certain about the dating: it could also be a NwG loan.

slikte 'smooth and flat' (SaaS; SaaN) (adjectives)
< PS **sliktë* ← PScand **slihtaz* > ON *sléttr* 'flat, smooth, even'
The word has been borrowed separately into Southern Proto-Saami (Aikio 2012: 110). The North Saami word stems from **liktēs*. The semantics of the word is transparent.

snaejrie 'slice (of bread, cheese)' (SaaS, SaaL, SaaN, SaaI, SaaSk) (food and cookery)
(< PS) ← PScand **snaiþō* > ON *sneið* 'cut, split'.

staavra 'pole; fishing rod' (SaaS, SaaP, SaaL, SaaN, SaaI) (hunting and fishing)
< PS ?**stāvrę* ← PScand **stauraz* > ON *staurr* 'pole'. Another possible semantic category for the word is tools and working materials.

staeries 'certain; trustworthy' (SaaS, SaaL, SaaN) (adjectives)
(< PS) ← PScand **stađaz* > ON *staðr* 'vakaa'.

ståapoe 'house, hut, cottage' (SaaS, SaaU, SaaP, SaaL, SaaN) (buildings and constructions)
(< PS) ← PScand **stuƀōn* > ON *stofa* 'house, hut, cottage'; N *stuva*.

suahtehke 'delicious, sweet (food)' (SaaS, SaaP, SaaL, SaaN, SaaI, SaaSk) (food and cookery)
< PS **sōttę* / **suottę* 'pleasant; sweet (food)' ← PScand **swōti-* > Sw *söt* 'sweet'.

sudtie 'opening in ice' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (water and water systems)
< PS **suntē* 'ice hole; smelt' ← PScand **sunda* > N, Sw *sund* 'strait'.
The etymology is uncertain as, according to Aikio (2009: 153), the semantic development is complex: 'strait' > 'place with a strong current' > 'place which remains unfrozen due to a strong current' > 'opening in ice' (> 'unfrozen'). The alternative etymology points to Finnish as the donor language (< Finnish *suntan* 'thaw') (Sammallahti 1998: 264).

svaajnes 'farm worker; big, strong, fat reindeer; quick (of a person)' (SaaS, SaaU, SaaP, SaaL) (agriculture and animal husbandry)
< PS ?**svājnę* ← PScand **swainaz* > ON *sveinn* 'boy, lad, young male; servant'.
The word could be classified in the category of humans and humans as members of society or reindeer and reindeer husbandry.

svaaloe 'swallow (bird)' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (wild animals)
< PS **svālfō* ← PScand **swalwōn- (?*swalhwōn-)* > ON *svala* 'swallow'.

svijnie 'swine' (SaaS, SaaU, SaaP, SaaL, SaaN) (agriculture and animal husbandry)
< PS **svijnē* ← PScand **swīna* > ON *svín*; Sw, N *svin* 'swine'.

tājhkoe 'female dog' (SaaS, SaaL, SaaN, SaaI, SaaSk, SaaK) (agriculture and animal husbandry)
< PS **tijkkō* ← PScand **tīkō* / **tīku* > ON *tík* 'female dog'.

vaanhtse, faahtse 'mitten' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (clothing)
< PS **vāccę* 'mitten' ← PScand **wantuz* > ON *vǫttr*; Old Sw *vanter*; Sw *vante* 'mitten'.
The PS form **vāccę* is not fit for SaaS, as there is a nasal in the SaaS word. A better form might be **vānccę*. This might be a separate loan in SaaS unless the SaaS form gained the nasal again later. The word is secondarily categorized under agriculture and animal husbandry.

vaarese 'homespun fabric' (SaaS, SaaU, SaaP, SaaL, SaaN) (clothing)
(< PS) ← PScand **wāđiz* > ON *váð* 'piece of cloth, garment'.
There has been an expansion of the meaning. The original word likely referred to a garment that was made of homespun fabric. In SaaS, the meaning has been expanded to refer to all (homespun) fabric. The SaaS word for clothes has been borrowed from the same PScand word (see *vaarjoeh, vaarjese*). The word is secondarily categorized under agriculture and animal husbandry.

vaarjoeh, vaarjese 'clothes; fabric' (SaaS, SaaU, SaaP, ?SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (clothing)
< PS **vārjə̄* 'cloth, piece of clothing' ← PScand **wāđiz* > ON *váð* 'piece of cloth, garment'.
The word is secondarily classified under agriculture and animal husbandry.

vaartasjidh 'to look closely, examine, follow with eyes' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaT) (action processes)
< PS **vārtāšę-* / **vārtā* 'examine' ← PScand **warđō-* > ON *varða* 'to guard, watch, defend'.
The semantics of the etymology is quite clear as the meaning has to do with sight both in Saami and in Old Norwegian.

vaegkie 'broad valley, low terrain where grass grows' (SaaS, SaaL, SaaP, SaaN) (terrain and landscape)
< PS **vāŋkē* ← PScand **wangaz* > ON *vangr* 'field, meadow'.

vaeltedh 'to take' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (action processes)
< PS **vāltē* ← PScand * *walđa- / *waldan* > ON *valda*; Sw *våld* 'violence, force'.
The development of the meaning is an expansion from a more specific meaning of 'to take by violence' to the general meaning of taking.

vaenie(s) 'scanty, scarce; a small amount' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (adjectives)
< PS **vānē(-s)*'scarce' ← PScand **vanaz* > ON *vanr* 'lacking, wanting'.

veapsa 'wasp' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK, SaaT) (wild animals)
< PS **vēpsēs* 'wasp' ← PScand **hwepsaz* > ON, N *hvefs*; Sw dial. *väfse;* N *veps* 'wasp'.

vïerhtse 'ram' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk, SaaK) (agriculture and animal husbandry)
< PS **vērccę* 'ram' ← NwG **wėþru-* > PScand **weþruz* > ON *veðr*; N *vær* 'ram'.

vijries 'wide, vast' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI, SaaSk) (adjectives)
< PS **vijδēs* 'wide' ← PScand **wīđaz* > Sw *vid* 'wide, vast'.

voevnijes 'terrible, grim' (SaaS, SaaL, SaaN, SaaI) (adjectives)
(< PS) ← PScand **ōgni-* > ON ógn 'awful, terrible'.

vuaksa 'ox' (SaaU, SaaP, SaaL, SaaN, SaaI) (agriculture and animal husbandry)
< PS **ōksā* ← PScand **oksan / *oksē* 'ox'.

våhkoe 'week' (SaaS, SaaU, SaaP, SaaL, SaaN, SaaI) (relations in time and space)
(< PS) ← Pscand **vika* > ON *vika*; Sw *vecka* 'week'.

Appendix 2. Reference literature for the lexical material

Saami word	Reference literature
aajhtere	Álgu s.v. *aajtere*; Collinder 1932, 193–196; Lagercrantz 1939, 27; Sköld 1980, 108; Qvigstad 1893, 86; Koivulehto 1993b, 129.
aajloe	Koivulehto 2008, 321; 2016, 390.
aajmoe	Álgu s.v. *aajmoe*; Lagercrantz 1939, 26; Lehtiranta 1989, s.v. *ājmō*; Qvigstad 1893, 83, 191; Sammallahti 1998, 128; 227; Sköld 1960, 11–13.
aajne	Álgu s.v. *áidnu*; LÄGLOS 1 s.v. *ainoa*; Qvigstad 1893, 83–84; Sammallahti 1998, 128; SSA 1 s.v. *ainoa*.
aaksjoe	Álgu s.v. *ákšu*; Bjorvand & Lindeman 2007 s.v. *øks*; Lagercrantz 1939, 29–30; Lehtiranta 1989 s.v. *ākšə̄jə̄*; Schalin 2018 personal comment 21.2.2018; Sammallahti 1998, 128.
aalhtedh	Álgu s.v. *elta*; Koivulehto 1992a, 87; Qvigstad 1893, 89; ks.m. Aikio 2012, 79.
aajroe	Álgu s.v. *áiru*; Lagercrantz 1939, 27; Lehtiranta 1989 s.v. *ājrō*; Qvigstad 1893, 86; SSA 1 s.v. *airo*.
aarhtse	Álgu s.v. *aarhtse*; Collinder 1932, 217; 1964, 52; Koivulehto 1999b, 8; Lagercrantz 1939, 35–36; Qvigstad 1893, 91, 93.
aarjoehtidh	Álgu s.v. *eira*; LÄGLOS 1 s.v. *aihella*; Qvigstad 1893, 92.
aarmoes	Álgu s.v. *armr*; LÄGLOS 1 s.v. *armas*; Qvigstad 1893, 92; SSA 1 s.v. *armas*.
aartege, haartege	Álgu s.v. *hárdu*; Kallio 2009, 37; Lagercrantz 1939, 157; Lehtiranta 1989 s.v. *ārtijā*; LÄGLOS 1, 84; Qvigstad 1893, 189; Sammallahti 1998, 129; Schalin 2018 pers. comm.; SSA 1 s.v. *hartia*.
aassjoe	Algu s.v. *áššu*; Aikio 2006, 20; Lagercrantz 1939, 41; Sammallahti 1998, 128.
aavtja	Aikio 2006, 14; Álgu s.v. *ávža*; J. Häkkinen 2010b, 52; Koivulehto 1991, 112; Qvigstad 1893, 98; Sköld 1960, 5–10.
aavtjoe	Álgu s.v. egg; Bergsland 1992, 7–8; Lagercrantz 1939, 42; Qvigstad 1893, 97; SSA 1 s.v. *aaja*.
aegnieh	Álgu s.v. *agn*; LÄGLOS 1 s.v. *akana*; Qvigstad 1893, 96.
aejlege, aejlies	Bergsland 1992, 9; Lagercrantz 1939, 26 (152); Qvigstad 1893, 85.
aepie	Aikio 2006, 14; 2009, 55, 244; Álgu s.v. *áhpi*; Bjorvand & Lindeman 2007 s.v. *hav*; Koivulehto 1999b, 12, 13; 2008, 322; Lehtiranta 1989 s.v. *āpē*; Sammallahti 1998, 128.

Saami word	Reference literature
àr^{aH}ku$\check{}$	Álgu s.v. *arkku*; Lagercrantz 1939, 36; Qvigstad 1893, 92; SSA 1 s.v. *arkku*.
aerkie	Álgu s.v. *argr*; Lagercrantz 1939, 36; Lehtiranta 1989 s.v. *ārkē*; LÄGLOS 1 s.v. *arka*; Qvigstad 1893, 92; SSA 1 s.v. *arki*.
aernie	Álgu s.v. *arina*; Hasselbrink 1981, 217; Heikkilä 2014, 113; Lagercrantz 1939, 37–38; LÄGLOS 1 s.v. *arina*; SSA 1 s.v. *arina*.
aerpie	Aikio 2006, 12, Álgu s.v. *árbi*; Bjurvand & Lindeman 2007, s.v. *arv*; Koivulehto 1976, 250; 2002, 587; Lagercrantz 1939, 37; Lehtiranta 1989, s.v. *ārpē*, *vōrpē*; Qvigstad 1893, 91; Sammallahti 1998, 128; 1999, 83; 2001, 409.
aevhkie	Álgu s.v. *ávki*; Koivulehto 1976, 42; Lagercrantz 1939, 42; Qvigstad 1893, 97; Sammallahti 1998, 228; Schalin 2018 pers. comm.
aevlerge	Álgu s.v. *ävli*; Lehtiranta 1989 s.v. *āvlē*; LÄGLOS 1 s.v. *haahla*; Qvigstad 1893, 97; SSA 1 s.v. *haahla*; ks.m. Aikio 2012, 79.
aevries	Álgu s.v. *audes*; Collinder 1932, 221; Koivulehto 1976, 249; LÄGLOS 1 s.v. *autio*; Qvigstad 1893, 96; Sammallahti 1998, 228.
aevsie	Álgu s.v. *áksi*; Bjorvand & Lindeman 2007 s.v. *haus*; J. Häkkinen 2017 pers. comm.; Qvigstad 1893, 87; Sammallahti 1998, 128.
asspa	Álgu s.v. *asp*; LÄGLOS 1 s.v. *haapa*; Qvigstad 1893, 94.
awča	Aikio 2006, 14; Álgu s.v. *ávža*; J. Häkkinen 2010b, 52; Koivulehto 1991, 112; Qvigstad 1893, 98.
baante	Álgu s.v. *band*; Israelsson 2015 s.v. *baante*; Lagercrantz 1939, 624; LÄGLOS 3 s.v. *panta*; Qvigstad 1893, 99.
baarhkoe	Koivulehto 1987, 201; Lehtiranta 1989 s.v. *pārkk$\tilde{}$*
baaroe	Aikio 2009, 268; Álgu s.v. *baaroe*; Lagercrantz 1939, 627; Lehtiranta 1989 s.v. *pārō*; Qvigstad 1893, 102
baernie	Aikio 2006, 18; Álgu s.v. *bárdni*; Korhonen 1981, 185; Lagercrantz 1926, 111; 1939, 626–627; Lehtiranta 1989 s.v. *pārnē*; Qvigstad 1893, 101; Sammallahti 1998, 128, 230.
bearkoe	Aikio 2006, 14; Álgu s.v. *biergu*; Koivulehto 1988, 30; 1989, 45; 2002; 589; 2016, 160; Lagercrantz 1939, 658; Lehtiranta 1989 s.v. *pērkō*; Qvigstad 1893, 106; Sammallahti 1998, 128. 231.
betnie	Álgu s.v. *bodni*; Bjorvand & Lindeman 2007 s.v. *botn*; Lagercrantz 1939, 605–606; Lehtiranta 1989 s.v. *ponnē*; Sammallahti 1998, 128.
buvrie	Aikio 2009, 270–271; Álgu s.v. *buvrie*; Koivulehto 1992a, 91; 2002, 589; Lagercrantz 1926, 130; 1939, 687–688; Lehtiranta 1989 s.v. *puvrē*; Qvigstad 1893, 121

Saami word	Reference literature
daajje	Álgu s.v. *deigr*; Koivulehto 1976, 42; Lagercrantz 1939, 893; LÄGLOS 3 s.v. *taikina*; Qvigstad 1893, 124; SSA 3 s.v. *taikina*.
daatje	Aikio 2009, 281; Álgu s.v. *daatje*; Lagercrantz 1939, 904; Lehtiranta 1989 s.v. *tānćę*; Sammallahti 1998, 128, 236.
daerpies	Aikio 2006, 22; Álgu s.v. *dárbu*; Heikkilä 2014, 46; Koivulehto 2002, 586; Korhonen 1981, 91, 104, 194, 200; Lagercrantz 1939, 910; Lehtiranta 1989 s.v. *tārpę*; Qvigstad 1893, 126; Sammallahti 1998, 237; SSA 3 s.v. *tarve*.
dahpe	Aikio 2006, 24; Álgu s.v. *dohppa*; Koivulehto 1981, 77–78; 1987, 195; Lagercrantz 1939, 897; Lehtiranta 1989 s.v. *toppę*; Sammallahti 1998, 128; 1999, 82; 2001, 409; SSA 3 s.v. *tuppi*.
davgh	Álgu s.v. *dávk*; Koivulehto 1976, 43; Lagercrantz 1939, 902; Qvigstad 1893, 127; Sköld 1980, 108.
deemedh	Aikio 2009, 281; Álgu s.v. *temja*; Koivulehto 1992a, 87; Lagercrantz 1939, 908–909; Lehtiranta 1989 s.v. *tāmę*; Qvigstad 1893, 123, 125.
ditnie	Álgu s.v. *datni*; Lehtiranta 1989 s.v. *tęnē*; Nielsen 1976 s.v. *tin*; Qvigstad 1893, 123; Sammallahti 1998, 128; Schalin 2018 pers. comm.
dovres, dovrehke	Álgu s.v. *dýrr*; Bjorvand & Lindeman 2007 s.v. *dyr*1; Lagercrantz 1939, 923; LÄGLOS 3 s.v. *tyyris*; Qvigstad 1893, 132; ks.m.SSA 3 s.v. *tyyris*.
dytnije	Álgu s.v. *didnu*; Lagercrantz 1939, 896; Lehtiranta 1989 s.v. *tinnᵊ*; Qvigstad 1893, 129; Sammallahti 1998, 128.
dälja	Álgu s.v. *dilljá*; Bergsland & Mattson Magga 2007 s.v. *dælja*; Bjorvand & Lindeman 2007 s.v. *tilje*; Lagercrantz 1939, 914; 922; Lehtiranta 1989 s.v. *tiljā*; Qvigstad 1893, 131, Sammallahti 1998, 128; SSA 3 s.v. *teljo*.
eajma	Aikio 2009, 183; Lagercrantz 1939, 116.
eajmeske	Aikio 2009, 183, 184.
faala, faelies	Aikio 2009, 286; 2012, 109; Álgu s.v. *fális*; Koivulehto 1999b, 11; Lagercrantz 1939, 129; Lehtiranta 1989 s.v. *vālās*; Qvigstad 1893, 144; Sammallahti 1998, 128; SSA 3 s.v. *valas*.
faaroe	Aikio 2006, 14; Álgu s.v. *fárru*; Korhonen 1981, 134; Lagercrantz 1939, 131; 134; 135; Lehtiranta 1989 s.v. *vārō*; Qvigstad 1893, 146; Sammallahti 1998, 128, 241.
faastoe	Álgu s.v. *faastoe*; LÄGLOS 3 s.v *paasto*; Qvigstad 1893, 147, 158; Schalin 2018 pers. comm.

Saami word	Reference literature
fealloe	Aikio 2006, 14; 2012, 109; Álgu s.v. *fiellu*; Koivulehto 1976, 46; 1988, 30; 1989, 45; 1992a, 92; 1992b, 301; 2002, 589; 2016, 160; Lagercrantz 1939, 138; Qvigstad 1893, 150; Sammallahti 1998, 128.
fierve	Aikio 2009, 246; 2012, 109; Álgu s.v. *fierva*; Koivulehto 1995, 92f 7; Korhonen 1981, 134; Lagercrantz 1939, 141; Qvigstad 1893, 151.
fuelhkie	Álgu s.v. *fuelhkie*; Heikkilä 2014, 90; Schalin 2018, pers. comm.
gaahkoe	Álgu s.v. *gáhkku*; Bjorvand & Lindeman 2007 s.v. *kake*; Lagercrantz 1939, 260; Lehtiranta 1989 s.v. *kākk-*; LÄGLOS 2 s.v. *kakku*; Sammallahti 1998, 128; Schalin 2018 pers. comm.; ks.m. Aikio 2012, 79.
gaajedidh	Aikio 2009, 76; Álgu s.v. *gaajedidh*
gaajhtse	Aikio 2009, 106, 250; Álgu s.v. *gáica*; Bjorvand & Lindeman 2007 s.v. *geit*; Koivulehto 1999b, 10; 2002, 589; Lagercrantz 1939, 84, 256–257; Qvigstad 1893, 159–160; Sammallahti 1998, 128
gaaltije	Aikio 2009, 250; Álgu s.v. *gáldu*; Koivulehto 2008, 322; 2016, 391; Lagercrantz 1939, 263; Lehtiranta 1989 s.v. *kāltijā*; Qvigstad 1893, 160; Sammallahti 1998, 128; 2012, 100.
gaavnedh	Álgu s.v. *gagn*; Koivulehto 1992a, 87–88; 2002, 589; Lagercrantz 1939, 274–275; Lehtiranta 1989 s.v. *kāvnę*; Sammallahti 1998, 243.
gaavnoe	Álgu s.v. *gávdni*, *gagn*; Koivulehto 2002, 589; Lagercrantz 1939, 274; Lehtiranta 1989 s.v. *kāvnē*; Qvigstad 1893, 167; Sammallahti 1998, 129, 243.
gaejmie	Aikio 2009, 249; Lagercrantz 1939, 258.
gaejsie	Álgu s.v. *gáisi*; Aikio 2009, 249; Heikkilä 2011, 69; 2014, 121; LÄGLOS 2 s.v. *kaira*, *keihäs*; Nordic Languages 2002, 117; Sköld 1954, 35.
gaellies	Aikio 2009, 250; Àlgu s.v. *gállis*; Koivulehto 1999b, 11; Lagercrantz 1939, 261–262; Lehtiranta 1989 s.v. *kāllēs*, Qvigstad 1893, 161–162; Sammallahti 1998, 128.
gaelpie	Álgu s.v. *kalfr*; Heikkilä 2014, 240; Lagercrantz 1939, 263; LÄGLOS 2 s.v. *kalpe*; Qvigstad 1893, 160; ks.m. Aikio 2012, 79.
gaerie	Aikio 2009, 248; Álgu s.v. *gárri*; Lagercrantz 1939, 269; Lehtiranta 1989 s.v. *kārē*; Qvigstad 1893, 165; Sammallahti 1998, 129; SSA 1 *kaara*.
gaertie	Aikio 2009, 249; Álgu s.v. *gárdi*; Koivulehto 2002, 589; Lehtiranta 1989 s.v. *kārtē*; Qvidstad 1893, 164–165; Sammallahti 1998, 129; SSA 1 s.v. *kaarre*2.

Saami word	Reference literature
gaessie	Koivulehto 1999b, 14; Lagercrantz 1939, 272; Lehtiranta 1989 s.v. *kāssē*; Qvigstad 1893, 166; Schalin 2018 pers. comm.
gealoe	Álgu s.v. *gealoe*; Koivulehto 1992a, 91; Sammallahti 1998, 128.
gearhka	Álgu s.v. *geärkaa*; Koivulehto 1992a, 92; 1992b, 301; 2016, 175.
geehtedh	Koivulehto 1999a, 258; Lagercrantz 1939, 273; Qvigstad 1893, 166.
giëhtjedh	Álgu s.v. *giëhtjedh*; Heikkilä 2014, 80; J. Häkkinen 2017 pers. comm.; Lagercrantz 1939, 278; Lehtiranta 1989 s.v. *kēććę*; Sammallahti 2001, 399.
gïeles	Aikio 2009, 252; Álgu s.v. *gielas*; Lagercrantz 1939, 304; Qvigstad 1893, 168.
goeme, guemie, gåemie	Álgu s.v. *guopmi*; Bjorvand & Lindeman 2007 s.v. *gomme*; Lagercrantz 1926, 59; 1939, 371; Qvigstad 1893, 183; Sammallahti 1998, 128.
govse	Álgu s.v. *gussa*; Heikkilä 2014, 240; Koivulehto 1990, 37; 1992a, 91; 1999b, 14f 2; 2002, 589; Korhonen 1981, 47, 202; Lagercrantz 1939, 357, 360; Lehtiranta 1989 s.v. *kusę*; Qvigstad 1893, 184; Sammallahti 1998, 129.
haajhke	Aikio 2009, 245; Álgu s.v. *haajhke*; Koivulehto 2006, 424; Lagercrantz 1939, 150; Lehtiranta 1989 s.v. *ājkkę*; Lagercrantz 1926 s.v. *hą̀i̯χɛ̄*; Qvigstad 1893, 84; Sammallahti 1998, 129; SSA 1 s.v. *aihki*.
haallode	Álgu s.v. *álu-*; Lagercrantz 1939, 153–154; Lehtiranta 1989 s.v. *ālə̄*; LÄGLOS 1 s.v. *kallas*; Qvigstad 1893, 188; Sammallahti 1998, 128.
haame	Koivulehto 2008, 323; 2016, 392.
haelmie	Álgu s.v. *halmr*; Lagercrantz 1939, 147; LÄGLOS 1 s.v. *halme*; Qvigstad 1893, 188.
haepkie	Álgu s.v. *haukr*; Lagercrantz 1939, 156; LÄGLOS 1 s.v. *haukka*1; Qvigstad 1893, 186–187.
hiessjie	Álgu s.v. *asso*; Koivulehto 1999b, 14; Qvigstad 1893, 94; Schalin 2018 pers. comm.
hovme	Aikio 2009, 173–174; Lagercrantz 1939, 178.
ïbje	Aikio 2006, 25; Álgu s.v. *ïbje*; Qvigstad 1893, 338.
klaajpoe	Álgu s.v. *klaajpoe*; Lagercrantz 1939, 312; Schalin 2018, pers. comm.; Sköld 1960, 16, 17.
klahtje	Aikio 2012, 110; Álgu s.v. *kleggi*; Lagercrantz 1939, 312; Qvigstad 1893, 214.
kraavhtse	Aikio 2009, 272; 2012, 110; Álgu s.v. *rákca*; Koivulehto 1999b, 7; Korhonen 1981, 182; Lagercrantz 1939, 344, 385–386, 716; Qvigstad 1893, 179.

Saami word	Reference literature
kraesie	Aikio 2012, 110; Álgu s.v. *rássi*; Heikkilä 2011, 78; Koivulehto 1999b, 14f 2; Lagercrantz 1939, 386–387; Lehtiranta 1989 s.v. *rāsē*; Qvigstad 1893, 259; Sammallahti 1998, 129.
kraevies	Aikio 2012, 110; Álgu s.v. *grár*; Bergsland 1992, 10; Lagercrantz 1939, 387; Qvigstad 1893, 260–261.
krievvie	Aikio 2012, 110; Álgu s.v. *krievvie*; Bergsland 1988, 161–162.
kruana / kråånehke	Álgu s.v. *kråånehke*; Koivulehto 1988, 36; 1999b, 17; Lagercrantz 1926, 68; 1939, 391; Lehtiranta 1989 s.v. *rōnę*; Qvigstad 1893, 275.
laaffa	Aikio 2006, 14; 2012, 109; Álgu s.v. *lávkkis*; Lagercrantz 1939, 402; Qvigstad 1893, 211; Sköld 1980, 108.
laajkoe	Aikio 2009, 260; Algu s.v. *láigu*; Koivulehto 1999a, 49; 2002, 589; Lagercrantz 1926, 70; 1939, 402–403; Qvigstad 1893, 208; Sammallahti 1998, 128; 2012, 100; SSA 2 s.v. *laikko*1.
laajroe	Aikio 2009, 260; Álgu s.v. *láidet*; Koivulehto 1976, 249f 2; Lagercrantz 1926, 76; 1939, 404; Lehtiranta 1989 s.v. *lājδō*; Qvigstad 1893, 208; Sammallahti 1998, 129; ks.m. SSA 2 s.v. *laitis*.
laampe	Álgu s.v. *laampe*; Heikkilä 2014, 119, 240; Lagercrantz 1939, 399; Qvigstad 1893, 204.
laavkedh	Álgu s.v. *lávgat*; Bergsland 1964, 144; Bjorvand & Lindeman 2007 s.v. *lagg*; Lagercrantz 1939, 410; Lehtiranta 1989 s.v. *lāŋvę*; Sammallahti 1998, 129.
laedtie	Aikio 2009, 260; Álgu s.v. *láddi*; Lagercrantz 1939, 401; Lehtiranta 1989 s.v. *lāntē*; Qvigstad 1893, 205, 210; Sammallahti 1998, 129; SSA 2 s.v. *lanta*2
laejjies	Aikio 2012, 110; Álgu s.v. *slær*; Qvigstad 1893, 209; Sköld 1980, 108; SSA 2 s.v. *laimea*.
laejpie	Álgu s.v. *hleifr*; Koivulehto 2002, 592; Lagercrantz 1926, 70; 1939, 403; LÄGLOS 2 s.v. *leipä*; Qvigstad 1893, 208; Sammallahti 1998, 251; SSA 2 s.v. *leipä*.
laejrie	Álgu s.v. *laejrie*; Heikkilä 2014, 113; Lagercrantz 1939, 404; Qvigstad 1893, 209.
laektedh	Aikio 2009, 191–192; Collinder 1932, 220; Lagercrantz 1939, 404–405.
lïhtse	Aikio 2006, 15; Álgu s.v. *lïhtse*; Koivulehto 1999b, 8–9; Lehtiranta 1989 s.v. *lęδęs*.
lijnie	Álgu s.v. *lijnie*; Lagercrantz 1926, 76; 1939, 422; Lehtiranta 1989 s.v. *lijnē*; LÄGLOS 2 s.v. *liina*; Qvigstad 1893, 216.

Saami word	Reference literature
liksie ~ livsie / lievsie ~ luevsie	Aikio 2009, 260; Álgu s.v. *lýsi*; Lagercrantz 1926, 75, 76; 1939, 423; Qvigstad 1893, 218.
loeves	Álgu s.v. *luovos*; Lagercrantz 1939, 452–453; Lehtiranta 1989 s.v. *lõvẹs*; Qvigstad 1893, 226; Sammallahti 1998, 129, 252.
luptedh	Álgu s.v. *loktet*; Lagercrantz 1939, 431; Lehtiranta 1989 s.v. *loptẹ*; Sammallahti 1998, 129, 252; Schalin 2018 pers.comm.
maake	Álgu s.v. *máhka*; Lagercrantz 1926, 82; 1939, 469–470; Lehtiranta 1989 s.v. *mākẹ*; Qvigstad 1893, 229; Sammallahti 1998, 129.
maanoe	Álgu s.v. *mánnu*; Koivulehto 1999b, 20; 2002, 589; Lehtiranta 1989 s.v. *mānō*; Qvigstad 1893, 231; Sammallahti 1998, 129, 253–254.
maarhvie	Aikio 2006, 14; 2012, 109; Álgu s.v. *márfi*; Lagercrantz 1926, 82; 1939, 473.
maelie	Aikio 2009, 260; Álgu s.v. *mál*; Koivulehto 2002, 589; Lagercrantz 1939, 471; Lehtiranta 1989 s.v. mālē; SSA 2, 36, 37.
naehpie	Álgu s.v. *náhppi*; Lagercrantz 1926, 91; 1939, 516; Lehtiranta 1989 s.v. *nāppē*; LÄGLOS 2, s.v. *nappo*; Qvigstad 1893, 243; Sammallahti 1998, 129; ks.m. SSA 2 s.v. *nappo*.
nejpie	Álgu s.v. *niibi*; Bjorvand & Lindeman 2007 s.v. *kniv*; Heikkilä 2014, 112; Lagercrantz 1926, 92; 1939, 522; Lehtiranta 1989 s.v. *nijpē*; Qvigstad 1893, 245; Sammallahti 1998, 129; Schalin 2018 pers. comm.
noerhte	Álgu s.v. *nuorti*; Bjorvand & Lindeman 2007 s.v. *nord*; Collinder 1932, 222; Koivulehto 1988, 28; Lagercrantz 1926, 95; 1939, 535–536; Lehtiranta 1989 s.v. *nõrttē*; Qvigstad 1893, 248; Sammallahti 1998, 129; Schalin 2018 pers. comm.
nuehtie	Álgu s.v. *nuohtti*; Koivulehto 1992a, 91; Lagercrantz 1939, 536–537; Lehtiranta 1989 s.v. *nõttē*; LÄGLOS 2 s.v. *nuotta*; Qvigstad 1893, 248; Sammallahti 1998, 129.
plaahkoe	Aikio 2012, 111; Álgu s.v. *plaahkoe*; Qvigstad 1893, 210.
plaassa	Aikio 2012, 111; Álgu s.v. *fles*; Koivulehto 1999b, 14; Qvigstad 1893, 212.
plaerie	Koivulehto 1997b, 82; 1999a, 344; Lagercrantz 1939, 401; Qvigstad 1893, 206; Sköld 1960, 26.
plievvies	Aikio 2012, 110; Álgu s.v. *plievvies*; Lagercrantz 1939, 661; Qvigstad 1893, 110.
provrese	Aikio 2012, 110; Álgu s.v. *brud*; Koivulehto 1999b, 8; Qvigstad 1893, 117.

Saami word	Reference literature
raaktse	Álgu s.v. *raaktse*; Koivulehto 1999b, 9; Lagercrantz 1939, 716.
raajne	Álgu s.v. *hreinn*; Lagercrantz 1926, 133; 1939, 713; LÄGLOS 3 s.v. *rainis*; Qvigstad 1893, 255.
raajroe	Aikio 2009, 272; Álgu s.v. *ráidu*; Koivulehto 2006, 426; Lagercrantz 1939, 714; Lehtiranta 1989 s.v. *rājtō*; Qvigstad 1893, 255; Sammallahti 1998, 129, 261.
raammaa	Álgu s.v. *ramas*; Lagercrantz 1939, 717; Lehtiranta 1989 s.v. *rǫmęs*; Sköld 1960, 67.
raavke	Aikio 2009, 272; Álgu s.v. *rávga*; Lagercrantz 1939, 721; Lehtiranta 1989 s.v. *rāvkę*; LÄGLOS 3 s.v. *raukka*; Qvigstad 1893, 261; Sammallahti 1998, 129.
raavre	Aikio 2009, 272–273; Álgu s.v. *rávdu*; Koivulehto 1976, 34, 247; Lagercrantz 1939, 721–722; Lehtiranta 1989 s.v. *rāvtō*; Qvigstad 1893, 260; Sammallahti 1998, 129.
raejvie	Álgu s.v. *raejvie*; Bergsland 1988, 162.
rïekte / rïektes	Álgu s.v. *riekta*; Lagercrantz 1939, 733; Sammallahti 1998, 261.
rijsie	Álgu s.v. *rissi*; Koivulehto 1999b, 14; Lagercrantz 1926, 137; 1939, 729; Lehtiranta 1989 s.v. *rissē*; Qvigstad 1893, 266; Sammallahti 1998, 129, 261.
råhtoe	Aikio 2009, 275; Álgu s.v. *råhtoe*; Koivulehto 1971, 593; Lagercrantz 1939, 738; Lehtiranta1989, s.v. *rotō*
råtnoe	Aikio 2009, 274; Álgu s.v. *råtnoe*; Lagercrantz 1939, 737; Lehtiranta 1989 s.v. *ronō*.
riejries	Álgu s.v. *reid*; Lagercrantz 1926, 136; 1939, 723; LÄGLOS 3 s.v. *ratsas*; Qvigstad 1893, 279.
roehtse	Álgu s.v. *rót*; Koivulehto 1999b, 10; Lagercrantz 1939, 748; Qvigstad 1893, 276–277; Schalin 2018 pers. comm.
röövpses	Koivulehto 1999b, 15; Lehtiranta 1989 s.v. **rōpsę*; Sammallahti 1998, 128; 2001, 409.
saajve	Aikio 2009, 276; Álgu s.v. *saajve*; Korhonen 1981, 47; Lagercrantz 1939, 767; Lehtiranta 1989 s.v. *sāvję*; Qvigstad 1893, 332; Sköld 1961, 126; 1980, 108; SSA 3 s.v. *saivo*.
saalje	Álgu s.v. *selja*; Koivulehto 2001, 364; 2006, 428; 2016, 262; Lagercrantz 1939, 769; Qvigstad 1893, 331; Schalin 2018 pers. comm.
saavtje / saavhtse	Álgu s.v. *sávza*; Heikkilä 2014, 119; Koivulehto 1999b, 8; 2002, 589–590; Korhonen 1981, 180; Lehtiranta 1989 s.v. *sāvcę*; Qvigstad 1893, 285; Sammallahti 1998, 129.

Saami word	Reference literature
saedtie	Álgu s.v. *sandr*; Lagercrantz 1939, 764–765; LÄGLOS 3 s.v. *santa*; Qvigstad 1893, 281.
saejrie	Álgu s.v. *sár*; Korhonen 1981, 47; Lagercrantz 1939, 766; LÄGLOS 1 s.v. *haire*; LÄGLOS 3 s.v. *sairas*; Qvigstad 1893, 284; Sköld 1980, 108.
saejtie	Aikio 2009, 276; Álgu s.v. *sáidi*; Lehtiranta 1989 s.v. *sājδē*; Qvigstad 1893, 282; Sammallahti 1998, 129.
sïlpe	Aikio 2009, 278; Álgu s.v. *silba*; Lagercrantz 1939, 786; Lehtiranta 1989 s.v. *silpe*; Qvigstad 1893, 287; Sammallahti 1998, 129.
skaaltjoe	Aikio 2006, 14; 2012, 110; 2009, 250; 2012, 110; Álgu s.v. *skálžu*; Lehtiranta 1989 s.v. *kālćō*; Qvigstad 1893, 290–291.
skaavtjoe	Aikio 2012, 110; Álgu s.v. *skegg*; Lagercrantz 1939, 797; Qvigstad 1893, 293.
skinne	Aikio 2009, 253; Álgu s.v. *skinne*; Heikkil 2014, 119; Lagercrantz 193e9, 799; Qvigstad 1893, 294.
skugkie	Aikio 2012, 110; Álgu s.v. *skovve*; Lagercrantz 1926, 150; 1939, 806.
skuvmie	Álgu s.v. *skuvmie*; Koivulehto 1992a, 93; Lagercrantz 1939, 807; Sammallahti 1998, 128; Sköld 1986, 131–150.
slikte	Aikio 2012, 110; Qvigstad 1893, 220.
snaejrie	Álgu s.v. *snaejrie*; Collinder 1932, 221–222; Qvigstad 1893, 306–307.
staavra	Álgu s.v. *staurr*; Koivulehto 1979, 279–280; 1984, 118; Lagercrantz 1939, 838; LÄGLOS 3 s.v. *saura*1; Qvigstad 1893, 320
staeries	Álgu s.v. *staeries*; Koivulehto 1993a, 30; Lagercrantz 1939, 291; Qvigstad 1893, 317; Schalin 2018 pers. comm.
ståapoe	Álgu s.v. *stohpu*; Heikkilä 2014, 240; Lagercrantz 1939, 841; Qvigstad 1893, 322; Sammallahti 1998, 263; Schalin 2018 pers. comm; ks.m. SSA 3 s.v. *tupa*.
suahtehke	Álgu s.v. *suohtas*; Koivulehto 1999b, 18; Lehtiranta 1989 s.v. *sõttę*; Sammallahti 1998, 129, 264.
sudtie	Aikio 2009, 153; Álgu s.v. *sudtie*; Lehtiranta 1989 s.v. *suntē*; Sammallahti 1998, 264.
svaajnes	Álgu s.v. *sveinn*; LÄGLOS 3, s.v. *soini*; Qvigstad 1893, 312
svaaloe	Aikio 2012, 110; Álgu s.v. *spálfu*; Qvigstad 1893, 312; Schalin 2018 pers. comm.
svijnie	Álgu s.v. *svijnie*; Heikkilä 2014, 240; Lagercrantz 1939, 833; Qvigstad 1893, 313.

Saami word	Reference literature
tjuvrie	Koivulehto 1997a, 160; Lagercrantz 1939, 100; Lehtiranta 1989 s.v. **ćuδē*.
tæjhkoe	Aikio 2009, 27; Álgu s.v. *tík*; Heikkilä 2014, 233; Koivulehto 2009, 422f 13; Lagercrantz 1939, 920; Qvigstad 1893, 335.
vaanhtse, faahtse	Álgu s.v. *fáhcca*; Koivulehto 1999b, 8; Lagercrantz 1926, 201; 1939, 128; Lehtiranta 1989 s.v. *vāccę*; Qvigstad 1893, 147–148; Sammallahti 1998, 128; SSA 3 s.v. *vantus*.
vaarese	Álgu s.v. *vaarese*; Koivulehto 1999b, 9; Lagercrantz 1939, 989; Qvigstad 1893, 339.
vaarjoeh, vaarjese	Álgu s.v. *fárju*; Lagercrantz 1939, 131; Lehtiranta 1989 s.v. *vārjə̄*; LÄGLOS 3 s.v. *vaate*; Qvigstad 1893, 145, 339; Sammallahti 1998, 128.
vaartasjidh	Aikio 2009, 287; Álgu s.v. *vaartasjidh*; Koivulehto 1999b, 12; Lehtiranta 1989 s.v. *vārtā*; Qvigstad 1893, 343; Sammallahti 1998, 129.
vaegkie	Aikio 2009, 286; Álgu s.v. *vaegkie*; Heikkilä 2011, 76–77; Lagercrantz 1939, 979.
vaeltedh	Álgu s.v. *vaeltedh*; Lagercrantz 1939, 983–984; Lehtiranta 1989 s.v. *vāltē*; LÄGLOS 3 s.v. *vallata*; Sammallahti 1998, 265.
vaenie(s)	Aikio 2009, 285; Álgu s.v. *vátni*; Lagercrantz 1939, 985; Lehtiranta 1989 s.v. *vānē*; Qvigstad 1893, 339, 342; Sammallahti 1998, 129; SSA 3 s.v. *vaana*.
veapsa	Álgu s.v. *vievssis*; Koivulehto 1999b, 11; Lagercrantz 1939, 1008; Lehtiranta 1989 s.v.*vēpsēs*; Qvigstad 1893, 347, 348; Sammallahti 1998, 129.
vïerhtse	Álgu s.v. *vierca*; Bjorvand & Lindeman 2007 s.v. *vær*; Collinder 1932, 222; Koivulehto 1999a, 360; 1999b, 8; Lagercrantz 1939, 1008; Lehtiranta 1989 s.v. *vērccę*; Qvigstad 1893, 347; Sammallahti 1998, 128, 129; 2012, 100.
vijries	Álgu s.v. *viiddis*; Koivulehto 1999b, 11, 14f 2; Lagercrantz 1939, 1000; Lehtiranta 1989 s.v. *vijδēs*; Qvigstad 1893, 346; Sammallahti 1998, 129.
voevnijes	Álgu s.v. *ógn*; Koivulehto 1992a, 88–89; Qvigstad 1893, 352.
vuaksa	Heikkilä 2014, 122f 109; 240f 200; Lagercrantz 1939, 1019; Qvigstad 1893, 350.
våhkoe	Álgu s.v. *vahkku*; Lagercrantz 1939, 971; Qvigstad 1893, 340; Sammallahti 1998, 265; ks.m SSA 3 s.v. *viikko*.
å̄wjiɛ	Koivulehto 2008, 322; 2016, 391; Qvigstad 1893, 96.

Appendix 3. The reference literature for archaeological and osteological material

RAÄ number	Archaeological site	Reference literature
154	Storsjö 17:5	Oskarsson 1998.
2	Finnäset	Serning 1966a, 224; Wehlin 2016, 221.
112:1	Fulufjället	Wehlin 2016, 233.
2	Halvfariudden	Hemmendorff 1984; Sundström 1989c, 160.
80	Hästnäset	Gejvall 1966, 254; Hyenstarnd 1987, 132–133; Serning 1962, 32, 35, 50–51; 1966a, 92–94, 217–218; Wehlin 2016, 225.
126	Hästudden	Hyenstrand 1974, 109; Serning 1966a, 177–180; Wehlin 2016, 229.
104	Josvedsviken, Tomte 1:2	Magnusson 1986, 68, 149.
106b	Josvedsviken	Magnusson 1986, 62–67.
161	Josvedsviken	Magnusson 1986, 71–73, 149.
10	Klevsand	Larje 1989; Sundström 1989a; 1989c, 158; Sundström & Feldt 1989.
9:1	Krankmårtenhögen	Ambrosiani et al 1984.
77	Ljungdalen	Holm & Willemark 1988.
77	Ljungdalen	Holm & Willemark 1988.
81	Myrviken, Myre 2:1	Magnusson 1986, 76–77.
9	Näsvarpsundet	Sundström 1984; 1989c, 156.
36	Präsbordet	Magnusson 1986, 88–89.
4:1	Smalnäset	Ambrosiani et al. 1984; Hvarfner & Kvarning 1958.
309	Stålavan	Sundström 1989b, 96–100.
120	Södra Getryggen	Serning 1966a, 176–177; Wehlin 2016, 228–229.
32	Tjuvholmen	Magnusson 1986, 73–75.
6	Vindförbergs udde	Johansson 2016, bilaga 1; Lipping 1980; Serning 1966b, 1966c; 1967.
163	Ånnsjön	Jensen 1989, 64–66.
107	Åssjön, Tomte 1:1,	Magnusson 1986, 69–70.

RAÄ number	Archaeological site	Reference literature
14:1	Örviken	Hyenstrand 1987, 119–120; Serning 1966a, 150–152; Wehlin 2016, 230–231.
1	Övre Grundsjön 1	Hemmendorff 1984.
7	Övre Grundsjön 7	Hemmendorff 1984.
40	Ångron	Magnusson 1989, 89–95.
24		Hyenstrand 1972, 22 fig 15; 1974, 193 tabell 2.
80		Hyenstrand 1972, 22 fig 15; 1974, 193 tabell 2.
141		Hyenstrand 1972, 22 fig 15; 1974, 193 tabell 2.
21		Hyenstrand 1972, 22 fig 15; 1974, 193 tabell 2.
179		Hyenstrand 1972, 22 fig 15; 1974, 193 tabell 2.

Appendix 4. (on the following pages)

Table combining the archaeological and lexical material.

The table presents all semantic and archaeological categories, but lists lexical finds in only those semantic categories that could be detected in the archaeological material. However, all lexical finds in those categories that can be correlated with the archaeological categories of this research are provided, even if there are no corresponding archaeological find groups for all of the words. The lexical finds in the table have been classified according to their primary meaning, though some exceptions have been made due to differences in the nature of archaeological and lexical data. The secondary meanings are listed in Appendix 1 for each word if secondary meanings can be identified.

Appendix 4. Table combining the archaeological and lexical material.

Archaeological category		Archeological find group
Main	**Sub**	
Ø		
Ø		
Animal bones	Domestic animal bones	sheep/goat
		swine
		dog
		horse
	Wild animal bones	fish
		capercaillie
		bear
		beaver
		elk
		loon

Lexical find	Semantic category	
	Sub	Main
		Action processes (verbs)
		Adjectives
aegnieh 'chaff, husk'	Agriculture	Agriculture and domestic husbandry
hiessjie 'hay rack'		
svaajnes 'farm worker'	Professions related to agriculture	
gaajhtse 'goat'	Domestic animals	
laampe 'lamb'		
saavtje / saavtse 'sheep'		
vïerhtse 'ram'		
gaelpie 'calf of a cow'		
govse 'cow'		
vuaksa 'ox'		
svijnie 'swine'		
täjhkoe 'dog'		
raavre 'red char'	Fish	Wild animals
saejtie 'coalfish'		
faala / faelies 'whale'	Other marine animals	
skaaltjoe 'seashell'		
aarhtse 'eagle'	Birds	
haepkie 'falcon'		
raejvie 'a bird's nest on tree'		
svaaloe 'swallow'		
klahtje 'horsefly'	Insects	
laaffa 'flea'		
veapsa 'wasp'		

Archaeological category		Archeological find group
Main	**Sub**	
Animal bones	Wild animal bones	red deer
		ruminant
	Indetermined bones	indetermined
Hunting	Hunting tools	
		arrowheads
Artefacts connected with animal handling		horseshoe
Human bones, animal bones		
Indetermined bones		
Structures	dwelling structures	fire places
	grave structures	stone settings
		stone chains
		corner stones
		bone caches
Clothing & jewelry	Clothes	fabric
	Jewelry, accessories	spirals
		beads
		rings
		buckles
		brooches
		fibulas

Lexical find	Semantic category	
	Sub	Main
		Wild animals
nuehtie ‘seine net’	Hunting and fishing tools	Hunting and fishing
staavra ‘pole, fishing rod’		
		Animal handling
naehpie ‘milking bowl’		
		Body parts
aernie ‘fire grate’	fireplaces	Buildings & constructions
aassjoe ‘hearth in a smithy’		
buvrie ‘storage building’	buildings	
ståapoe ‘house, hut’		
àr^{aɬ}kuč ‘chest’	Other constructions	
nåarvie ‘cross-bar’		
raammaa ‘frame’		
lijnie ‘shawl’	Pieces of clothing	Clothing
vaanhtse ‘mitten’		
vaarjoeh ‘clothes’		
vaarese ‘homespun fabric’	Fabric	

Archaeological category		Archeological find group
Main	**Sub**	
Clothing & Jewelry	Jewelry, accessories	pins
		buttons
		bracelets
		pendants
		mountings of belt
		combs
		hairpins
		pendants
	Others	bird shaped artefact
Ø		
Ø		
Animal bones		
Human bones		
Ø		
Ø		
Unburnt antlers & cranial parts of elk and reindeer		elk
		reindeer
Animal bones		

Lexical find	Semantic category	
	Sub	Main
		Clothing
		Conditions & changes
		Flora
bearkoe 'meat for food'	Food	Food & cookery
laejpie 'bread'		
maelie 'animal blood for food'		
snaejrie 'slice of bread'		
daajje 'dough'		
gaahkoe 'unleavened bread'		
kraavhtse 'porridge'		
aevlerge 'the pole in Saami tent that holds the pot'	Cookery	
gaerie 'bowl'		
		Humans & humans as members of society
		Natural phenomena
		Other words
aevsie 'cranial parts of reindeer /elk around antlers'	Elk	Wild animals
	Reindeer	Reindeer & reindeer husbandry
eajma 'reindeer doe who wanders where it wants'		
haame 'antler-less reindeer'		
råtnoe 'reindeer doe'		

Archaeological category		Archeological find group
Main	Sub	
Ø		
Structures	grave structures	
Ø		
Ø		
Ø		
Iron manufacture & forging	Structures	furnaces
		charring pits
		iron ore storages
		slag dumps
	Tools	iron bars
		iron hammer
		pliers
Tools, working materials	Working material	sheet metal
		iron bars

Lexical find	Semantic category	
	Sub	Main
deemedh 'to tame a reindeer'	Reindeer husbandry	Reindeer & reindeer husbandry
gaertie 'reindeer corral'		
krievvie 'reindeer herd'		
raajroe 'reindeer caravan'		
		Relations in space and time
aajmoe 'the other world'		Religions & beliefs
saajve 'a mythical creature living inside mountains'		
aejlege / *aejlies* 'holiday, Sunday'		
raavke 'apparition'		
faastoe 'lent'		
		Terrain & landscapes
		Vehicles & traveling
		Water & water systems
		Work-related words
	Working material	
staavra 'pole, bar'		
sïlpe 'silver'		
liksie / *livsie* / *lievsie* / *luevsie* 'blubber oil'		
fealloe 'plank, board'		
aalhtedh 'to prepare; to work with animal skin'	working	

Archaeological category		Archeological find group
Main	**Sub**	
Tools, working materials	Parts of tools/artefacts	bushings
		sockets
		staples
	Tools	awls
		flint tools
		(bronze) chisel
		firesteel
		scissors
		scrapers
		spindle whorl
		stone tools (other than flint
		iron knives
Glass artefacts		beads
Weapons		pommel
		shields
		spearheads

Lexical find	Semantic category	
	Sub	**Main**
	Tools	Work-related words
	Tools	
aavtjoe ‘edge of knife’		
nejpie ‘knife’		
aaksjoe ‘axe’		
baante ‘band’		
dahpe ‘sheath’		
rïejhpe ‘rope, cord’		
		Ø
		Ø

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Language choice among rural Mari families and their motives

Language choice is a core value of language policy that consists of three elements: management, or direct efforts to manipulate a language situation: practice, a sum of sound, word and grammatical choices that an individual speaker makes; and ideology, a set of beliefs about appropriate language practice (Spolsky 2004). Motives are related to the last component. As stated by researchers, language usage within a family can be determined by even one of these factors.

This article presents the results of an analysis of quantitative and qualitative data collected during my fieldwork in Mari El (Russia). Comparative analysis of the survey data confirmed the process of weakening of intergenerational language transmission among rural Maris and the fact that the linguistic behavior of family members varies by generation. Usage of Russian or Mari within a family is mainly the result of different values attached to each language and their social roles among certain sectors of society.

1. Introduction
2. Background information about the Maris
3. Method
    3.1. Research instrument
    3.2. Sample and participants
4. Linguistic image of rural Mari families
5. Factors affecting the languages used within Mari families
6. Code-switching within families
7. Conclusions

References
Appendix: Questionnaire

1. Introduction

Language choice is the core value of any language policy (Fishman et al. 1971), from the highest supra-national level to the level of the individual, i.e. when a person starts thinking about whether to speak one or another language. Of the overall set of domains, it is the family that first follows

a language policy and thus determines the very linguistic repertoire of a person. Over the course of one's lifetime, the languages of communication can change several times.

According to Spolsky (2004), any language policy includes three components: language practice, which is "the habitual pattern of selecting among the varieties that make up its linguistic repertoire" (p. 5); language management, defined as "any specific efforts to modify or influence that practice ..." (p. 5); and language ideology, which implies certain beliefs about language and language use. Motives are a small but significant part of the last component, i.e. language beliefs. However, a combination of these elements is not an obligatory condition for language choice. As stated by Spolsky (2004), in some cases, the language used by a family might also be the result of an absence of language management; or, ideology might be a sufficient factor in influencing people's linguistic behavior, an aspect that was investigated for this paper. One often reads that the Mari language, culture and identity are best preserved in the countryside (Ivanov 2004; Sanukov 2011; Soloviev 2012). It is certainly the case that lifestyle of Maris, and, thus, their culture, are still strongly attached to rural areas (Soloviev 2012). This argument applies to all Finno-Ugric peoples (Sanukov 2011), as well as other minorities, in Russia. However, according to Lallukka (1990), the process of ethnic erosion is evident in rural settings. First of all, it manifests itself as a narrowing of the sphere of language use and a decrease in the number of native speakers. In the domain of the family, erosion is revealed through an increase in code-switching, i.e. "when speakers switch backwards and forwards between distinct codes in their repertoire" (Bell 2014: 113), or a complete shift to Russian. Moreover, general trend of rural exodus in Russia (Bychenko & Shabanov 2012; Numurkhametova 2016) has accelerated ethnic erosion through assimilation (Lallukka 1990, 1997; Bychenko & Shabanov 2014)

The goal for this paper was to study the motives behind language choices among rural Mari families. For this purpose, a social and psychological approach was taken, with the intention to investigate the social background of the participants. All conclusions were based on the analysis of empirical data collected by the author during fieldwork excursions in Mari El (2013, 2014, 2016).

The first part of the article provides background information about the Maris and the sociolinguistic situation in Mari El with a short history of the Russian context. In the second part, a brief description of the

Figure 1: Map of the Mari El region within Russia

participants' social background (from the surveys and interviews) and families in general, grouped according to the language of communication, is presented. The third part gives an account of the use of either language by rural Maris in their communication with family members. All of the conclusions are intended to provide a clear explanation of why some modern Maris are more inclined to speak in Russian among their family than the Mari language, and why this is one of the primary reasons for ethnic erosion among Maris

2. Background information about the Maris

The Maris are one of the Finno-Ugric peoples settling in the Volga region of the Russian Federation. According to the 2010 Census data (Natsionalnyi sostav 2012), the total number of Maris in Russia is approximately 550,000. The official territory of the Maris is the Mari El Republic (Figure 1), which has a population of 680,500, comprising 42% ethnic Mari, 45% Russian and 13% other ethnic groups.

The official state languages of Mari El are Mari[1] and Russian. Despite its official status, the Mari language has a limited usage in the Republic: it is neither a language of instruction (though it is taught as a separate subject

in 98% of schools), nor a language of business communication. Sixteen periodicals and approximately 30–45 books (a total of more than 45,000 copies) are published annually in the Mari language (Chuksin 2009; Vasiutina 2009). The Mari language is actively used on webpages (*Mari-Uver* at http://mariuver.wordpress.com/; *Respublika Mariy El,* at http://mari-el.name/) and social networks such as Vkontakte, Facebook, and Odnoklassniki (e.g. in the communities *Чылаже марий-влак ушныза!*, *Марий улам – марла илем!* at http://vkontakte.ru and *Тый марий улат мо?* at http://odnoklassniki.ru). There is a Mari TV channel and a radio broadcaster, but both have limited broadcasting time (approximately 6.2 hours per week for TV news and programs in Mari)[2].

The official history of the Maris in Russia begins in the 16th century, when the territory of the Mari was annexed from the Kazan Khanate by the Russian state[3] (Sanukov 2011; Bakhtin 2012). Until the second half of the 19th century, the Maris lived in relative cultural isolation from the Russian majority (Sanukov 2011), but the implementation of governmental policies towards ethnic minorities in tsarist Russia (forced Christianization, the beginning of Russification) and Russification during the Soviet era (starting point is the end of the 1930s) resulted in closer contact between the two peoples. In 1990, the local Supreme Soviet established the former Mari ASSR (as it was officially titled from 1936 to 1990) as a republic with its own right to self-determination. This was also a time of high ethnic activism of the Maris, which had some influence on local politics (Sanukov 2010, 2012). However, in recent years, political activity among the Mari has declined significantly, mainly due to the different political stance of the local regional authorities, which has manifested in a reluctance to support the Mari ethnic movement (Shamiev 2010; Knorre & Konstantinova 2013).

Despite official sources from Mari El regularly producing reports about successful language policies in the republic (Sbornik 2005; Shvetsova 2008, 2012), the real situation regarding the Mari language is rather complicated, as can be seen in the statistics (Natsionalnyi sostav 2012). According to census data, 80.8% of people self-identifying as ethnic Mari considered it their native language in 1989; by 2010, this figure had decreased to 76.0%[4].

As stated by researchers (Hint 1995; Ivanov 2004; Sanukov 2011), this linguistic situation is the result of Soviet language planning, which was directed towards linguistic and ethnic assimilation of minorities within Russia. Russian policies manifested in the ethnic erosion of Finno-Ugric minorities, which slowed with the fall of the Soviet Union in the last decade of the

twentieth century (Lallukka 1995), but increased again at the very beginning of the third millennium. In the case of Maris, the most evident indicator of this erosion is a gradual replacement of Mari by the Russian language in all domains.

3. Method

3.1 Research tools

In order to obtain information about the language practices of members of Mari families, a Revised questionnaire elaborated in the ELDIA project (from 2010 to 2013) was utilized. The questionnaire included 63 questions about the role of language in people's lives. However, within the framework of this paper, only data about language use in the family domain were analyzed. All responses were evaluated on a 3-point Likert scale.

A simplified and adjusted 32-item version of the Subjective vitality questionnaire by Bourhis et al. (1981) was used for collecting data about the language practices of Mari children in Mari El. The questionnaire was divided into four conceptual groups areas, one of which contained 10 questions about language use in various social situations. All responses were given using a 7-point Likert scale, which was later recoded into a 3-point scale to harmonize the data. The data from both surveys was processed using version 14.0 of the statistical package SPSS.

In order to obtain more detailed information about language choice within Mari families, eight open-ended interviews were conducted in March 2016 in Mari El. Of the eight interviews, two were telephone interviews and the rest were conducted face-to-face. They contained questions corresponding to one part of the Revised questionnaire about language use by family members (see Appendix). The total number of questions was 10. The families were divided into three linguistic groups (Group 1, Group 2, and Group 3). Group 1 contained families who communicated with each other using the Mari language**,** Group 2 contained families who communicated using both languages and Group 3 contained families who communicated in Russian.

3.2. Sample and participants

The sample consisted of two age groups: adolescents (aged 13–17 years old) and adults (18–70). The data was collected by the author in Mari El during 2013 and 2016. Stratified (for the adolescents) and snowball (for the adults) sampling methods were used, the former to classify Mari adolescents by place of residence (city or rural) and the latter to classify Mari adults according to four social characteristics: age, gender, place of residence (city or rural), and education (basic, secondary, and higher). The revised questionnaire was completed by 104 Mari adults and the subjective vitality questionnaire by 376 adolescents. In accordance with the aim of the investigation, the samples of Mari adult and child groups were reduced to 61 and 222.

The interviewee sample included eight women, with the aim that they would represent their respective families. All of the participants were from rural areas except for one, who lived in a city. However, as the subject matter of the interview with the woman living in a city was language choice among her parental family, who lived in a rural area, the location of the interview was irrelevant. In order to ascertain the motives for selecting one language or the other, a short description of all the families is provided in the next section. For the sake of anonymity, the names of the participants have been changed.

Only women (predominantly married women) participated in the interviews. Husbands were not able to participate due to the inconvenient time of the interviews (during working time). Prior to that, a one-way between-group analysis of variance (ANOVA) had shown no statistically significant difference in the linguistic preference of participants within a Mari family by gender, so I allow myself to suppose that even interviewing only Mari women can provide more or less objective information about the linguistic situation among Mari families. All the information given regarding occupation and age was applied at the time of the interview. The families have been divided into groups as follows:

Group 1 (Mari speakers)

Family 1

Maria (37) and Aleksey (42) live in Kugener village[5] (Sovetskiy district, Mari El). Maria is an assistant in a local shop and Aleksey a

worker in the local township plant. Both were born and grew up in the families with Mari as the language of communication. They have two children, a boy (Maxim, 13) and a girl (Nadezhda, 11).

Family 2

Anastasia (36) and Vitaliy (36) live in Kugener village. Anastasia is an assistant in the township shop and Vitaliy a worker in the local sawmill. Both were born and raised in Mari families, however, until Anastasia's marriage, she had communicated predominantly in Russian, whereas her spouse spoke in Mari. Anastasia and Vitaliy have three sons, Aleksey (14), Mikhail (12), and Vladimir (3).

Family 3

Anna (26) and Pavel (24) live in Kundyshumbal village[6] (Sovetskiy district, Mari El). Anna is a nurse in the neighboring township hospital and Pavel a seasonal (from May to August) construction worker in Moscow. Both were born and raised in Mari families. Since early childhood, the language of communication in both families has been Mari. They have one son, Aleksander (3).

Family 4

Nataliya (25) and Vadim (32) live in Toshto Kreshyn village[7] (Orshanka district, Mari El). The Mari population forms a majority of the community, but due to the close proximity to a city (Yoshkar-Ola), the proportion of Russian and Russian-speaking settlers in the village has been gradually increasing. Nataliya works as a cleaner in the city hospital and Vadim as a driver for a logistics company. They have two daughters, Kristina (3) and Ekaterina (6).

Group 2 (speakers who actively practice code-switching)

Family 5

Liudmila (34) and Mikhail (35) live in Ronga village[8] (Sovetskiy district, Mari El). Liudmila is a logistics manager at the local hospital and Mikhail a seasonal (from May to August) construction worker in Moscow. They have three sons, Anton (15), Vladimir (9) and Nikolay (6). Since early childhood, Liudmila and Mikhail exclusively spoke Mari with their immediate family members. However, they

frequently switch codes when communicating with each other and their children. Their children also speak both languages with one another. According to Liudmila, she makes a point of communicating with her children in Mari whenever possible.

Family 6

Larisa (34) and Vladislav (28) live in Solnechnyi township[9] (Sovetskiy district, Mari El). Ethnically, the township is mixed, though the Mari population is dominant (Poselok 2014). Larisa is an assistant in the township shop and Vladislav a coal heaver at the local boiler station. Larisa was born and raised in a family who exclusively spoke Mari. In Vladislav's family, his parents sometimes switched to Russian when communicating with their children. The language of communication within Larisa and Vladislav's family is predominantly Russian, though Larisa has also attempted to teach Mari to their daughter Irina (3).

Group 3 (Russian speakers)

Family 7

Valentina (37) and Sergey (42) live in the village of Diemino[10] (Kuzhener district, Mari El). The village is considered Russian (Derevnya 2014a), however, over the last 20 years the majority of the Russian population has moved to urban or near urban areas. Valentina is a laundress at the local kindergarten and Sergey a driver for a cooperative farm. The language of communication of their immediate families varies: in Valentina's it is Russian; in Sergey's it is a mixture of Russian and Mari. Valentina and Sergey have two children, a daughter, Elena (9), and a son, Konstantin (13). All have a good command of Mari, but use it only for communicating outside of the family

Family 8[11]

Svetlana (57) and Igor (62) live in Shura village[12] (Novyi Toryal district, Mari El), where the Russian population dominates (Derevnya 2014b). They have five children: two daughters, Anna (39) and Olga (27), and three sons, Yuriy (37), Leonid (34), and Denis (25). The language of communication between Svetlana and Igor is Mari, but they have spoken with their children in Russian since their early childhood. The language of communication between the children is Russian, though all can speak Mari fluently.

4. Linguistic image of rural Mari families

Currently, the relevance of rural areas being a locus for the maintenance of the Mari language has not yet been determined, and it is subject to both objective (e.g. the language policy of the country and region; the poor economic situation of the state; a lack of natural recourses) and subjective (the indifference of some people to ethnic issues) factors. To address this, we created a linguistic image of a typical Mari family based on a statistical analysis of language choice among two age groups (adults and children), with various family members (between spouses, parents and children, and siblings), which allowed to compare a language choice from two perspectives: children and adults.

	Parent		
Family member	Mari	Mari and Russian	Russian
Parent	51.0	17.6	31.4
Child	43.6	38.2	18.2

Table 1: Language use of Mari adults (N=61) with family members (%) in rural areas

Currently, as seen from Table 1, Mari is more spoken by parents among themselves (51%), than with children (43,6%) and almost twice as little mixed language is used among parents than with children (17,6% vs 38,2%), which indicates clearly weakening of native Mari language position.

To my surprise, the statistical analysis showed that almost twice as many adults spoke exclusively in Russian to each other than with their children (31.4% and 18.2%, respectively). Such figures could be interpreted as a clear indicator of Mari parents' concerns regarding in what language to speak with their children, and an attempt to control it consciously. However, this conclusion should be made with a caution as, indeed, the questionnaire data does not reflect the details of language choice made by parents (in which domestic situations they speak Mari, what level of Mari, etc.)

In comparison to adults, the linguistic behavior of children varied to a lesser degree, though demonstrated the same tendency regarding the use of languages (Table 2). However, by comparing two tables, one can see some difference in the linguistic preferences of two generations. While Mari parents tended to prefer using their native language when communicating

	Children		
Family member	Mari	Mari and Russian	Russian
Grandparents	65.9	28.5	5.6
Parents	38.7	52.3	9.0
Siblings	25.9	60.0	14.1

Table 2: Language use of children (N=222) with family members (%) in rural areas

with their children, the children preferred to switch codes. Similar proportions of both generations used the Mari language with one another (43.6% and 38.7%) but differed regarding the use of Russian (18.2% and 9%). Such a discordance in the evaluation of the degree to which each language is used, can be caused by a different language position between two generations. Which language do parents address their children in? In what language(s) do children reply? Why? As seen from previous numerous studies (Curdt-Christiansen 2013; Folge 2013; Kopeliovich 2013, etc.), the language behavior of participants depends on various conditions (e.g. the interrelations of family members, the level of language knowledge of the participants, attitudes to the languages, the language strategies of parents). However, in order to answer these questions regarding Maris, it is necessary to conduct long-term research within Mari families with account of foregoing theoretical and practical conclusions.

Questioning showed that the rate of the Mari and Russian language usage by family members (grandparents, parents, children, and siblings) in rural area varies according to the generation, involved (Table 2). That confirmed the generally known fact that nowadays, the Mari language is mostly used with grandparents, and least with siblings. Generally, the proportion of the Mari language usage by the younger generation with family members (grandparents, parents, and siblings) was roughly equal to 3:2:1, an indicator of the weakening of intergenerational language transmission among Maris.

Thus, despite the widespread opinion that rural areas are a locus for the maintenance of minority languages and culture (Lallukka 1990; Ivanov 2004; Sanukov 2011), the process of ethnic erosion, is clearly evident there. Regarding Mari, as well as other minority languages in Russia, it manifests itself in gradual linguistic assimilation, further followed by ethnic assimilation of people. Taking into account the fact that the process of language

loss is a global disaster, it may be assumed that the Mari language will fit into those half of the world languages that would have disappeared by 2100, as reported by UNESCO (Laccino 2015)

5. Factors affecting the languages used within Mari families

Several factors affected language usage, justified by participants as their motives for choosing a "permanent language" of communication within their family. The linguistic behavior of family members in any given situation was not the point of this paper; the focus was on the survey question "What language do you speak with your family members?" in an attempt to answer the implicit question "Why did you choose this/or that language(s) for communication in your family?". For this purpose, all the collected responses were generalized and, in combination with some previous conclusions, are provided below.

One of the main factors highlighted by the survey respondents is that of community. There are a variety of research papers describing the mechanisms and effect of community on the linguistic behavior of children growing up in immigrant families (Romaine 1995; Curdt-Christensen 2013; Kopeliovich 2013). Such families have one common feature: despite various levels of knowledge of parental or community languages, children more or less practice the use of their native minority language(s) among their families. This means that parents somehow linguistically resist the effect of the majority community. However, the situation is different in the case of the Maris: an investigation into the motives for language choice in the family domain reveals that the majority of rural Russian- and Mari-speaking families justify their specific linguistic behavior by referring to the effect the community they live in has upon them. Two examples best illustrate this linguistic position among the Maris:

1) *Ялыште чыланат марий улыт, марла кутырат. Меат ешыште марла кутырена. Ала-кузе, мо, сайын огеш чуч, рушла кутыраш тӱҥалына гын... марла веле (Анастасия, 36 ий; еш № 2).*

   Everybody speaks Mari in our village. We also speak Mari in our family. Somehow, hm, it seems uncomfortable if we start speaking Russian... Only Mari (Anastasia, 36; Family 2).

2) *В семье говорим по-русски. Да у нас вся деревня считается русской. Соседи все русские. Поэтому неудивительно, что в семье тоже говорим по-русски* (Ольга, 27 лет; семья № 8).

We all speak Russian in our family. Our village is considered Russian. All neighbors are Russian. That is why it is not surprising that everyone speaks Russian in our family (Olga, 27; Family 8).

The research shows that all of these families are similar, as they demonstrate an absence of language management in the family (because "everybody speaks ... language") and the surrounding community has a strong effect on which language is spoken. In the latter case, the family has converted to the community language policy, which in this context is often Russian. In addition, it is the lack of a language policy within the family that partly justifies the existence of the next motive, the habitual way of communication between spouses:

3) *Я понимаю марийский и могу говорить на нём. Но для меня привычнее говорить по-русски. Я всегда разговариваю по-русски* (Ольга, 27 лет; семья № 8).

I understand Mari and can speak it. But it is more habitual for me to speak Russian. I always speak Russian (Olga, 27; Family 8).

This motive is related to the following one, the language used from the beginning of communication between the spouses. Such couples are more active in language management regarding their children:

4) *Влад дене рушла кутырена... Ме тӱҥалтыш гычак рушла кутырена. Марла тудо мошта... Но шуэн мый денем кутыра. Южгунам мый тудлан иктаж-мом марла ойлем, мутым, але мыскарам ыштем, но тудо рушла вашешта* (Лариса, 33 ий, еш № 6).

I speak Russian with Vlad... We have been speaking the Russian language since we met. He knows Mari... But he rarely speaks Mari with me. Sometimes I say something to him in Mari, some expressions, make jokes, but he always replies to me in Russian (Larisa, 34; Family 6).

Thus, one can conclude that neither the level of knowledge of Mari nor any other ideological stances are influencing people's linguistic behavior.

Among the other motives for language choice within the family domain, one should address the following category, strong ethnic values (applied to Group 1). These values are:

1. Sense of ethnicity, or association of native Mari language with ethnic affiliation:

5) *Ме марий улына да марла кутырена... Марий ешыште шочынна... Омак умыло, молан марий-влак шке йочашт дене рушла кутырат? Меже вет марий улына. Тидыже мемнан йылме...* (Анна, 26 ий; еш № 3).

We are Mari and we speak Mari... We were born in Mari families... I really do not understand why Mari people speak Russian with their children. We are Mari. This is our language... (Anna, 26; Family 3).

2. Homeland, or association of one's native language with the region one lives in (an indication of regional identity):

6) *Марла веле кутырена... Марий Элыште вет илена... Тиде мемнан йылме* (Мария, 37 ий; еш № 1).

We only speak Mari... We live in Mari El... And this is our language (Maria, 37; Family 1).

A pragmatic approach to the language issue (one prioritizing learning, teaching, and speaking) has a negative effect in relation to Maris speaking their native language (Vedernikova 2014a). This was more applicable to Group 3, which includes the people who were first to abandon their ethnic language and, in general, identity:

7) *Мы с детьми, в семье не говорим по-марийски. По-русски разговариваем... Почему? А зачем он нужен? Русский больше нужен... Марийский - это уже прошлое. На нём только в деревнях с бабушками разговаривать и всё* (Валентина, 37 лет; семья № 7).

We do not speak Mari with our children. We speak Russian... Why? And why is it necessary? Russian is more necessary... The Mari language is already the past. It is only for speaking with grannies in villages and that is all (Valentina, 37; Family 7).

As one can conclude from this passage, the value attached to the Russian language by Maris is associated with the present and the future, while, in contrast, Mari is considered a relic. Such utterances are rather typical of linguistically (and also ethnically) assimilated Maris, those who are categorized as "ethnic nihilists" by Sanukov (2011) and Soloviev (2012). To my mind, this is a substantial reason for the endangerment of the Maris as a people.

If one uses the categorization of Romaine (1995), the next motive can be identified as an intuitive division between one's home language and the language of the community, which was applicable to Groups 1 and 2, as the interviewees could not give a clear explanation for such kinds of linguistic behavior in different situations, an idea best exemplified by the following interview passage:

> 8) *С мужем и детьми говорим по-русски... Мы все знаем марийский язык, но говорим только по-русски. По-марийски говорим с соседями и знакомыми... в наших родительских семьях мы тоже говорим по-русски или по-марийски очень мало. Так принято, что ли... Не знаю, как объяснить* (Валентина, 37 лет; семья № 7).
>
> We speak in Russian with my husband and children... We all know the Mari language, but we speak only Russian. We speak Mari with our neighbors, some familiar people... in our parental families, we also speak Russian, or speak very little Mari. It is a habit... I do not know how to explain it (Valentina, 37; Family 7).

A short content analysis has revealed that the selection of either Mari or Russian as a language of communication in a family is the result of various factors that can be categorized as cultural, social, and psychological. Thus, selection of Mari appears to be explained by ethnic values, while the use of the Russian language was justified by evoking e.g. "profit" or "convenience". This once again indicates that the languages have different social roles within Mari society (Ivanov 2004; Kuznetsova 2004), which is one of the most substantial reasons for the strengthening of the position of the Russian language over Mari in the Russian post-Soviet space.

6. Code-switching within families

Among the variety of reasons for code-switching indicated by the interviewees, linguistic factors were most significant. They included:

1. A lack of a Mari vocabulary caused by the absence of terminology in some fields (e.g. politics, public life, scientific activities, and engineering), which is a topical issue with regard to the modern use of the Mari language (Ivanov 2004; Sibatrova 2012).

9) *Южгунам ме руш мутым кучылтына але рушла кутырена. Мый ом пале южо мутшым марла. Ну, теве ом пале, кузе марла «компьютер», «телефон» манаш. Рушла веле палем. Ну вот, рушла и ойлем* (Анастасия, 36 ий; еш № 2).

Sometimes we use some Russian words or speak Russian. I do not know some words in Mari. For instance, I do not know the word "computer" or "telephone"[13] in Mari. I know [them] only in Russian. So, I say [them] in Russian (Anastasia, 36; Family 2).

2. A limited command of Mari, often caused by either an absence of language management within a family, or by an indifferent attitude of the community to this issue, which appeared to have a strong effect on people's linguistic preferences. Such a tendency generally has its roots in the 1960s, when the policy of Russification was followed by elimination of Mari as a language of instruction in schools, and further negative re-evaluation of the role of native minority languages and cultures (Sanukov 1992). This resulted "in a generation of Maris growing up with a command of their language as vernacular" (Ivanov 2004: 52) and striving for diverge from their ethnic roots. That Soviet policies have had a long-term effects, which have manifested in passing this tendency of indifference to successive generations.

3. Dialectal differences that cause misunderstandings and awkward situations during communication among two or more speakers belonging to various subdialects, as exemplified by the following utterance:

10) *Наш папа говорит и на русском и на марийском одновременно... Часто мешает языки. Вообще, он не говорит много по-марийски с нами. Он из Мари-Турекского района. Они говорят 'Шӱрым волтен пу' вместо 'Шӱрым пыштен пу'... Однажды он попросил меня: 'Мыламат шӱрым волтен пу'. Ну, я взяла и поставила кастрюлю на пол. Он был в шоке. [смеется] С тех пор он говорит: 'Ты говоришь на своём языке, я на своём'. Я прошу его: 'Пожалуйста, хоть в деревне-то говори по-марийски, ведь все же марийцы здесь' [пауза] Однажды была ситуация летом на сенокосе. Там много народу... И тут он спросил: 'Кӧ вӱчамбакыже кӱза?' Все мои родственники упали: 'Какой «вӱчамбал»? [пауза] А мо, манеш?'* (Людмила, 34 ий; еш № 5)

Our father speaks in Russian and in Mari... He often mixes [i.e. switches from Mari to Russian and vice versa] languages. Well, he doesn't speak Mari too much with us. He is from the Mari-Turek district. They say 'šürym volten pu' [lit. 'drop some soup'] instead of 'šürym pyšten pu' ['put down some soup']... Once he asked me, 'Mylamat šürym volten pu' [lit. 'drop me some soup']. I took the saucepan and put it on the floor. He was shocked. [laughing] And since then he says, 'You and I speak different languages'. I

> asked him, 'Please, speak in Mari at least in the village, because everybody is Mari'. [pause] Once, during haymaking, there was a situation. There were a lot of people, and he asked 'Kö vüčambakyže küza?' [Who will go to the hayloft?]. All my relatives burst out laughing, 'What's vüčambal?' [pause] 'But how?', he asked (Liudmila, 34; Family 5).

As one can see from this case, the switch to another language occurred not because of any mutual intelligibility, but for a psychological reason (fear of being the subject of some emotional reaction from the community).

4. Weak ethnic self-awareness, which has its roots in a variety of reasons. For one, it is a consequence of the Soviet policy of assimilation, which accelerated the process of assimilation during the second half of the twentieth century. Modern processes in Russian society (strengthening the position of Russian in all domains at the expense of minority languages) also exert a negative impact on the ethnic self-identification of many minority peoples. As language and ethnicity are closely interrelated for most minority groups in Russia, a decrease in the position of one's native language is followed by an increased tendency to diverge from one's own ethnic group.

7. Conclusions

Comparative analysis of the survey data has shown that the linguistic behavior of children and adults varies. Members of the younger generation tends to mix languages with their parents, while older people (parents, grandparents) are more likely to speak Mari, which indicates their conscious approach to the language issue within the family. A comparison of the language choice of two generations revealed a clear weakening of intergenerational language transmission, which is an indicator of ethnic erosion among the Maris.

The qualitative analysis of the interview data showed that the language of the community was the strongest determining factor of language choice among rural Mari families.

Another group of factors affecting linguistic behavior within the family can be characterized as psychological, as they reflect people's subjective position with regard to language. Thus, for Group 1 (Mari-speaking families), it was the association of one's native language with one's homeland and ethnicity, which can indicate some level of ethnic self-awareness among rural Maris. In turn, cases of ethnic indifference, i.e. usage of the

dominant non-native language as a habitual way of communication, were observed among the families who spoke mainly in Russian (Group 3). The relatively small Mari lexicon and dialectal distinctions were the next substantial factors for the mixing of languages. As argued by researchers (Ivanov 2004; Sanukov 2011), a limited command of one's native language, and, separately, low ethnic self-awareness, are also reasons for partial or complete switching to Russian by the Maris.

The investigation into the motives for language choice among rural families showed that in most cases it is determined by language ideology, which is in line with the argument of Spolsky (2004) regarding the determinants of language policy. However, one cannot omit the other various factors, which are intertwined with one another and require further, more detailed investigation.

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Notes

1 There are two literary standards, Meadow and Hill Mari
2 Although Ehala & Vedernikova (2015) reported unlimited radio broadcasting time in the Mari language, the situation has changed, with a reduction in radio broadcasting in Mari.
3 Some subgroups of Maris were either forcefully annexed to Russian principalities much earlier (in the 9th–12th centuries) and underwent full ethnic assimilation, or voluntarily joined the Russian state, as was the case with the Hill Mari subgroup during the 16th century (Bakhtin 2012)
4 As argued by Sanukov (2011), the results of the 2002 Census can be disregarded due to the different methodological approach to questions about native language use.
5 Geographical coordinates 56°44'08.8"N 48°35'54.5"E
6 Geographical coordinates 56°45'55.9"N 48°40'12.4"E
7 Geographical coordinates 56°48'02.9"N 48°00'05.3"E
8 Geographical coordinates 56°42'17.4"N 48°31'04.2"E
9 Geographical coordinates 56°32'35.2"N 48°24'07.3"E
10 Geographical coordinates 56°52'16.9"N 48°55'39.2"E
11 The interviewee was Olga (27), the youngest daughter of Igor and Svetlana.
12 Geographical coordinates 57°07'27.1"N 48°19'20.8"E
13 In this case, by saying "Russian words" the respondent, indeed, indicates loanwords. This is due to the lack of understanding that Russian does not exist in vacuum either. In the meantime, much of what is considered "Russian" is simply internationalisms. So, here one could speak about the usage of internationalisms in Mari speech.

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Appendix. Questionnaire.

1. In what language do you speak with your wife/husband? Why?
2. In what language do you speak with your children? Why?
3. Are there cases where you address your children in different languages?
   – If yes, why do you speak different languages?
4. Are you consistent in speaking Mari/Russian with your children? Why?
5. Do you teach your children Mari/Russian?
   – If yes, in which way do you do that?
6. What is the main reason for speaking Russian/Mari in your family?
7. What are the attitudes of your family members to Mari and Russian?

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Evaluating language revival policies of Russia's Finno-Ugric republics: policy impact and its limits

The paper evaluates language policies of the ethnic republics of Russia titled after the ethnic groups speaking Finno-Ugric languages in order to understand why the policies had limited impact on their sociolinguistic situations. This is an empirical-analytical study based on quantitative research that investigates within the framework of policy analysis the link between policy outputs and outcomes in order to test the hypothesis that changes in behaviour and attitudes can be traced back to the patterns of language management. The study produces a systematized set of data on measures taken to create the conditions for language knowledge, use and attitudes in the republics and searches for correlations among variables. The sources of quantitative data include legal and other official documents, accessible official statistics and available sociological and sociolinguistic surveys. Such a policy evaluation contributes to the theoretical understanding of the limits of the revivalist project pursued as a "top-down" public policy.

1. Introduction
2. Policy environment and policy scope
    2.1. Development of the soviet language policy: historical context
    2.2. Sociolinguistic condition of the titular groups of the Finno-Ugric ASSRs
    2.3. Post-Soviet policy formation and adoption
3. Policy inputs and outputs
    3.1. Evaluation of policy institutionalization and implementation
    3.2. Creation of conditions in the domains of language use
4. Policy outcomes
    4.1. Evaluation of policy outcomes
    4.2. Indicators for policy outcomes
    4.3. Sociolinguistic condition of the titular groups in Post-Soviet times
5. Policy impact
    5.1. Evaluation of policy impact
    5.2. Policy impact in the Finno-Ugric republics and its limits
6. Conclusion

1. Introduction

In the early 1990s, Russia's ethnic republics posited "revival" of their titular languages as their language policy goal. While some republics took more practical efforts than others, it is generally recognized that the revivalist policies have neither reversed the language shift nor prevented further linguistic assimilation. The failure is true even for the far better protected Tatar language in Tatarstan, inter alia, because its prestige has not significantly increased in relation to Russian (see Gorenburg 2005). What was wrong with the policy? Was it not up to the task? Where and why did revivalist policies fail?

The purpose of the paper is to evaluate the effects of language policy in the Finno-Ugric republics of Russia in order to understand why revivalist policies with regard to the titular groups had such limited impact on their sociolinguistic situations. The cases of language policies of the Finno-Ugric republics are suitable for a comparative study because they cover a range of variables, while providing a sufficiently similar policy environment. The cases of language policies of Tatarstan and certain other Turkic republics, such as Bashkortostan or Sakha, are better known (and have also been studied comparatively; see, for example, Gorenburg 2003, 2005) and each is unique in its own way. This study takes the most illustrative data from Tatarstan to draw a baseline of what could have potentially been possible.

State language policy is a complex phenomenon. In studying it, Bernhard Spolsky (2004, 2009) used the stages approach and drew the distinction between language practices, language ideology and language planning (language management). Based on this distinction, in my research on language policy in the Finno-Ugric republics, I subsequently investigated, first, how practices and ideologies influenced language planning (Zamyatin 2015) and, second, why status planning became the main policy tool and what it implied (2013a, 2013b, 2013c), how the policy was institutionalized in language laws (2014b), and how it was implemented (2014c). In the last article mentioned, I evaluated how executive programs were implemented against their own goals and showed that, while the content of the state support was adequate vis-à-vis the revivalist goal, the extent of the support was insufficient. A general evaluation of policy implementation is still lacking.

The republics' ministries on nationalities affairs typically evaluated and reported annually on the implementation of their policies. However, these reports remained largely descriptive and present the data in absolute

terms of the numbers of books published, language courses organized or events arranged (see Zamyatin 2014c). In addition, from time to time, the ministries commissioned some sociological and sociolinguistic research into different aspects of the ethnic and linguistic situation (1993–4, 1996, 2002, 2007 in Karelia; 1996, 2004, 2008–9 in Komi; 1994, 2001, 2003, 2011, 2012 in Mari El; 1991, 1994, 2010 in Mordovia; and 1994, 2000, 2003, 2007 in Udmurtia). However, the data were typically not interpreted in the context of the impact of language policy, probably because its accumulating lasting effects often remain indistinguishable over the short-term periods used for reporting. Similarly, individual studies conducted on language processes in republics remain descriptive and superficial with regard to the impact (see Klementiev 2013, Kondrashkina 2008, Williams et al. 2008, Vlasova 2016). Therefore, the actual impact of revivalist efforts on language practices and ideologies remains largely unknown.

The empirical rationale is based on my work done hitherto to finalize the study of the policy cycle in the Finno-Ugric republics of Russia. Evaluation is the last stage of the policy cycle and often concentrates on studying policy outcomes and impact. However, a complete evaluation should also assess the stages of policy formation and implementation. Policy formation determines which policy inputs and resources are raised. Policy implementation results in measures undertaken by agencies, policy outputs, and consequences for society in general, or policy outcomes. Impact is then the degree to which the outcomes observed are attributable to the outputs. A low impact is observed when the outcomes are rather attributable to social factors.

While it is often possible to study outputs using quantitative methods, it is more difficult to study outcomes, because these may be caused by factors other than outputs. Accordingly, I will apply François Grin's distinction of internal and external effectiveness evaluation to the study of outputs and outcomes, answering, respectively, the questions of whether the objectives were achieved and how they affected actual language use and attitudes (Grin 2003: 171–178). Grin suggested three principles of good policy: effectiveness, cost-effectiveness and democracy (Grin 2003: 91–96). In my evaluation, I will apply only the first principle of effectiveness as the most relevant to the given context, because the cost consideration was secondary in the top-down policy of the state that had not become a democracy. Impact reveals the policy effectiveness as the degree to which the goal was achieved.

As part of the public policy analysis, I will conduct a systematic expert evaluation based on the quasi-experiment design when the policy effects on the target populations are measured comparatively across regions that are similar in many respects (Anderson 2010). What effects did the policies have? Policy is an independent variable that is controlled to test its effects on outcomes as the dependent variable. If the changes in inputs and outputs are reflected in the changes in outcomes, then the outcomes are to be attributed to the policies. I will compare the policy effects synchronically across the republics and diachronically across time periods along selected quantitative indicators based on the available statistical and survey data. The comparison across the republics is useful because, on the one hand, it makes it possible to test whether there is a link from the effects to policies based on the dissimilarity of cases and, on the other hand, to control for other variables based on the similarity of cases.

If the comparison reveals that the dissimilar patterns in inputs and outputs across republics in otherwise similar settings correspond to dissimilar patterns in outcomes, then the outcomes are to be attributed to the policies. Alternatively, if the pattern in outcomes across republics remain similar despite dissimilar policy inputs and outputs, then the outcomes are to be attributed to social factors external to policy. Policy inputs differed not only in the amount of the institutional and financial support for the revivalist policy but also in the level of political support. Inputs depended on the level of ethnic political representation (see Zamyatin 2013c: 142–144). At the same time, the ethnic and socioeconomic situation of the republics is similar in most respects. Moreover, in the early 1990s the republics adopted similar policies because titular elites borrowed from each other and advocated for the same ideas about language revival.

Timing provides another possibility to control for inputs and outputs. If in the early 1990s some republics were determined in pursuing their revivalist policies, then first the decline in activities of national movements and later the change of the political regime in Moscow in the early 2000s resulted in a narrowing of the scope of policy until the policies were *de facto* terminated in the early 2010s (on the periodisation see Zamyatin 2016a). The development in individual republics was not as linear and depended on constellations of regional power. Thus, one could hypothesize that policy implementation in the 1990s and 2000s should have had different policy effects (see Zamyatin 2014c: 231–232).

In the first part of the paper, I will provide a historical overview of the developments of Soviet language policy and discuss the scope of measures in education and mass media provided for the titular groups of republics in its later period. Then, I will discuss the Soviet policy impact on some aspects of the sociolinguistic situation along such macrosociological indicators as demography and language retention rates and will further overview language knowledge and language use among the titular groups, based on data and evidence primarily from Lallukka (1990). I will further explore policy formation: how the accumulated trends in the sociolinguistic situation were identified in the post-Soviet times as policy problems, how these became the issues in the governmental agenda, what solutions were proposed, how the policy was formulated and what options passed in legislation, thereby determining the scope of the policy.

In the second part, I will first discuss the methods of evaluation of policy institutionalization and implementation. After that, I will study how policy outputs in the Finno-Ugric republics contributed to the creation of three conditions for language use: capacity, opportunity and desire to use the minority language in the spheres of public services and work environment, education and mass media, respectively. Based on the official data, I will assess such indicators as the numbers of bilingual road signs provided, pupils having access to native language learning, the numbers of printed matters published or the amount of time a language is used in TV and radio broadcasting.

In the third part, I will return to the discussion of the methods of evaluation focusing on policy outcomes. It would be most revealing to explore the diachronic changes in language knowledge and use in the private and public sphere, but consistent data is unavailable. Instead, I will present the data on the development in the sociolinguistic situation of the republics in post-Soviet times and the policy effects on their titular communities along the same indicators as for the Soviet period. In addition, I will separately discuss language attitudes. While it may take a generation to see a change in patterns of language knowledge and some years for those of language use, language attitudes can change very quickly, especially in times of rapid social transformations, and can thus serve as a more sensitive indicator of policy impact.

I will mostly use semi-official surveys regularly conducted by the republics' research institutes in the system of the Russian Academy of Sciences. These representative surveys are typically uniformly conducted over time

periods and relatively reliable in methodological terms. To spare space, I will not provide the details on their methodologies, which are described in the sources I quote. I will also use the only existing cross-regional survey conducted across the Finno-Ugric regions of Russia in 2007 (see Finno-ugorskie narody 2008). At the end of each subsection, I will focus on young people as the most important policy target group.

In the fourth part, I will discuss the methods of impact evaluation and assess what impact the policies had in the Finno-Ugric republics of Russia. Suzanne Romaine has emphasized that the evaluating the impact of language policy is complicated by a lack of straightforward casual connection between types of policy and language maintenance and shift, because language policy is not an autonomous factor and much depends on the cultural context (Romaine 2002). I will show how the outputs and outcomes correlate along selected indicators. This does not reveal causation but makes it possible to put forth only probabilistic arguments about impact.

In the conclusion, I will hypothesize as to why the policy might have had a limited impact. Bernhard Spolsky's "top-down" perspective on language policy as that pursued by the state was criticized for not taking into account a "bottom-up" grass-roots perspective (Johnson 2013). Earlier, I have argued elsewhere that studying language policy of Russia with its central role of the state from the top-down perspective provides an adequate descriptive account because this is exactly the way it was pursued (see Zamyatin 2014a: 43–47). However, the current study of the impact also reveals the limits of such a policy that could not reverse the processes it was designed to overcome. Therefore, the study results also have some normative implications and provide new evidence for the importance of a bottom-up grass-roots perspective.

2. Policy environment and policy scope

2.1. Development of the Soviet language policy: historical context

It was the affirmative action of the Soviet central government towards minority nationalities that ensured their national development through the national delimitation and the creation of national territorial units. The Union of Soviet Socialist Republics (USSR) became nominally a federation composed of union republics (SSRs), the state's first-layer units, named after their majority ethnic groups ("titular peoples"). The largest

among them was the Russian Soviet Federative Socialist Republic (RSFSR). Autonomous Soviet Socialist Republics (ASSRs) became the second-layer units in the federation, territorially within and administratively subordinate to the RSFSR. Due to the mixed character of ethnic settlement, the national delimitation faced difficulties also within the RSFSR. In the Volga region, the Bashkir ASSR was the first to be created, in 1919, followed by the Tatar ASSR in 1920. The Tatars were by the far largest group concentrated within Russia and even aspired for the status of SSR for their republic, although they did not succeed in achieving this (see Zamyatin 2013a: 126–127).

The industrialization and collectivization of the early Soviet period destroyed traditional lifestyles and embroiled also the peoples speaking Finno-Ugric languages in the wave of modernization and urbanization. In 1920, autonomous regions were for the first time created for various smaller ethnic groups, including the Finno-Ugric peoples in Northwestern Russia and in the Volga region on the territories adjacent to the Tatar ASSR. In 1934–1936, these regions were upgraded to ASSRs. The national state-building process was conjoined with the early Soviet policy of "nativization", according to which the presence of non-Russians in the communist party and the state apparatus was to be strengthened. This resulted in the emergence of the first generation of national intellectuals (Zamyatin, forthcoming).

These processes were accompanied by unprecedented language planning efforts that encouraged the expansion of the official use of autochthonous languages in the public sphere of the newly created autonomies. The dissemination of these languages throughout the state apparatus in the Finno-Ugric ASSRs was never achieved due to some objective difficulties in corpus planning but also due to the short period until the subsequent policy change and the negative attitudes of the local Russians. At the same time, the accomplishments of early Soviet language planning were remarkable in terms of the spread of literacy and printed matters, as well as the creation of mass media and national schools operating in those languages.

The titular language was the language of instruction for 16.5% of schoolchildren in Karelia (along with 10.6%, who were instructed in the titular "Karelian and another" language, presumably Russian), 58.8% in Komi (and 24.6% in two languages), 29% in Mari (and 21.7% in two languages), 34.3% in Mordovia, 19.3% in Udmurt (and 20.7% in two languages) in Udmurtia and 46.8% in Tatarstan, the rest having Russian as their language of instruction in all republics. The data are for the academic year 1938–1939,

when the peak in opening national schools has already passed (Kulturnoe stroitelstvo 1940: 76–77). The immersion model was in use when more titular children received native language instruction in primary school, but their share dropped in secondary school, except in Mordovia, with its stable provision. Thus, when compared with the data of the 1939 population census, practically all titular schoolchildren had instruction in their native language; however, Russian started to supplant the native language of instruction after the introduction of its compulsory study since 1938.

In 1938, 30,300 book titles were published in Russian with an annual edition of 545,730 thousand exemplars. The corresponding figures were 89 titles and 546 thousand in Karelian, 156 titles and 723 thousand in Komi, 112 and 524 thousand in Mari, 161 and 1,435 thousand in Mordvin, 66 and 878 thousand in Udmurt, and 403 and 5,900 thousand in Tatar. Altogether 6,360 newspapers were published in Russian with an annual edition of about 5,878,500 thousand exemplars. The corresponding figures were six for Karelian and four for Finnish, with about 2,700 thousand exemplars together, 17 newspapers and 4,000 thousand in Komi, 16 newspapers and 4,500 thousand in Mari, ten and 5,000 thousand in Mordvin, 21 and 8,400 thousand in Udmurt, and 124 and 52,000 thousand in Tatar. A total of 1,406 journals were published in Russian with the annual edition of 238,200 thousand exemplars. The corresponding figures were one journal and 25 thousand in Karelian, one journal and 13 thousand in Komi, one and two thousand in Mari, four and 18 thousand in Mordvin, one and six thousand in Udmurt, and 11 and 662 thousand in Tatar (Kulturnoe stroitelstvo 1940: 214–215, 221).

Since the mid-1930s, the Russian language started to be promoted among non-Russians, initially justified by practical considerations such as the need for a common language. Starting in the late 1930s, the authorities began to emphasize the dominant position of ethnic Russians as well as the Russian culture and language. The repression of national intelligentsia followed as part of the Stalinist purges. In the following decades, the goal of Soviet nationalities policy shifted from the promotion of non-Russian nationalities towards the creation of a unified Soviet people, which implied the incremental assimilation of minorities.

As a result of population mixing and assimilation, ethnic Russians started to outnumber the titular groups in the Finno-Ugric ASSRs, while significant portions of titular populations were encouraged by Soviet migration policy to out-migrate to other regions. By 1989, about two thirds of

Mordvins (and also Tatars), half of Mari, a third of Udmurts and Karelians and up to a sixth of Komi lived outside their titular ASSRs. Notably, language teaching and printed matters were typically provided only in titular regions. Their volumes depended *de facto* on the status of ethnic groups in the Soviet hierarchy, where languages were classified as those of the SSRs, ASSRs, etc. Since the 1960s, the Soviet state, under a *laissez-faire* policy, began to withhold support for smaller languages, and the positions of the titular languages of the ASSRs deteriorated.

The major vehicle of assimilation of non-Russians in the RSFSR was the gradual substitution of instruction in the native languages with instruction in Russian after enforcement by the 1958 education reform of free choice in language learning (see Zamyatin 2012b). In Karelia, Karelian was never introduced as the medium of instruction, inter alia, due to "Finnicization" (see Klementiev 2013: 15–16). In the aftermath of the reform, native instruction in the republics was stopped in Komi and Udmurt and was retained in Mari and the Mordvin languages only in some rural schools.

Children's access to the learning of their native language as a subject also significantly decreased. From the mid-1970s to the mid-1980s, the number of children learning the Komi language as a subject declined from about 25,000 to 15,000, the latter figure representing only about a quarter of the Komi pupils in the republic. From the early 1970s to the late 1980s, the number of children learning the Mordvin languages dropped from 77,000 to 24,000, the latter figure being perhaps less than 15% of all Mordvin pupils. From the late 1950s to the mid-1980s, the number of children learning the Udmurt language as a subject declined from about 32,000 to 29,000, the latter figure being about a third of Udmurts of school age (see Lallukka 1990: 183–191.) With the shift in languages of instruction from the native language to Russian, which reached its fullest extent in the 1970s, an entire generation of parents emerged who had never had native language instruction and were fluent in Russian (Zamyatin 2012c: 89–90).

The production of printed matters in the Finno-Ugric languages has been carried out almost exclusively by publishing houses of the titular ASSRs. The use of these languages in publishing also significantly decreased especially in the post-war decades. Karelian remained a language without a written form. In 1946–1955, average annual numbers of titles of books and brochures published in Komi was 61.1, in Mari 88.2, in the Mordvin languages 81.4 and in Udmurt 59.1. In 1976–1985, the corresponding figures were 21.9 in Komi, 42.6 in Mari, 46.6 in the Mordvin

languages and 27.9 in Udmurt. According to a rough estimation, the average annual numbers of titles of books and brochures dropped by half during this period. At the same time, the numbers and circulations of journals and newspapers remained relatively stable, albeit quite low in absolute terms (see Lallukka 1990: 191–194). By the time of the USSR's collapse, the titular languages had become stigmatized *de facto* minority languages that were practically not used at all in official contexts except for symbolic purposes.

2.2. Sociolinguistic condition of the titular groups of the Finno-Ugric ASSRs

The policy developments had their impact on the sociolinguistic situation and contributed to ethnic assimilation and extensive language shift from non-Russian languages to Russian in the titular republics but especially elsewhere, because many members of the titular groups out-migrated to other regions. Ethnic assimilation during the Soviet times is well documented and could be followed, for example, based on the data of Soviet population censuses. Language shift, however, remained less discernible (see Table 1 on the following page).

There are some problems with the Soviet census data on ethnicity and language. In particular, the data on language retention rates are not very informative because they were based on the subjective interpretation of the respondents and likely underestimate the extent of linguistic assimilation. The term "Native language" began to be interpreted in the later Soviet population censuses not as one's mother tongue but as the language of one's ethnic affinity, thereby avoiding tension between one's identity and a lack of language knowledge. For that reason, the data on the command of a language and on actual language use are more illustrative of the sociolinguistic processes (see Lallukka 1990: 71–82).

First of all, during the late Soviet decades, titular groups reached a high level of national language-Russian bilingualism patterns, while local Russians remained practically monolingual. Seppo Lallukka has demonstrated how different patterns of bilingualism contributed to the language shift as the numbers of "native monolinguals" and "unassimilated bilinguals" dropped and the numbers of "assimilated bilinguals" and "assimilated monolinguals" grew steadily (see Lallukka 1990: 194–207). Lallukka found a correlation between urbanization and the processes of language shift and assimilation.

Republic	Komi	Mari	Mordovia	Udmurtia	Karelia	Tataria
1. Total population of the republic (thousands)						
Census 1939	319	579	1,188	1,219	486	2,915
Census 1959	816	648	1,002	1,337	651	2,850
Census 1970	965	685	1,030	1,418	713	3,131
Census 1979	1,118	703	990	1,494	736	3,435
2. Titular group (thousands)						
Census 1939	231	273	405	480	109	1,422
Census 1959	245	279	358	476	85	1,345
Census 1970	276	299	365	484	84	1,536
Census 1979	280	307	339	480	81	1,641
3. Share of the titular group in the total population of the republic (%)						
Census 1939	72.5%	47.2%	34.1%	39.4%	23.2%	48.8%
Census 1959	30.1%	43.1%	35.7%	35.6%	13.1%	47.2%
Census 1970	28.6%	43.7%	35.4%	34.2%	11.8%	49.1%
Census 1979	25.3%	43.5%	34.3%	32.1%	11.1%	47.6%
4. Report knowledge of their titular native language in the republic (%)						
Census 1959	93.8%	97.8%	97.3%	93.2%	80.9%	98.9%
Census 1970	86.7%	95.8%	96.2%	87.7%	71.7%	98.5%
Census 1979	80%	93.7%	94.3%	82.3%	61.2%	97.7%
5. Report knowledge of their native language in the RSFSR as a whole (%)						
Census 1939	95.3%	98.7%	88.6%	97.3%	90.6%	97.7%
Census 1970	83.4%	91.9%	79.7%	83.5%	63.9%	90.5%
Census 1979	76.9%	87.7%	74.6%	77.6%	56.5%	88.1%

Table 1: Dynamics in absolute numbers and shares of the titular groups in relation to the total population of the Finno-Ugric Republics and their language retention rates (census data)

According to the data obtained by Lallukka, the knowledge of Russian improved to the point that it generally started to be better than the knowledge of one's native language. His data on oral and literary competence and language preferences suggested that such competence was more developed in Russian and people were yielding to preferring this language when it was necessary to use their literary skills. People's skills in Russian

improved when it came to speech, reading and writing, while reading and writing in one's native language had notably worsened, partly due to the workings of the school system and the availability of printed materials. The data on the Komi demonstrate that by the early 1980s, they knew Russian better than their native language (see Table 2).

	Speech	Reading	Writing	Speech	Reading	Writing
	Have a free command of the language in the designated component			Language preferences in regard to the components		
Komi	96.8	67.7	64.4	61	10.1	13.5
Russian	85.3	83.8	82.7	19.3	62.8	60.7
Both equally	n/a	n/a	n/a	19.7	27.1	25.8

Table 2: Command and preferential use of the Komi language and Russian by components of the language: rural Komi in 1981 (%, adapted from Lallukka 1990: 214)

In the data, over 80% of respondents claimed to command Russian freely in the three components, while for Komi, the reading and writing skills were less developed. Accordingly, most Komi preferred to read and write in Russian, which turned their native language into a spoken vernacular. This also corresponded to the data on the patterns of reading books and periodicals. Adult Komi showed the best competency in their native language, while the young and old generations lagged far behind. Lallukka attributes this outcome to the rise and fall of native-language education in the ASSRs. His conclusion is that Russian had become the language of the written word for the broad masses of titular groups (Lallukka 1990: 214–216). The data on reading habits are illustrative of this fact (see Table 3).

Regarding language use in one's family, Russian had penetrated family life in such a way that, while the bulk of adult Mari still used their native language in communication with parents and spouses, only a portion did so in communication with their children (see Table 4).

Further, a strong swing to Russian occurred during the decade across generations but especially among children. Language use strongly correlates with a person's place of residence: in 1985, about 80% of parents in the capital city of Yoshkar-Ola spoke Russian to their children, while in the villages only 5–6% did so. Therefore, the data show that a considerable

	Rural	Urban	Urban: Creative Intelligentsia	Rural	Urban
	Reading of periodical publications			Reading of books	
Only Russian	70.8	88.2	18.5	36.3	45.9
Russian and Erzia/ Moksha	26.3	11.3	81.5	46.5	42.2
Only Erzia/Moksha	2.9	0.5	0	17.2	8.9

Table 3: Reading of periodical publications and books by Mordvins in the Mordvin ASSR in 1973–74 (%, adapted from Lallukka 1990: 215–216).

	With One's Parents	With One's Spouse	With One's Children	of School Age	of Preschool Age
1973: Russian	4.6	8.1	14.8	n/a	n/a
1973: both	15.2	20.9	19.3	n/a	n/a
1973: Mari	80	70.8	65.6	n/a	n/a
1985: Russian	8.2	16.4	33.4	31.5	35.1
1985: both	17.2	22	23.2	23.7	22.5
1985: Mari	74.1	60.4	42.3	43.4	41.4

Table 4: Language used in communication by adult Mari with members of their family (%, adapted from Lallukka 1990: 212)

portion of families failed to transmit their language to the next generation (Lallukka 1990: 211–213).

Moreover, the native languages were much less often used at work or at public meetings than at home, and over the decades, this gap widened. The data show that most rural dwellers spoke their native language at home and more than half also spoke it at work, which Seppo Lallukka attributed to the relative ethnic homogeneity of the villages. The relevance of the latter factor could be seen, for example, in patterns of native language use at work among Komi lumberers, which depended on whether their share of

Republic	Mordvins		Udmurts			Komi			
	Rural	Urban	Rural	Urban	Rural	lumber A	lumber B	village	lumber
	1973–4	1973–4	1968	1968	1979	1970–1	1970–1	1981	1981
Native language									
At home	91.6	21.7	78	15	73	27.6	70	71.2	19.3
At work	61.8	1.8	62.7	5.3	48.4	4.7	13.6	36.3	0.5
At public meetings	31.9	1.1	47.1	6.9	25.2	n/a	n/a	n/a	n/a
Russian and native language									
At home	5.3	26.5	9.2	24.5	17.6	20.9	12.7	21.4	38.2
At work	32.2	26.5	22.8	16.8	36.1	22.6	26.6	54.1	48.2
At public meetings	26.1	3.8	22.3	3.6	21.3	n/a	n/a	n/a	n/a
Russian									
At home	3.1	51.8	12.8	59.6	9.1	48.6	16	7.4	42.5
At work	5.9	71.7	14.5	77.9	15.1	72.5	59.5	9.3	51.3
At public meetings	42	95.1	30.6	89.5	52.6	n/a	n/a	n/a	n/a

Table 5: Use of native languages and Russian by Mordvins, Udmurts and Komi in the titular republics in various domains of daily life (%, adapted from Lallukka 1990: 208)

the workers was less than a quarter (lumberers A) or almost a half (lumberers B, see Table 5).

However, the dynamics of native language use at work during the decade in Udmurtia was that the number dropped to less than half even in rural areas. Moreover, Russian became the dominant language of sociopolitical life in villages and was most often used at public meetings. In urban areas, Russian had become the sole medium of communication in all three domains for the majority of Mordvins and Udmurts. Lallukka demonstrated that ethnic intermarriage was a factor that strongly affected domestic language behaviour (see Lallukka 1990: 207–211). Further, the use of Russian increased in correlation with the level of education: white-collar and highly skilled workers showed an increased use and competency in Russian, while unskilled laborers were more likely to use native language.

The language shift was much more advanced among the young cohorts, which can be seen very well in the data on rural Karelians (see Table 6).

	Age group	16–19	20–24	25–29	30–34	35–39	40–49	>50
Knowledge of Karelian	**Fluent**	83.5	72.7	87.4	96.2	95.1	96.9	96.6
	Understand, express	8.9	17.2	9.6	2.1	1.8	2.9	2.4
	Understand, do not speak	7.6	10.1	3	1.7	3.1	0.2	1
Fluent	**Karelian**	39.1	31.7	57.3	58.8	55.9	75.3	75
	Russian	40	39.5	20.9	18.9	12.8	7.4	13.7
	Both	20.9	28.8	21.8	22.3	21.3	17.3	11.3
Native language	**Karelian**	64.2	68.6	84.9	85.9	90.3	94.1	96.5
	Russian	25.4	26.4	12.9	10.2	9	4.3	3.2
	Both	4.4	4.2	2.2	3.9	0	0.6	0
Speak at home	**Karelian only**	45.3	31.3	46.9	37.3	32.3	44.2	56.8
	Russian only	31.9	36.1	23.2	27.2	25.2	19.6	14.3
	Both	22.8	33.5	29.9	34.9	42.5	34.4	25.6
Speak at work	**Karelian only**	8.8	4.5	17.3	12.8	11.2	22	26.5
	Russian only	58.3	67.5	45.2	47.1	46.8	34.5	25
	Both	32.9	26.9	32.8	39.3	41.3	42.8	45.9

Table 6: Language knowledge and use by the age cohorts of Karelians in rural areas (%, adapted from Klementiev 2013: 18)

In the case of the Karelians, an important factor at play was the absence of schools offering the native language as the language of instruction. Language shift among the Karelians was more advanced than in other republics, but the same processes were also characteristic of the other titular groups, for example, among rural Mordvins (see Vavilin 1989). Based on the observed processes, Lallukka concludes that Russian became the language used in all domains, while the prestige and the scope of the social functions of the titular languages narrowed considerable especially during

the last Soviet decades, leaving them mostly in the private sphere (see Lallukka 1990: 216).

The mechanism of how the ethnic groups and their languages became stigmatized lies in the social structure that is the system of socioeconomic stratification. Scholars typically distinguish between the vertical and horizontal types of ethnic and social stratification, where either one group is subordinated to another or the groups form segments across social divisions (see Horowitz 1985). Subordination manifests itself in varying access to higher education and white-collar jobs, as well as in socioeconomic inequality. In segmented societies, the ethnic identity of an individual does not correspond with his or her social status. In reality, both stratification and segmentation typically co-exist. In Russia, the populations of ethnic regions represent a variety of patterns of stratification. In some republics, for example, in Tatarstan or Sakha, the titular group and local Russians had roughly similar employment structures and competed for jobs. In other republics, either the titular groups or ethnic Russians were overrepresented in high-status jobs (see Zamyatin 2016c: 223).

By the start of the new era, the ethnic and socioeconomic situation in the Finno-Ugric Republics had become characterized by the vertical type of stratification, as social differentiation between urban and rural dwellers largely overlapped with the ethnic cleavage between ethnic Russians and the titular groups. This type of ethnic stratification gives ground for instances of prejudice and discrimination typically expressed through verbal abuse and denial of certain social resources, such as equal access to education. Despite the massive migration of titular populations to the cities during the Soviet times, no significant urban segments of titular groups emerged, due to their steady but gradual arrival. Their adaptation and acculturation strategies in the predominantly Russian urban surroundings have undermined ethnic solidarity among them and contributed to the blurring of ethnic boundaries on the way to assimilation and the spread of the perception of Russian as the language of socioeconomic advancement (see Zamyatin 2016c: 222–224).

2.3. Post-Soviet policy formation and adoption

I study language planning based on the stages approach, which distinguishes a series of stages from policy formation and policy adoption to

implementation and evaluation (see Anderson 2010). Policy formation includes the stages of problem identification, agenda-setting and policy formulation that structure this section. Policy formation takes place within a certain policy environment. To characterize the environment, I borrow from the concepts of the advocacy coalition framework, the multiple streams framework and the punctuated equilibrium framework (see Sabatier 2007).

A policy venue is characterized by some set of actors (see chapter 6 in Sabatier 2007). Policy actors are not only official policymakers, the central and republics' authorities, but also non-governmental participants. During the political transition in the USSR, the policy venue changed, bringing in new political participants. Both the masses and elites participated in shaping the policies. Mass national movements emerged as organized efforts to achieve the attributes of a fully-fledged nation. Newly created political parties and interest groups formed as national organizations pursued their visions on the issue. Pressure groups within the elites formed into what I conceptualize as titular and Russian elite segments. Within the segments, advocacy coalitions (see chapter 7 in Sabatier 2007) of cultural and political elites emerged, the former typically being in creative professions such as writers, scholars and teachers, and the latter "national cadres" of the Communist Party of the Soviet Union (CPSU) and the state apparatus or nomenklatura (Zamyatin 2014a: 60–64).

Demands for policy actions stem from the identification of problems in the environment. The policy image is the way to conceptualize the set of problems and solutions. The Soviet industrialization policy was conjoined with mass population transfers between republics and resulted in major demographic change, particularly in the Soviet Baltic Republics, where the shares of newcomers rapidly increased. One effect of the change was that the Russian language began to supplant the local languages in the public sphere and power corridors. With the progression of *perestroika* from the mid-1980s, intellectuals in the SSRs and ASSRs identified this condition as the problem and, with the introduction of publicity (glasnost), dared to spread their concerns in the mass media. The intellectuals initiated the creation of national organizations to lead the emerging popular movements in the SSRs and ASSRs. Under pressure from the national movements, the CPSU republics' central committees, headed by national cadres, advocated for the inclusion of the problem as an issue in the policy agenda and urged the central government to act.

In 1988, the Estonian Communist Party Central Committee presented to the CPSU the demand to guarantee the sovereign rights of the SSRs, including a guarantee of the designation of their state languages. The demand ignored, the Estonian SSR first unilaterally passed in November 1988 its declaration of state sovereignty and then amended its constitution in December 1988 and passed the 1989 language law, with both, among other things, designating its titular language as its sole state language. The Latvian and Lithuanian ASSRs followed suit. These SSRs designated the titular languages as their sole state languages, officially because it was assumed that Russian would be the official language of the USSR. The status of state language combines two functions: the symbolic function of national language and the practical function of official language (Zamyatin 2014a: 16–18). During 1989 and by the spring of 1990, all SSRs except the RSFSR had passed their language laws. Among the actual reasons might have been concerns that a co-official status of Russian and the republic's language would not prevent the shrinking in official use of the latter and the conviction that only sole state language status would enhance its practical promotion (Zamyatin 2013a: 127–128).

To head the process, the CPSU in its September 1989 Platform on the Nationalities Policy suggested "advisability of the recognition of the state languages of the nationalities that gave names to the SSRs and ASSRs". It also recommended that the status of Russian as the nation-wide state language should be enshrined in law and that it should function on equal-in-rights footing with the state languages of the republics. The USSR language law of April 1990 provided the legal basis for this and designated Russian as the USSR's official language. The RSFSR was the last among the SSRs to pass its sovereignty declaration in June 1990, albeit without designating state languages. After this, the sovereignization and the official recognition of languages proliferated in a "cascade effect", which also extended to the level of ASSRs. Thus, the "parade of sovereignties" of 1990 opened the "occasions window" for the official designation of languages also in autonomies of the RSFSR (Zamyatin 2013a: 129–136). This way, the streams of problem, policy and politics met in a nexus linking a range of policy alternatives to address the problems raised under the conditions of political transition (for the multiple-stream theory, see chapter 2 in Sabatier 2007).

2.3.1. The interpretation of sociolinguistic trends as problems

The policy environment encompasses both the political culture and socioeconomic conditions. Gabriel Almond and Sidney Verba (1963) distinguish between parochial, subject and participant types of political culture. In a parochial political culture, citizen participation in policy formation is essentially non-existent. In a subject political culture, citizens may believe that they can do a little to influence public policy. In a participant political culture, citizens actively take part in politics.

In Russia's republics, there was a mix of a parochial and a subject political culture with small fragments of participant culture. Truly mass national movements typically emerged in the republics with significant urbanized titular populations in large capital cities. In the late 1980s, national organizations were also created in the Finno-Ugric ASSRs, but these were relatively weak and were never able to initiate mass ethnic mobilization, except for a short time in the Mari Republic (see Zamyatin 2016c: 224). It was arguably the combination of the political culture with the vertical type of stratification that predetermined a low level of popular support for nationalism in the Finno-Ugric republics (on measuring support, see Gorenburg 2003: 118–119, also subsection 4.3.3 below).

In the view of Thomas Dye (2001), public policy reflects the values, interests and preferences of the governing elite. He argues that even in a democracy like the United States, public policy is made from the top down, not from the bottom up. It was elite politics that mattered more than mass politics also in the latter category of ASSRs. The creation of national movements themselves in these republics was typically inspired "from above" because the republics' elites needed their existence to justify their claims for the republics' self-governance vis-à-vis the Kremlin (Zamyatin 2013a).

In the name of the titular peoples, national organizations expressed their dissatisfaction with the current condition when the data were publicised about the shift from the titular languages to Russian and the ethnic assimilation of non-Russians as well. The publication of the data of the 1989 population census added to public awareness of the problems. The organizations defined this condition as a problem, publicly articulated it and raised linguistic and cultural demands from the republics' governments to address the problem.

For a condition to be converted into a problem, people must have some criterion or standard by which the troubling condition is judged to be

unacceptable (Anderson 2010: 81). The Kremlin launched perestroika as an attempt to return to the genuine Leninist course. In this context, the conditions of language loss and ethnic assimilation were perceived as unjust and unacceptable by the standards of the early Soviet nationalities policy with its affirmative action approach. The organizations were quasi-representative bodies that since 1991 arranged the titular "people's congresses". The congresses claimed to represent the titular peoples and also raised political demands. Enjoying support of the republics' authorities, they had enough legitimacy and leverage to focus public attention on the problem.

2.3.2. Raising the issue on the policy agenda

The economic crisis of the early 1990s exposed social problems connected to unequal economic and educational opportunities across ethnic groups. However, national organizations in the Finno-Ugric ASSRs failed to link the problem of a disadvantaged socioeconomic situation of the titular groups with political demands and to gain public support (Zamyatin 2016c: 226). With a low level of popular mobilization, the masses remained largely indifferent to the problems raised. Yet, agenda setting in the ASSRs was also a top-down process. There was a vocal public discussion in mass media, because the rise of nationalism and separatism in the SSRs and ASSRs questioned the very existence of the state and, thus, the position of the elites. The public debates about language were embedded in these processes, as could be seen in the discourse analysis of mass media (see Zamyatin 2018b).

Agenda setting involves both a conflict and collaboration. As the Soviet ideology was in crisis, the regional elites with their common origin in the nomenklatura were transforming themselves from ideologically to consensually unified elites. They realized the necessity of cooperation in order to maintain and increase power but were now divided by ideas and interests, including those related to ethnic and linguistic issues. Language ideologies connect beliefs about languages and their place in society. Language practices reproduce ideologies, hierarchizing languages and normalizing this hierarchization. The titular and Russian discourses on these issues diverged in terms of problem identification, envisaged policy goals and proposed solutions (see Zamyatin 2018b).

Titular intellectuals explained that the low prestige of titular languages and their narrowed use in the public sphere caused language shift and

believed that this was a result of deliberate discriminatory Soviet policy. They felt psychologically insecure, used the rhetoric of victimization and doubted the values of their languages and cultures. At the same time, they shared an ideology of linguistic pluralism and believed multilingualism to be a normal condition. Another ideology they shared without ever explicitly saying so aloud was linguistic nationalism with its belief in the central role of language for a nation. Both ideologies were rooted in the early Soviet ideology with its "equality of peoples and their languages", and the titular intellectuals now sought to return to these standards.

In the view of the titular activists, language revival as an aspect of national revival had to become the policy goal, with the intended effect of preventing and reversing the shift from the titular languages to Russian and, thus, changing the existing equilibrium. In Soviet times, many aspects of people's lives depended on the state and they were used to state paternalism. Due to the prevailing political culture, the activists believed that the state should act on the issue. This belief was also rooted in the rhetoric of entitlement and the claim of possession of the titular republic.

The local Russians also saw the condition of inter-ethnic relations as problematic and thus worthy of being raised on the governmental agenda. They pointed to ethnic tensions, conflicts and wars in some SSRs and also alleged discrimination of the Russian speakers, primarily in the Baltic republics. They also used the rhetoric of victimization and felt like a psychologically insecure majority because they had, unexpectedly for them, become minorities in the former SSRs and now also felt their majority position threatened in the former ASSRs and were prepared to discriminate reciprocally in order to protect their position. The ideology of the Russian elite segments was that of linguistic assimilation, and they envisaged monolingualism as the norm. Another implicit ideology was Russian linguistic nationalism, according to which Russian had to become the state language of Russia.

The implicit goal of the one-language-only policy was to sustain the shift from non-Russian languages to Russian, but it had to remain covert, because this idea contradicted the official Soviet discourse of internationalism. Assimilation and language shift were already ongoing practices. Thus, the explicit goal became the preservation of the status quo based on rhetoric about the need to prevent tensions and conflicts and to maintain inter-ethnic harmony. A further rationalization for monolingualism was based on the efficiency assumption, that the official use of two or more

languages was impractical, and on the integration assumption, according to which Russian should be promoted because it would ensure a unified informational and cultural space in the country (Zamyatin 2014a).

Therefore, the elites shared the view that there were language-related problems that had to be addressed. The ideological tensions in republics were between pluralist and assimilationist discourses. But there was also a level of consensus, because both visions shared the ideology of linguistic nationalism and, thus, although for different reasons, also shared the view that the idea of state languages could be an appropriate solution. Another point of consensus was the idea about the equality of languages. Equality was perceived in the public discourse as the just way to solve the inter-ethnic tensions. The equality idea in conjunction with linguistic nationalism had such an effect that most people supported the official designation of two state languages. The conflict was over whether the official status of the titular languages implied only voluntary or also compulsory language use.

2.3.3. Policy formulation

The designation of state languages was a new approach not previously used in the Soviet times. Policymakers were compelled to act, but when the issue was discussed beyond symbolic recognition, the interests of elite segments diverged, and a public disagreement emerged about the meaning of the official designation of languages as the solution to the problems. Russian and titular elite segments referred to different standards to adapt this new approach: the Russian elites supported only the symbolic recognition the titular languages, whereas the titular elites insisted in addition on the practical use of these language as the official languages.

Three central questions emerged in public discussions that embodied policy alternatives: how many state languages there should be, whether they should be compulsory for study in all school of a republic and whether all inhabitants of a republic must know them. The solution to the first question came earlier "from above", and all republics except Karelia addressed the issue in their sovereignty declarations (for a discussion of the options, see Zamyatin 2013a: 126–139). In Karelia, the problems mounted, starting with the very basic issue that due to the lack of a standardized written form, the Karelian writers themselves were against the official designation of Karelian, as they could not agree on which variety should be chosen and perceived Finnish as a language with a higher prestige for that role (Zamyatin 2013a: 139–141).

Most ASSRs first declared the official status of their state languages in their sovereignty declarations in autumn 1990 without having yet passed language laws, which amounted to symbolic recognition. Although the public was against soveregnization, it did not have a say, because the sovereignty declarations were drafted in parliamentarian commissions and adopted in parliaments with overwhelming majorities (see Zamyatin 2013a: 137–138). National organizations prepared their own drafts that were rejected, for example, in Komi. The general atmosphere of the processes of disintegration of the USSR made possible the sovereignization of these ASSRs as well. It was explicitly stated in the sovereignty declarations of some republics, e.g. Tatarstan, Komi and Mari, that the titular language and Russian as two state languages would function on equal footing (Zamyatin 2015: 297).

Titular pressure groups wanted to designate the titular languages with an official status not only because the symbolic recognition would increase the prestige of the language but also because it would enable their designation as compulsory as the mechanism for their expansion in the public sphere. Some politicians of titular nationality insisted that the titular languages should become the sole state languages of the republics, because in their opinion the co-official status of Russian would prevent or at least complicate the compulsory use of titular languages. However, this view was considered radical even by the titular elites themselves, most of whom could not imagine such a situation. For example, in the early 1990s, the chair of the national organization Udmurt Kenesh was himself against the introduction of Udmurt as the medium of instruction, because "it was not needed". Furthermore, there was a split in the national movements because a significant portion of the titular elites were themselves Russian speakers and often did not support the compulsoriness of the titular languages. As a result, the national organization in Tatarstan also supported the two-state-language solution (Zamyatin 2013a: 134–136).

The titular groups were to be the target community of the revivalist policy. Yet, the compulsoriness also had broad effects and directly touched upon the language behaviour of ethnic Russians and Russian speakers in the republics. They did not know or use the titular languages and their prevailing attitude towards them was that they had a low prestige and were not useful. Thus, the regional Russian elite segments were strongly predisposed against the compulsoriness of the titular languages. Furthermore, they suspected that the revivalist rhetoric was just a pretext while

the actual goal of titular elites was to use the language requirement of first-rank officials to ensure preferential access of their representatives to power. At the same time, the prevailing discourse of "inter-ethnic accord" also restricted them from expressing their negative attitudes publicly so as not to undermine the existing level of consensus. Instead, the Russian politicians preferred not to voice their ideology explicitly but thumbed their noses behind the back of the proponents of compulsoriness of the titular languages.

As the aspirations contradicted one another, a compromise was needed. There was a need to reconcile and balance the conflicting interests of elite segments advocating for their ethnic groups. This compromise became possible, inter alia, because of the common origin of the elite segments in the nomenklatura. The position of the first figure on the issue and the leadership style, conflictual or consensual, was crucial. Furthermore, there was a joint interest among regional elites in increasing the republic's self-governance vis-à-vis the center (Zamyatin 2013a: 151–153).

The scope of the compromise regarding the second and third questions about compulsoriness was set in the RSFSR language law of 1991. The law introduced Russian as the state language of the whole country and permitted the compulsoriness of titular languages in certain domains, including education and at work. Therefore, the introduction of some elements of the compulsoriness depended on the political situation in each individual republic. In the early 1990s, there were still no agencies of the republics on nationalities affairs that were generally tasked with developing policy proposals. Language laws were drafted by regional parliamentarians or officials, as in Tatarstan, Komi and Mari El. By the mid-1990s, ministries or state committees on nationalities affairs were created everywhere and began drafting the laws in those republics that still lacked them: Mordovia, Udmurtia and Karelia. Sometimes, law drafts were prepared by national organizations or research institutes (Zamyatin 2014b).

2.3.4. Policy adoption

Therefore, policy adoption consisted of not one but three steps: symbolic designation in the sovereignty declarations, formal designation in the constitution and legal designation in languages laws (see Zamyatin 2014a: 97–103). By form, symbolic designation actually did not amount to policy adoption because the sovereignty declarations were policy documents

that expressed intention rather than action (see Zamyatin 2013a). By content, however, the policy option of the designation of the co-official state languages of republics remained the same as it had already been in the declarations.

The constitutional designation amounted to policy adoption, although it resolved only the most general issues: those about the co-official status and, in some republics, about language requirements of presidential candidates. The constitutions were adopted in the period between 1992 and 1995 in constitutional assemblies, which meant that the people were once again to a large extent sidelined from the discussion (for a detailed discussion on the adoption of the constitutions, see Zamyatin 2013b). Yet, according to the data of the 1993–1994 public opinion surveys, by that time, the co-official status of the languages reflected the prevailing public attitudes. This option was supported primarily by the titular groups but also by a sufficiently large share of the Russian-speakers to have overall majority support not only in the Finno-Ugric republics but also in Tatarstan (see subsection 4.3.3 below). The constitutions of the republics formalized their upgrade in political status to that of constituent republics of Russia with their own constitutions and state languages as symbols of their national statehood.

Tatarstan was the first to pass its constitution in 1992, before the Russian constitution of 1993 and the designation of Tatar and Russian as equal-in-rights state languages. The 1994 constitution of the Komi Republic designated Komi and Russian as the republic's state languages. The 1994 constitution of the Udmurt Republic designated Russian and Udmurt as its state languages. The 1995 constitution of Mari El designated two varieties of Mari (Hill, Meadow) and Russian as its state languages. The 1995 constitution of Mordovia designated Russian and two Mordvin languages (Moksha and Erzia) as its state languages. The Republic of Karelia did not designate its state languages at the time and designated only Russian in its 2001 constitutional amendment (see Zamyatin 2013b).

Most issues were left for legal designation in language laws. In public debate, the rhetoric of "language revival" was widespread but the policy goal was formulated and adopted in the laws as a more moderate "maintenance and development of languages", which implied the process but not necessarily the result (for a detailed discussion on the adoption of the constitutions, see Zamyatin 2013c). This became not an absolute goal but one balanced by the goal of maintaining the position of Russian as "the language of inter-ethnic communication" (literally, "inter-nationality

communication") and enabling its further spread. In the next section, I will explore the specification in legislation of only the first goal.

3. Policy inputs and outputs

3.1. Evaluation of policy institutionalization and implementation

Legislators typically define policy inputs by not only formulating the goal of the language spread but also providing an itemized list of instituted elements of domains through the adoption of language laws and the allocation of budgetary funds, which I refer to as institutionalization. Accordingly, the indicators for measuring policy inputs are the share of instituted provisions and the amount of allocated funds. Executive authorities should then act as policy implementers and are responsible for producing policy outputs. Thus, the indicators for measuring policy outputs are of two types, the first depicting the share of institutionalized elements where the use of titular languages was actually introduced and the second depicting the share of measures that were actually implemented under executive programs, as sets of rules, routines and resources, or through everyday activities of executive agencies. Focusing on studying the relative shares makes it possible to see beyond the absolute numbers typical of official reporting.

The gap between policy goals and implementation is also typical for other countries and is well-studied (see Hill & Hupe 2002). A specific feature of the situation in Russia was that it was the co-official status of languages that predetermined the problems of implementation. The republics' authorities took on the formal commitment to promote the titular languages but instituted only few obligations to actually use them. In order to reach a compromise, the revivalist goal was too broadly formulated and had to be pursued under the conditions of official bilingualism, when Russian was already used in all domains. Furthermore, the 1990s revivalist projects were pursued mostly as a top-down policy narrow in scope because they mainly sought to increase language use within the elements of domains where titular languages already functioned and their expansion to new elements of domains was generally not planned. Thus, the patterns of covered elements of domains were also a Soviet legacy, and in post-Soviet times, there was no expansion of the titular languages to new domains, with some exceptions, notably information technology (see Zamyatin 2014b and Table 7 in the next section).

In Russia's republics, the policy institutionalization through language laws was done in vague terms and contained such contradicting ideas as the proclaimed equality of languages and the hierarchy of language statuses (see Zamyatin 2015). This shifted the task of filling in the details to the executive agencies to be created. In the early 1990s, the regional ministries were typically assigned a non-itemized budget line with the proxy of developing governmental executive programs (especially those in the first stage, see Zamyatin 2014c). In other words, implementers enjoyed a discretion on implementation matters, in particular in allocating funds to concrete measures. This was the case partly because the institutionalization of the official language status in laws and implementation were disconnected, as the structure of laws and executive programs did not match (Zamyatin 2014c). In my earlier study, I demonstrated that the broad discretion given to the government officials over the issues of implementation coupled with the officials' attitudes of "benign neglect" and lack of commitment to the task was a significant reason for the poor implementation or non-implementation of policy measures (Zamyatin 2014a: 104–108).

However, there were also technical obstacles that led to poor implementation. The definition of societal problems in relative rather than absolute terms determines the limitation of policy in affecting conditions (Dye 2013: 78). The institutionalization was often not specified into objectives and, thus, was difficult to operationalize for the purpose of implementation and evaluation. No specific targets or measurement units were set in the fields of activities such as the number and nature of public services to be made available. Another problem was that the agencies were in charge of both implementation and the evaluation of implementation. As a result, their reports tended to consist of lists of activities that focused on progress rather than on shortcomings. Further, a crucial weakness was the lack of consideration for the role of titular community organizations, although in practice pressure groups often had much leverage on the agencies, for example, through participation in advisory bodies or other forms of consultations or as contractors for the activities undertaken in order to implement the policy measures (for a similar situation, see De Korne 2012).

How is it possible to evaluate policy institutionalization and implementation? Based on the policy analysis approach, François Grin (2003) developed a model of policy evaluation in the context of the European Charter on Regional or Minority Languages. He pointed out that "the desired outcomes of the policy measures to be adopted under the Charter ought to be

the continued vitality of those languages, meaning that they ought to be known – and used". To specify the content of the vitality, Grin used Joshua Fishman's *graded intergenerational disruption scale* (GIDS), which contains eight stages on the scale of "threatenedness" of languages, with stages 8 to 5 amounting to minority language use in private and stages 4 to 1 in the public sphere (Fishman 1991). Grin further noted that one way to define the desired outcome is a general movement towards stage 1 of the GIDS. He sums up that the improvement of the position of languages on the GIDS scale should achieve some minimum results of "restoring and maintaining self-priming mechanisms of language reproduction", which coincides with stage 5 (see Grin 2003: 40–42).

In Russia, the titular Finno-Ugric languages also found their way into the public sphere as officially recognized state languages of republics (except in Karelia). Moreover, the revivalist goal itself was to be achieved through the expansion of the use of the languages in official contexts through its institutionalization in law. Tatarstan and Komi started to pursue revivalist policies quite assertively in terms of inputs, passing their language laws already in 1992. Mari El was also assertive and passed a strong law in 1995, but the policy underwent to an abrupt change at the turn of the millennium. In contrast, Mordovia and Udmurtia were slow in launching the policies through the adoption of their language laws in 1998 and 2001, respectively (see Zamyatin 2014b). Therefore, to evaluate whether the policy achieved its goal is to study the expansion of languages into domains of the public sphere.

Based on the GIDS, I developed a model for classifying language use in the public sphere depending on public institutions. I distinguish language use (1) by the bodies of state authorities, (2) in the work environment of public institutions, (3) in state-funded mass media and cultural institutions (4) in public schools. Further, depending on its functions, I distinguish language use (1) in the office, (2) in communication with citizens, and (3) in the provision of public services (see Zamyatin 2014a). Essentially, the republics' language laws prescribed the use of the titular languages across some elements of three domains of the public sphere: languages in the bodies of state authorities, official mass media and education. Their use in the work environment was not instituted, but sometimes some implementation measures were taken.

In other words, the titular languages were granted only "limited officiality" both in the scope and extent of institutionalization, as Russian already

performed all functions. For example, courts and law-enforcement agencies fall under the federal competence and are thus monolingual Russian, with the exception of the right to translation. Thus, the scope of the use titular languages was restricted to certain regional authorities (see Zamyatin 2015). In my study on institutionalization, I demonstrated that the use of titular languages in official contexts, in addition to Russian, was either (1) not instituted in the language laws, (2) instituted but never implemented or (3) instituted and at least partially implemented. In the second case, one can only speak about indirect effects on language prestige. Thus, it is only in the third case, when legal provisions were at least partially implemented, that it is possible to evaluate the extent to which policy outputs were achieved (Zamyatin 2014b).

According to François Grin's policy-to-outcome path, implementation measures are taken to create of the conditions for language use: the capacity, opportunity and desire to use the minority language (Grin 2003: 43–48). As a result of cross-fertilization, measures of status planning, acquisition planning or prestige planning typically affect different aspects of language behaviour simultaneously, but the different types of language planning mainly affect one condition for language use. In Russia's republics, at the core of status planning was the creation of opportunities to use the languages, in particular attempts to spread the use of the titular languages in the bodies of state authorities. Acquisition planning and capacity development were central in the sphere of education. Mass media was illustrative of the desire to use the languages. In the next section, I will explore policy the volumes of inputs and outputs directed at creating the conditions for language use accordingly in each of four domains.

3.2. Creation of conditions in the domains of language use

3.2.1. Authorities' offices and the work environment: opportunity

Status planning included the designation of the titular languages with an official status of state languages of republics and relied on their compulsory use as the means of their promotion. The official recognition has not resulted in the introduction of titular languages as the working languages of state authorities. The use of titular language in parliamentary debates was permitted in such activities as drafting laws and discussions, including work in committees, the publication of laws as well as in official

documentation and correspondence. The republics typically instituted the right to speak in both languages at parliamentary sessions. However, the prevailing attitude was that the titular languages were considered insufficiently linguistically developed, although they had literary traditions and standardized written forms, with the exception of Karelian, which acquired a written form in 1989. To address the latter problem, language boards were created in every republic with the mission of corpus planning.

Compulsory knowledge of the official language by (a candidate for the post of) the head of a state or territory is an important element of language status. This requirement can have dual justification within the language status: as a part of the working language of the state authorities and as a language preference. Language preferences and the requirement to know both state languages were justified in the republics by the multinational character of their statehood. Among the Finno-Ugric republics, the requirement of knowledge of both state languages of the republic for the head of state were introduced only in Mari El. However, when an incumbent head attempted to apply the provision, this provoked a conflict, so the provision was never enforced (Zamyatin 2013b).

Language requirements for officials and civil servants were justified as the way to ensure the right of citizens to address authorities in the state languages. Despite the plans, almost nowhere were language requirements instituted and also implemented. In Mari El, in addition to the general provision of language requirements, there was a provision on language requirements from heads and employees of educational institutions, while language requirements for some professions did not pass in the language law. In Tatarstan and in Karelia, financial bonuses for the knowledge and use of languages in professional activities were introduced (see Zamyatin 2014b). Some official data is available on measures for the promotion of titular languages in the work environment. For example, annual language courses for public officials and citizens were organized in Komi and Udmurtia. In Komi, language requirements for some professions did pass into the original law, but the list of professions was never approved (see Zamyatin 2013c: 137). A total of 150 public officials attended such courses during the six years between 2006 and 2012 (Gabusheva 2013). All in all, the attempts to expand the use of titular languages did not reach the objectives of creating new opportunities for language use in official contexts.

3.2.2. Communications with citizens, public services: opportunity

Language laws not only regulated language use by authorities and their officials but also in the authorities' communication with citizens and in the provision of public services. In my study of these two latter contexts, I found that the elements of domains in which titular languages had to function as the medium of the interaction of authorities with citizens were partly instituted. In some republics, the right to choose the language of communication in requests from authorities and the obligation of authorities to respond were instituted. Both state languages could be used in the text of documents (forms, seals, stamps or signboards with the names of authorities), as well as in official documents verifying identity and other information (passports; birth, marriage and death certificates; diplomas; military cards; etc.). In addition, the right to have traditional personal names, the right to have access to information and the obligation of authorities to provide such information were included in the Mari El language law.

The elements of domains of public services were also partly but somewhat better instituted. The language laws allow, but do not require, both state languages to be used in consumer services and commercial activities, industry, agriculture, communications, transport, power engineering, marking of goods and instructions for goods, labels, standards, nomenclature, texts of official announcements, visual and audible advertisements and other information, timetables, audible and visual announcements in airports, railway stations, river ports, bus stations, road signs and geographical names. The institutionalization of these elements did not mean that they were to be used automatically, and civic initiative was often needed to launch their implementation. Further, in the early 2000s and the early 2010s, the number of instituted provisions decreased (see Zamyatin 2013c). If one compares the instituted and at least partly implemented elements across the republics in the 2000s, the following picture appears (see Table 7 on the following page).

For the sake of simplicity, I have presented in Table 7 the data not on all but only on the key elements of four domains (for the full list, see Zamyatin 2014b). This selection makes their presentation incomplete but visualizes the data well and allows for a general comparison of the policies. To complicate the picture, the authorities used the legal language of qualifications like "can", "if possible", or "according to legislation" to weaken legal provisions especially in Karelia and Udmurtia, which suggests that they

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia
1. Requirement for top officials	0	1	0	0	0
1a. Rights to speak at sessions	1	1	1	1	1
1a. Languages of draft laws	0	0	0	0	0
1a. Languages of discussions	0	0	0	0	0
1a. Languages of law publication	1/1	1	1	1	1
1b. Texts of documents and signboards	1/1	1/1	1/1	1/1	1/1
1b. Audio-visual information	1/1	1/1	1/1	1/1	1/1
1c. Right of citizens to request	1	1/1	1	1	0
1c. Obligation to respond	1	1	1	1	0
2. Language requirements	0	1	0	0	1
3. Languages in mass media	1/1	1/1	1/1	1/1	1/1
4a. State languages for all pupils	1/1	1	1/1	0	0
4b. Native language of instruction	0	1	1/1	0	0
4c. Native language as a subject	1/1	1/1	1/1	1/1	1/1
Instituted, not used / partly used elements	9/6	11/7	10/6	8/4	7/4

0 – not instituted
1 – instituted, not used or implemented
/1 – instituted, partly used or implemented

Table 7: Institutionalization of selected elements of the official status of the titular Finno-Ugric languages in language laws (adapted from Zamyatin 2014b)

actually lacked the intention to implement the respective provisions. Notably, in all republics, almost exclusively those elements were instituted that increase the visibility of the languages: texts of documents and signboard were to be translated and audio-visual information provided. For example, the distribution of public information in the state languages of the republic was regulated in Mari El. I have suggested that this was due to the circumstance that the titular languages were used in the official contexts mostly in their symbolic function, and the majority made concession in this part but not regarding the practical function. This also indicated the inability of policymakers to change the existing interactional order (see Zamyatin 2014a).

It is not easy to quantitatively overview the implementation of language provisions in communication with citizens and public services. The units of measurement could include the number, frequency and duration of opportunities to use the language in dealings with authorities (see Grin 2003: 100). However, the official data on language use in public services is scarce, and only circumstantial evidence is accessible. For example, the installation of bilingual signposts is the only obligation under federal legislation. The installation of bilingual signposts or the translation of documents is a one-time event, which makes it possible to count. The agencies typically provide numerical information on the implementation of these two activities, but no quantitative studies have been conducted. There have been no studies on language landscapes in the Finno-Ugric republics like those conducted in Tatarstan (see Gabdrahmanova et al. 2016). The Komi Republic was by far the first among the Finno-Ugric republics in instituting and implementing the use of the Komi language in official contexts. For example, the republic's laws were translated into that language. But even in this republic, the installation of bilingual signposts was not fully completed, except in the towns of Syktyvkar and Ukhta (Gabusheva 2013). In Udmurtia, officials reported that some laws were also translated and provided the information on the absolute number of the translation of the names of public and commercial legal entities (see Implementation Report 2014). In contrast, the Republic of Tatarstan instituted the use of Tatar along Russian in all the elements listed in Table 7 (see Iskhakova 2002).

3.2.3. Education: capacity

The main focus in language education is on the creation of the capacity to speak a language. By the end of the Soviet era, most national schools in the Finno-Ugric republics were situated in the countryside and had Russian as the language of instruction, while the native language was taught as a subject only. The objective of the revivalist project in education was to increase access to native language learning as a subject and ultimately to provide it to all titular pupils, including in urban areas. Native language of instruction was also to be expanded where it existed, that is, in rural schools in Mari El and Mordovia. The objective to introduce the native language of instruction was not pursued, although it was discussed in the early 1990s, for example, in the Komi Republic. The teaching of titular languages as state languages of the republic as a compulsory subject to all pupils irrespective of their ethnicity was introduced at different times in Komi, Mari El and Mordovia. While units of measurement were defined to enable quantitative evaluation, no separate objective of skills development was set to focus on increasing the level of competence, and qualitative evaluation remains problematic.

In a separate study, I systematically evaluated the implementation of language policy in education with the help of both qualitative and quantitative methods based on the official data (for the data and methodology, see Zamyatin 2012b, 2012c; see also Zamyatin 2016 for the evaluation in relation to the Charter standards). On the policy input side, there are resources to invest, such as the numbers of hours in the curriculum, textbooks and supply materials, schools and trained teachers. I took access to native language learning in one of the three modes, the native language of instruction, as a subject of native language or a subject of state language, as an indicator of policy outputs and diachronically compared it across the republics. The combined data illustrate the processes that were ongoing in language education in the Finno-Ugric republics during the two post-Soviet decades (see Table 8).

The data demonstrate that the access to native language learning in the Finno-Ugric republics was only partially provided. In general, probably up to a quarter of titular schoolchildren studied their native language in any form in Karelia, up to half in Komi, Mordovia and Udmurtia, and up to three quarters in Mari El. Karelia and Mari El achieved more in terms of outputs. In Karelia, the access to native language learning either as a native

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia	Tatarstan
Year	1990/1991	1990/1991	1990/1991	1989/1990	1989/1990	1990/1991
Instruction	0	8,706	4,719	0	0	65,074
Native lang.	15,890	27,700	16,576	29,278	301	192,600
State lang.	3,483	-	-	-	-	n/a
Year	1999/2000	2000/2001	1999/2000	2000/2001	2000/2001	2000/2001
Instruction	0	6,316	3,597	0	0	150,632
Native lang.	16,926	25,974	16,136	33,143	2 149	313,750
State lang.	21,224	46,559	3,191	-	-	99.1%
Access	~ 52.1%	81.9%	~ 41.7%	41.2%	17.6%	99.6%
Year	2009/2010	2009/2010	2009/2010	2008/2009	2009/2010	2010/2011
Instruction	0	273	1,689	0	0	85,516
Native lang.	6,200	11,616	7,670	19,315	1,581	185,392
State lang.	27,800	29,304	15,493	-	-	~ 100%
Ethnic share	~ 55.6%	~ 84.3%	~ 50.2%	~ 44.8%	~ 25%	~ 100%

Table 8: Number of students of titular nationality learning the titular languages in the Finno-Ugric Republics in three modes (as the language of instruction or as a subject of native language or state language) and share of students with access to native language learning in any of these forms (adapted from Zamyatin 2012b, 2012c)

or a state language increased from 3.4% in 1990 to 17.6% in 2000 and was about 25% in 2010. In Mari El, the access to native language learning was 55.2% in 1990 and remained relatively stable despite the policy change in 2001, when up to half of the Mari pupils had access, while by 2000 most of the rest had to learn Mari as the state language of the republic. Neither secondary professional nor higher education was available, except for training of native language teachers.

In contrast, the share of Tatar schoolchildren having native language of instruction increased from 12% in 1990 to 48% by 2000, while the rest learned Tatar as a subject of native language. Exceptionally, some humanities courses in secondary professional and higher education were also provided in Tatar (2.5% of all students). Until 2017, when compulsory teaching was abolished, practically all non-Tatar schoolchildren in Tatarstan had to learn Tatar as a subject of state language (Zamyatin 2012c, State Program of Tatarstan 2013).

It is complicated to study language competence as a policy output, either quantitatively or qualitatively. One problem is that only about two thirds of those who start studying the native language in primary school continue to do so also in secondary school. Furthermore, an unintended consequence of the policy was that the introduction of the compulsory study of the state language actually negatively affected native language teaching, since the 2007 education reform changed the setting. The reform introduced the satisfaction of linguistic and ethnocultural demands of people as the criterion of language policy effectiveness (Zamyatin 2012a). Schools anticipated low parental demand and started to switch the language teaching from that of a subject of native language, which had to become voluntary, to that of the compulsory subject of state language. The problem is that far fewer hours are assigned to teaching in the latter mode and the teaching is of lower quality (see Zamyatin 2012b). In the future, the criterion of satisfying the linguistic demands would make it possible to study also the desire to learn the language, but due to the lack of systematic data, this is currently not possible.

After an increase in the 1990s, access to one's native language and the volume of teaching of the Finno-Ugric languages decreased in the 2000s. The 2007 education reform has further worsened the position of the Finno-Ugric languages in the education system. Until recently, the negative trend in this process of decrease was due to the closure of small rural schools in the campaign for "optimization of the education system". Since the reform, the number of schoolchildren learning their native language has been further decreasing as a result of the absence of the declared linguistic need expressed by parents or their preference for other subjects in the formation of the school curriculum (see Zamyatin 2012a). The existing quantity and quality of language teaching does not ensure the reproduction of language competence of a significant portion of schoolchildren of titular ethnic origin (see Zamyatin 2012b).

3.2.4. Mass media: desire

Demand for products in a language reveals the desire to use the language. The level of demand also indicates the effectiveness of measures directed at prestige planning but is difficult to study. Mass media is illustrative of the desire to use the language because people are free to order subscriptions.

Since the Soviet times, books, journals and newspapers have been printed in the titular languages of the republics and TV and radio broadcasting have been arranged, because these were the channels of ideological indoctrination. With the introduction of the freedom of the press in the early 1990s, there has been an interesting interplay between supply organized by the republics' authorities and popular demand. Under the conditions of the drop in popular demand during the economic crisis of the 1990s, the objective was not to expand but only to sustain the level of supply. Policy outputs are influenced by many other variables besides popular demand, including economic and technological ones. However, one indirect way to study demand is to assess the trends in minority media in relation to the output in the Russian language, thus sidelining the effects of variables that influence all languages.

Therefore, when compared to the dynamics of printing in Russian, one can indirectly speak about regional policy outputs. In the republics, substantial funding was typically allocated in the executive programs for book-printing in the state languages of republics and other local languages. Publications for children and schoolbooks are in particular focus, along with their distribution to libraries and schools, including among diasporas. The republican budget finances periodicals, as well as the making of broadcasts and telecasts. In addition, the executive programs provide funding for dubbing and subtitles.

I observed the dynamics of the provision of media products in the titular languages of the Finno-Ugric republics during the two post-Soviet decades, comparing the trends based on the official data, which are for the whole of Russia. When the output in 1990 is taken as constant (100%), the calculation shows the following trends in printing in the titular Finno-Ugric languages (see Table 9 on the following page).

As can be seen from the data regarding books and brochures, the republics' authorities annually commissioned up to two dozen titles, with the average total editions amounting to tens of thousands in the Komi, Mari, Mordvin and Udmurt languages. For Karelian, both the numbers of titles (only a few) and average editions (some thousands) have been clearly smaller.

In 1991, only 3% of all books published in Russia were in non-Russian languages and in 1996 this share decreased to 2.3%. Most of the non-Russian books were in Tatar and Bashkir, while the share of other non-Russian languages was about 20% (Hudaverdian 1998). The data show that, over the

	1990		2000		2010	
	Issue of books and brochures in selected languages of the peoples of Russia (titles)					
Russian	37,740	100%	56,863	151%	118,378	314%
Tatar	169	100%	210	124%	280	166%
Karelian	3	100%	4	133%	1	33%
Komi	29	100%	24	83%	35	121%
Mari	72	100%	15	21%	29	40%
Mordvin	35	100%	11	31%	30	86%
Udmurt	28	100%	9	32%	5	18%
Editions of books and brochures in selected languages of the peoples of Russia (thousands)						
Russian	1,499,722	100%	445,041	30%	641,659	43%
Tatar	3,436	100%	411	12%	1,776	52%
Karelian	11	100%	6	55%	0.3	3%
Komi	106	100%	85	80%	39	37%
Mari	301	100%	16	5%	33	11%
Mordvin	135	100%	39	29%	14	10%
Udmurt	149	100%	7	4.7%	11	7%
Issue of newspapers in selected languages of the peoples of Russia (titles)						
Russian	4,488	100%	5508	123%	9,166	204%
Tatar	89	100%	72	81%	172	193%
Karelian	0		3		4	
Komi	4	100%	1	25%	5	125%
Mari	16	100%	11	69%	15	94%
Mordvin	2	100%	2	100%	4	200%
Udmurt	18	100%	7	39%	10	56%
Editions of newspapers in selected languages of the peoples of Russia (thousands)						
Russian	37,391,289	100%	6,973,018	19%	9,391,206	25%
Tatar	192,233	100%	60,767	32%	51,835	27%
Karelian	0		275		54	
Komi	2,870	100%	315	11%	1,149	40%
Mari	9,946	100%	3,573	36%	1,485	15%
Mordvin	2,106	100%	686	33%	333	16%
Udmurt	9,720	100%	3,091	32%	1,321	14%

Table 9 (on the left hand page): Average annual numbers of titles of books, brochures, periodicals and newspapers published in Russian and the titular Finno-Ugric languages (titles) and the dynamics in relation to the output in 1990 (%) (the data on Mari and Mordvin for both languages/varieties)

Sources: data of *Goskomstat Rossii*, cited for 1990 and 2000 from the *Russian Statistical Yearbook* 2009, cited in *Yazykovoe raznoobrazie* 2010; data for 2010 from *Finno-ugorskii mir* 2012.

two post-Soviet decades, the number of books published in Russian tripled, while the numbers of books published in the Finno-Ugric languages decreased, although remaining relatively stable, which is probably the result of efforts on the part of the republics' authorities. At the same time, while the book editions in Russian were restored to half of the 1990 level, the book editions in the republics significantly dropped, which probably demonstrates diminished demand.

As for printed mass media, within the approximately two decades, the number of journals and newspapers in Russian almost doubled, and the numbers of journals and newspapers published in the Finno-Ugric languages remained relatively stable, which is again probably the result of efforts of the republics' authorities. The republics' policy was to intervene in order to support mass media. For example, in Udmurtia, the regional legislature and the government became co-founders of three official newspapers and the State Television and Radio Broadcasting Company *Udmurtia* in 1995.

In every republic, there is at least one official newspaper and one journal in the titular language, but the volumes of their circulation have been low and subscription from outside of the respective republics is virtually impossible. According to the official data, two to three newspapers have been published throughout the post-Soviet period in the Karelian, Komi and Mordvin languages; for Mari and Udmurt, the number of newspapers is higher. A rapid rise in the number of periodicals and newspapers during the *perestroika* times was followed by a dramatic decrease. For example, the number of newspapers dropped from eighteen in Udmurt and sixteen in Mari in 1990 to seven and eleven, respectively, by 2000, and somewhat recovered to ten and fifteen in 2008. About two to four journals with an average circulation of tens of thousands have appeared in the Komi, Mari, Mordvin and Udmurt languages (see Table 9).

At the same time, circulations dropped by many times and never recovered. Editions of journals and newspapers in Russian were restored up to a third and a quarter, respectively, of the 1990 level. The drop in editions of journals in the republics was higher, which is probably another indicator of diminished demand, especially among blue-collar workers. In the case of newspapers, the decrease in editions in the Finno-Ugric languages is comparable to that of those written in Russian. The demand for newspapers was relatively stable probably because the readers reside mostly in the countryside with no other comparable sources of information available.

Since the Soviet times, there has been regional TV and radio broadcasting in local languages. There was an idea to provide broadcasting in minority languages on federal channels, but it was never implemented, and federal channels are exclusively in Russian. In the post-Soviet period, state-owned TV and radio broadcasting channels in the republics have continued to offer some broadcasts in the titular languages, usually about an hour per week on television and several hours per week on radio. Private commercial enterprises rarely issue cultural products in minority languages, as it is considered unprofitable due to the low demand, and these products often are considered to be of poorer quality than those available in Russian.

In the new era, the broadcasting hours of regional TV and radio companies have also been decreasing rapidly. In 2005, all regional TV and radio companies were resubordinated to the All-Russian State TV and Radio Company. This led to a further decrease in the number of broadcasting hours in minority languages on the waves of the Russian official state radio. Still, in Udmurtia, for example, in 2007, the volume of broadcasting in the Udmurt language on TV was ten hours and on the radio seventeen hours per week (Semionov 2008). However, the quality of news in titular the languages in periodicals as well as in broadcasting is not sufficient, inter alia, because subsidies make them less competitive. As a rule, news in Russian offers more information and is of higher quality (Etnosotsiologicheskoe issledovanie 2000).

An extensive study has been carried out on the position of Finno-Ugric languages on the Internet. According to the data, there has only been a little progress in twenty years' time and not all languages have all the necessary language resources and tools available in order to enable their use as languages of the information environment. Only Komi and Udmurt have language corpora, while Komi, Mari and Udmurt have spell-checkers,

purposeful corpora and native character sets. The websites of the respective republics' authorities are translated into Komi and partially into Mari, Udmurt and the Mordvin languages (Fedina 2016).

3.2.5. Diverging inputs and outputs across the republics

In this section, I demonstrated that there was a mismatch between policy inputs and outputs in terms of instituted and at least partially implemented provisions. Another mismatch was observed between the measures only "formally implemented" by box-ticking and those also actually implemented (see Zamyatin 2014c: 229). Third, the amount of inputs and outputs in the republics have diverged. In the early 1990s, despite the inevitable delay in their launch due to bureaucratic inertia, policies were relatively assertive in terms of the institutionalization of the compulsory use of titular languages, especially in Mari El and Komi, but this was not reflected in equal inputs, if measured in the passing of executive programs and the amount of funds assigned to them as indicators of policy input. This was partly due to the economic crisis of the early 1990s and the 1998 default. In the 2000s, the funding became more stable but political will to pursue revivalist projects decreased due to the incremental regime change in the country.

Since 2000, the amount of funds assigned for policy implementation in Mari El was reduced to a negligible amount due to the political situation. In the other republics, the amount of funds was comparable, including Karelia. That said, the target group in Karelia was many times smaller compared to the other titular groups and, thus, the input per individual in the target group was more substantial. Inputs in individual republics seem to have correlated with outputs (see Table 1, Zamyatin 2014c: 252–253). Insufficient inputs also resulted in inadequate outputs, which I measured by figuring out the trends in the evolution of such indicators as access to native language learning, volumes of printed materials and others. Outputs were not up to the task of creating the conditions for language use. In contrast, in Tatarstan, long-term planning, continuity in policy implementation and adequate allocation of resources led to the achievement of significant progress in outputs in all domains (see Zamyatin 2014c).

4. Policy outcomes

4.1. Evaluation of policy outcomes

How can one evaluate whether the effects of policy outputs matched the desired outcomes? Typically, it is much more difficult to conduct a quantitative evaluation of policy outcomes because of the scarcity of data. According to Grin, the best solution in this situation is to carry out surveys of language competence and language use, or at least on language attitudes in the population, at regular intervals. Alternatively, it is also possible to collect statistical data on a range of language skills and patterns of language use separately, for example about enrolment in language learning, television audiences or sales of printed matters. The analysis of the evolution in indicators should then establish whether there is the link between policy measures and outcomes. This method produces only correlations that have to be substantiated in order to separate the effects specific to policy, that is, ones that would not have taken place without policy. A policy can then be evaluated as effective in comparison to any alternative policy, if policy measures incur actual positive changes through the creation of the conditions for language use (Grin 2003: 102–103).

In Russia's ethnic republics, the policy formation took a similar scenario when the goal became the expansion of the use of titular languages in the public sphere. The narrow policy scope and relatively low-intensive policy input and outputs into the sociolinguistic situations makes it problematic to discern policy effects from the effects of social, economic and other factors. For example, how much were the closure of newspapers and the drop in their circulations due to economic competition and how much due to diminished support? It is hardly feasible to produce a projected trend line. The comparison of potential and actual outcomes is prevented by the fact that there are too many variables. Furthermore, the lack of consistent data presents a methodological problem. The task of conducting one's own surveys is unrealistic because of the scale required to trace trends for entire groups. Alternative sources are official statistics and surveys commissioned by regional agencies. Statistical data are typically available but are not especially useful because they do not allow for distinguishing effects of the social structure and policy effects under the conditions of insignificant input. It would be more relevant to collect semi-official survey data on language knowledge, language use

and language attitudes among the titular groups, but obtaining such data is also more problematic.

Thus, the next difficulty is the significantly limited accessibility of data under the current authoritarian regime. At the central level, the data concerning the monitoring of inter-ethnic relations were made secret after the creation of a new federal agency for nationalities affairs headed by a former secret service operative. At the regional level, the approach of executive agencies to report on policy outputs and outcomes in absolute numbers focusing on progress might be a deliberate choice in order to avoid publicity. For example, the recent reporting on the ongoing program on inter-ethnic relations in Udmurtia uses a sophisticated system of quantitative indicators that enable measuring the dynamics in the citizens' opinions about the state of inter-ethnic relations but only mentions the indicators in absolute numbers on books and their editions in Udmurt ("0" books published for the period, see Implementation Report 2014). Thus, official reports might deliberately conceal policy outcomes and prevent the use of post-program comparison. At the same time, one reason for a bias toward positive results in reporting on government-sponsored research is that the establishment of language revival programs had a primarily symbolic value. Even if the programs did not actually change the conditions of the target groups very much, their effect was to make the titular group feel that the government "cares" about their concerns (see Dye 2013: 75).

Further, not only authorities but also research institutes might provide biased information intended to misrepresent the situation for political reasons. A relevant ministry and a research institute might produce diverging data, because in the first, the supporters of the language revival project might prevail, while in the second, the proponents of Russian nation-building, who would be critical of the project, would be predominant. For example, the 2007 data of the Komi ministry of nationalities affairs on language use and attitudes are probably overestimated (Long-term Program 2009) but the 2004 data of the Institute of Language, Literature and History at the Komi Scientific Center of the Russian Academy of Sciences, seem to be underestimated (Opros 2004) when compared to similar data from the other republics. It must also be noted that in the background, there was a conflict about the compulsory teaching of Komi to all pupils (see Zamyatin 2013c). The research institutes are dependent on the academy and not only monitor the situation but also serve to implement the central policy of promoting the all-Russian identity in the regions.

Thus, the survey data should be taken with a degree of mistrust, not only because there might be problems in consistency of data, such as representativeness, but also because there could be a hidden agenda aiming to conceal the actual policy impact. Furthermore, consistency in the data does not guarantee its adequacy, because in addition to respondents possibly falsifying their preferences, domestic researchers may also be politically biased or employ self-censorship because inter-ethnic relations are perceived under an authoritarian regime to be a sensitive area. Finally, it is difficult to detect the evolution in indicators because they have rarely been consistently surveyed over time periods.

What makes the study of impact simpler is that the alternative policy in the given case would be a mere symbolic policy and the absence of the instrumental policy (see subsection 2.3.3 above; Zamyatin 2018a). The continued situation of the provision of a low-level supply of services in titular languages due to inertia since the Soviet times implied the actual promotion of Russian based on the *laissez-faire* principle. It is a less complex task to search for policy effects in a contrast between the absence and presence of certain measures. As the general trends of language shift and assimilation in the Finno-Ugric republics continued, any positive change as the policy outcome is to be attributed to policy outputs. Yet, some rare positive changes were characteristic mostly of the 1990s, notably in education. Since the early 2000s, policy outputs have diminished. Recently, it was explicitly acknowledged that the agenda was only to lower the "intensity of ethnic and linguistic assimilation processes" (see State Program of Udmurtia 2013, Zamyatin 2014c). How could one discern whether and to what extent the revivalist policy hindered assimilation?

No consistent data on the dynamics in outcomes was available for all five republics. Similar data across the periods was systematically available for Mari El and Karelia, and for the latter also a long-term analysis (see Klementiev 2013). For Udmurtia and Komi, only occasional data were available. For Mordovia, there is the problem of a lack of data. Nonetheless, the analysis of the available data for Mari El and Karelia arguably makes it possible to provide a representative account of the processes in all republics, because these are two liminary cases in terms of their sociolinguistic situations as well as policy inputs, outputs and outcomes. In Karelia, language shift exceeds the similar processes in the other republics, while in Mari El, the processes are the slowest. At the same time, the ethnic elite in Karelia was more active in initiating ethnic mobilization than in the other

republics (see Zamyatin 2013a). Accordingly, the two republics were more advanced than the other three republics in producing policy inputs and outputs, which can most visibly be seen in education, as discussed in the previous section.

4.2. Indicators for policy outcomes

In the framework of the policy-to-outcomes path, a change in language knowledge, language use and language attitudes would represent policy outcomes. However, general data provide only indirect evidence due to the complex causation of sociolinguistic processes. They are formed as the results, on the one hand, of activities directed at the creation of capacity, opportunity and desire to speak a language and, on the other hand, of effects of the social structure that lie outside the scope of policy, for example, intergenerational language transmission in families. Thus, I will in this section identify specific indicators for each activity in order to operationalize its effects for the purpose of evaluation.

Acquisition planning is the area in which effects are most accessible to operationalization, inter alia, because more has been done and more data is available. The policymakers in republics passed diverging measures pursuing the objective of increasing access to native language learning. Outcomes in education can be measured along such indicators as the number and percentage of language users at different levels of competence and in different age groups. The 2012 federal law on education allowed pupils to choose the native language and literature as an optional subject in the Unified State Exam, and the opportunity to take this exam was instituted in some republics (Zamyatin 2012a). Based on official data and some secondary sources, it will be possible in some years to qualitatively assess the level of language knowledge of pupils, inter alia, depending on the form of language learning. There are currently some individual studies, but assembling a systematic account across the republics remains a matter for further research.

Instead, this study assesses mostly the dynamics in the quantitative data about the language knowledge of pupils in general and school graduates in particular. Exploring language use, the study assesses language behaviour of pupils in various domains of daily life. The data on opinions about the need for reading and writing skills are also illustrative, because these are developed primarily in school. Exploring attitudes, the opinion

about the appropriateness of compulsory teaching of titular languages and the need to study languages is informative of the policy outcome. Another indicator could be public opinion on whether schools' capacity to maintain and develop languages had changed, especially among teachers, pupils and their parents (see Grin 2003).

Regarding the creation of new opportunities for language use, the policymakers formulated the objective very narrowly to expand the use of the titular language only in official contexts. Despite their institutionalization, the titular languages were not used as working languages of the authorities in practice. At the same time, the titular languages were used to some extent in communication with citizens and in public services. Outcomes in official contexts can be measured by such indicators as the number and percentage of oral and written communications in requests, the percentage of official forms available or the percentage of civil servants who actually obtained language knowledge when attending language courses. However, no surveys have been conducted in the republics on these topics. An indirect way to reveal the change is to measure attitudes on the range of domains where people considered it appropriate to use their language, but no surveys have been conducted in this area, either. Insight into the change is provided by the data on public opinion about the measures needed to achieve a state of official bilingualism.

The objective in mass media was to sustain the level of supply. As there were few commercial outlets and channels using titular languages, the outcomes are directly attributable to policies. Outcomes in mass media can be measured using such indicators as sales figures of books and circulation figures of newspapers and journals, as well as audiences of TV and radio broadcasting. Alternatively, these can be converted into units of time spent on the consumption of media products. Regarding language use, it would be informative to examine the data on the change in habits related to reading, watching TV and listening to the radio as well as using the internet. For the exploration of attitudes, opinions about the demand for mass media are a relevant indicator.

4.3. Sociolinguistic condition of the titular groups in post-Soviet times

In what follows, I will again assess the general development in the sociolinguistic conditions of the titular groups along the outlined indicators. The data from the population censuses demonstrate that during the two

post-Soviet decades, both the absolute numbers and, with some exceptions, the relative shares of the titular Finno-Ugric groups have continued to decrease gradually due to ever-accelerating language loss and ethnic assimilation. The data demonstrate that the shares of the titular groups among the total population remained relatively stable or continued to decrease in Udmurtia and Karelia from census to census, usually within a margin of 1% or, rarely, 2% (see Table 10 on the following page).

The last 1989 Soviet population census had a separate question on whether a person possessed knowledge of his or her native language, on the basis of his or her own personal assessment. The 2002 All-Russian population census asked no specific question on respondents' native language, only on their language knowledge. Therefore, no "official data" are available, only estimates. The 2010 All-Russian population census again asked the question on respondents' native language. At the same time, the share of those who did not answer the question about ethnicity and language increased in comparison to 2002. Furthermore, it is a Soviet legacy of formulating the census questions that people sometimes report the language of their ethnic identity as their native language without having high or even any competence in that language.

According to the census data, language loss was somewhat slower during the first post-Soviet decade in comparison to the last Soviet decades. In the 1989 census, 88.4% reported knowledge of the Mari language among those who declared themselves ethnic Mari in the titular republic, along with 74.4% of Komi, 88.5% of Mordvins, 75.7% of Udmurts and only 51.5% of Karelians. According to estimates based on the data of the 2002 census, 84.2% of ethnic Mari in their titular republic reported knowledge of their language. The corresponding figures for other Finno-Ugric groups were 72.1% for Komi, 84.6% for Mordvins, 71.8% for Udmurts and 48.4% for Karelians. During the second post-Soviet decade, language loss intensified. According to calculations in 2010, only 75.8% of Mari, 65.4% of Komi, 68% of Mordvins, 55.8% of Udmurts and 36.8% of Karelians in their titular republics reported knowledge of their language. Outside the republics, language loss was more intensive, also among the Tatars, which indirectly indicates that the republics' language policies have had an impact.

4.3.1. Language knowledge

However, the census data are not sensitive to the fact that many people have double Russian-titular identities and claim the knowledge of two

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia	Tatarstan
1. Total population of the republic (thousands)						
Census 1989	1,251	749	963	1,605	790	3,641
Census 2002	1,018	728	889	1,570	716	3,779
Census 2010	901	696	834	1,521	643	3,786
2. Titular group (thousands)						
Census 1989	291	324	313	496	79	1,756
Census 2002	256	312	283	460	65	2,019
Census 2010	202	290	333	410	45	2,012
3. Share of the titular group in the total population of the republic (%)						
Census 1989	23.3%	43.3%	32.5%	30.9%	10%	48.5%
Census 2002	25.2%	42.9%	31.9%	29.3%	9.2%	52.9%
Census 2010	23.7%	43.9%	40%	28%	7.4%	53.2%
4. Report knowledge of their titular native language in the republic (%)						
Census 1989	74.4%	88.4%	88.5%	75.7%	51.5%	96.6%
Census 2002	72.1%	84.2%	84.6%	71.8%	48.3%	94.2%
Census 2010	65.4%	75.8%	68%	55.8%	36.8%	92.4%
5. Report knowledge of their native language in Russia (%)						
Census 1989	71.0%	81.9%	69.0%	70.8%	48.6%	85.6%
Census 2010	59.6%	70.6%	64.7%	62.2%	26.8%	79.2%

Table 10: Dynamics in the absolute numbers and shares of the titular groups in relation to the total population of the Finno-Ugric Republics and their language retention rates (census data)

Sources: The data on native language knowledge in the republics for 2002 is from Finno-ugorskie narody (2008) and for 2010 from Program (2013), for Karelia from Klementiev (2013). The data on native language knowledge in Russia for 2010 is from *Naselenie Rossii* (2013)

native languages. The latter is possible because practically universal knowledge of Russian has been reached among titular groups, which also means that practically no titular monolinguals are left. Sociological surveys offer sight into the processes of language shift. For example, in Udmurtia there were 19.4% titular-language monolinguals in 1970, 8.1% in 1989 and 1.6% in 2002. The number of unassimilated bilinguals and assimilated bilinguals remained relatively stable and were, respectively, 68.3% and 3.8% in 1970,

67.6% and 4.5% in 1989, and 65% and 5.2% in 2002. At the same time, the number of assimilated monolinguals increased from 8.5% in 1970 to 19.8% in 1989, 28.2% in 2002 and 44% in 2010 (see Lallukka 1990: 200–207; Williams et al. 2008: 54; Vorontsov 2013).

In contrast, the officials in Mari El reported based on a 1999 survey that the share of the Mari who declared Mari as their native language had for the first time increased within the decade, from about 80% to 85.8% (Yanalov 2000). According to the available data from the sociological surveys, 79.5% of the Mari respondents reported Mari as their native language in 1985, 88.1% in 1994, 81.8% in 2001, 76.4% in 2011 and 79.2% in 2012 (the 1994 data hereafter for Meadow Mari, by far the largest Mari subgroup, Mezhnatsionalnye otnosheniia 1995, 2002, Sotsiologicheskie issledovaniia 2013). However, it must be noted that the jump in the 1994 figures for Mari as one's native language is also probably the result of a possible change in the survey methodology, when respondents were discouraged from indicating two native languages. Namely, the share of respondents who reported both Mari and Russian as their native languages was 13.8% in 1985, 0.6% in 1994, 11.1% in 2001, 15.4% in 2011 and 12.9% in 2012. The share of those Mari who reported Russian as their native language was 6.1% in 1985, 8.7% in 1994, 6.2% in 2001, 7.3% in 2011 and 7.8% in 2012 (see Kudriavtseva & Shabykov 2002, Shabykov et al. 2014b).

This fluctuation also demonstrates that the question on one's native language conveys information about linguistic identity and attitudes rather than language knowledge (for the data on different understanding of the concept of native language among the Mari, see, for example, Shabykov et al. 2014b). The question about language competence is more revealing. It seems that the high level of competence among the Mari also remained relatively stable. Among those Mari respondents in the republic who reported Mari as their native language, 78.3% could speak, read and write in the language in 1994, 75.4% in 2001, 78.3% in 2007, 79.7% in 2011 and 76.6% in 2012 (Mezhnatsionalnye otnosheniia 1995, 2002, Finno-ugorskie narody 2008, Sotsiologicheskie issledovaniia 2013, Shabykov & Kudriavtseva 2015). The level of competence among the titular groups in the other republics was lower. According to data from the survey conveyed in 2007, the level of competence in titular languages among those who reported the titular language as their first language further dramatically decreased when compared to the late Soviet period (see Table 2 on page 266, Table 11 on the following page).

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia
Speech, Reading, Writing	73.4	78.3	75.1	68.6	66
Speech, Reading	10.2	5.2	7.2	8.6	10.2
Speech	7.5	4.4	9.7	10.3	12.6
Understanding freely	3.9	7.6	3.6	5.1	3.4
Understanding the topic	4.5	3.1	4.1	5	6.8
Undecided	0.6	1.3	0.3	2.4	1

Table 11: Command of native languages by component in 2007 (%, adapted from Finno-ugorskie narody 2008: 256)

Thus, respondents' knowledge of Russian was much better than their knowledge of native language, so that more titular representatives were more fluent in Russian than in native language. This becomes even clearer if one includes in the data also those who reported a titular ethnic identity but indicated Russian as their (first) native language. For example, the data of the 2002 sociological survey in Karelia demonstrated that only 23.8% of Karelian respondents could speak, read and write, 29.7% could freely speak but not read or write, 17.5% understood the language and could make themselves understood, 18.4% knew some words and 10.6% did not know Karelian at all. By 2008, the share of those Karelian respondents who could speak, read and write had decreased to 19.9%. About a third of Komi, Udmurts and Mordvins reported the same. In contrast, still more than half of the Mari respondents reported a high level of command of their native language (Table 12).

Surveys consistently find a very low level of knowledge of the titular languages among ethnic Russians, which rarely falls within the margins of more than one to two percent and has not significantly changed over time. In practice, only a relatively small portion of Russian schoolchildren have learned the titular languages despite the introduction of their compulsory study. In contrast, virtually all Russian schoolchildren in Tatarstan learned Tatar. The republic's authorities reported an increase in the number of Russians with at least some knowledge of Tatar from 18% in 1989 to 44.1% in 2010, including an increase in fluency among Russian speakers

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia
Speech, Reading, Writing	35.9	55.6	37.6	37.2	19.9
Speech, Reading	9.9	6.3	7.7	6.3	13.6
Speech	8.7	5.7	9.7	13.4	13.6
Understanding freely	4.2	6.8	6.6	7.4	8.7
Understanding the topic	6.3	5	6.4	12.5	20.9
Undecided	0	1.8	0.6	2.4	0

Table 12: Command of titular languages by titular groups by component in 2007 (%, adapted from Finno-ugorskie narody 2008: 256)

from 1.1% in 1989 to 12% in 2010. At the same time, no noticeable changes have been traced in their actual communicative behaviour (State Program of Tatarstan 2013).

The data on the language competence of pupils is illustrative of some progress. The 2002 data on the Karelian pupils in the titular republic demonstrated that in comparison with the data of the 1996 survey, the share of pupils with a good knowledge of the language somewhat increased and the share of schoolchildren with a satisfactory knowledge significantly increased. In the pupils' own assessment, the shares of those pupils who assessed their knowledge of Karelian proper as good grew from 4.2% in 1996 to 5% in 2002 and those who considered it satisfactory from 62.5% to 75%, while those who assessed their knowledge as unsatisfactory decreased from 29.2% to 15%. Among the pupils speaking Olonets Karelian, the shares of those who assessed their knowledge as good grew from none in 1996 to 3.6% in 2000 and as satisfactory from 76.5% to 92.9%, while those assessing it as unsatisfactory decreased from 23.5% to 3.6%. Despite the positive dynamics, the relatively low level of knowledge complicated its actual use (Klementiev 2013: 154–158). In 2007, 32% of those Karelian pupils who studied the language reported that they could speak, read and write, 42% understood the language but did not speak and 25% knew only some words (Predvaritelnye itogi 2007).

The 2000 data on Mari pupils demonstrated that only 53.1% of those graduating from the 9th and 11th grade could speak, read and write in the Mari language. Among students obtaining primary and secondary vocational education, the shares were, respectively, 37.3% and 38.8%, and among students obtaining higher education degrees, the figure was 53% (see Kudriavtseva & Shabykov 2002). In 2011, the share of those who could speak, read and write in the Mari language and had incomplete secondary education was 42.4% (Sotsiologicheskie issledovaniia 2013). Therefore, the Mari youth cohorts also had a lower competence in their native language than the older generations, and that level continued to decline, the primary reason for this being the fact that Russian was used as the language of instruction.

4.3.2. Language use

A striking trend is the reversal in the patterns of bilingualism across domains when compared to the patterns during Soviet times (see Table 2 on page 266). Recently, Russian was much more often used not only at work and with friends but also at home. For example, 48.1% of Tatar respondents in the titular republic in 1994 used their native language at home, 14.1% at work and 12.6% for reading newspapers; 29.6% used two languages at home, 37.5% at work and 44.8% for reading newspapers, while the rest used Russian (Musina 2004). In the same year, 47% of Udmurts used their native language at home, 15.7% in their studies and 31.1% at work (see Guboglo & Smirnova 2001: 395). In 2000, 29% used their language at work (see Etnosotsiologicheskoe issledovanie 2000). In 2003, 42.3% used their native language at home, 36.7% with friends and 23.5% at work (see Natsionalnye otnosheniia 2003). In 2007, the share of the Udmurt respondents who used their language at home was 12%, with friends 8.4% and at work 3.9%. In general, less than half respondents across the republics used their native language even at home (see Table 13).

Further, the 1997 cross-regional survey showed that 46.2% of Udmurt and 18% of Karelian respondents read fiction by authors from the titular nationality in their languages (Hudaverdian 1998). The 2007 survey in Mordovia showed that 17.8% of Mordovian respondents read fiction by titular authors in their languages and 36.6% in the titular and Russian languages. A total of 33.5% regularly, 52% rarely and 14.5% never watched TV and listened to the radio, while 32.5% regularly, 52% rarely and 13.5% never

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia
Native language					
At home	21.9	51.4	24.3	12	10.7
With friends	14.1	30	13.8	8.4	7.3
At work	9.9	20.4	5.8	3.9	4.9
Russian and native language equally					
At home	10.2	13.6	12.7	18.2	10.7
With friends	13.2	28.2	20.2	18.4	9.2
At work	9.9	21.4	13.3	10.8	8.3
Russian					
At home	62.9	29.8	61.6	69.5	78.2
With friends	68.9	36.8	65.2	73.1	83.5
At work	72.2	53.3	78.7	82	85.4

Table 13: Use of native languages and Russian by the titular groups in their republics in various domains of daily life in 2007 (%, adapted from Finno-ugorskie narody 2008: 172–173)

read periodicals in the titular languages (Natsionalnye fondy 2007). In 2000, 17% of the Udmurt respondents read periodicals mostly in their language, 45% mostly watched regional programs in that language on TV and 49% mostly listened to regional programs in radio broadcasting in their language (Etnosotsiologicheskoe issledovanie 2000). In 2003, 22.6% of the Udmurt respondents reported that they (regularly) read periodicals, 26.2% watched TV and 29.6% listened to radio broadcasting in the language (Natsionalnye otnosheniia 2003). In 2003, 40.8% of the Komi respondents regularly and 39.6% irregularly watched TV and listened to radio broadcasting in the language, while in 2006 only 29.1% did so regularly and 54.9% irregularly (Finno-ugorskie narody 2008: 167). Thus, the dynamics reveal the diminishing of the audience. By 2007, similar patterns were characteristic also for the other titular groups (see Table 14 on the following page).

In both cases, the Mari reported using their language more than others. In 1994, 49% of the Mari respondents regularly, 31.5% irregularly, 16.3% rarely and only 3.2% never watched TV; 43.8% regularly, 33.3% irregularly, 15.3% rarely and 7.6% never listened to radio broadcasting in the native language. In 2001, 34.5% regularly, 32.8% irregularly and 21.4% rarely watched TV; 29.2% regularly, 32.4% irregularly and 16.4% rarely listened to radio

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia
Reading of periodical publications					
Read regularly	15.3	24	5.8	12	13.6
Read occasionally	20.7	34.7	17.4	23	26.7
Do not read	40.4	25.6	58.3	59.5	56.3
Do not have the opportunity	4.8	2.3	5.5	2.7	2.4
Undecided	0	0.8	0	2.7	1
Watching/listening to TV and radio broadcasting					
Watch/listen regularly	29.6	33.4	14.4	29.2	19.4
Watch/listen occasionally	37.1	38.9	39	38.3	49
Do not watch/listen	11.7	27.3	31.5	27.3	28.2
Do not have the opportunity	2.4	3.6	2.2	3.6	3.4
Undecided	0.3	1.7	0	1.7	0

Table 14: The reading of periodical publications and watching/listening to TV and radio broadcasting in the titular languages in 2007 (%, adapted from Finno-ugorskie narody 2008: 256)

broadcasting (Mezhnatsionalnye otnosheniia 1995, 2002). In 2006, 33.4% regularly and 38.9% occasionally watched and listened to the Mari-language TV and radio broadcasting, while now 27.3% did not watch or listen at all. The Mari respondents also reported that they use their native language at home, regularly or occasionally read newspapers in that language in slightly more than half of cases. However, a closer look at the dynamics of language use in family life in Mari El over the course of a decade reveals that speakers used the language mostly with their parents (see Table 15).

If one follows the dynamics of communications with the next generation, 65.6% of Mari spoke their native language with their children in 1973. In 1985, 43.4% of Mari spoke their native language with their school-aged children. By 1994, the respective share of school-aged Mari children had decreased to 23.3%. In 2001, the data showed some increase in native language use up to 34.6%. In 2011, 15.7% still spoke Mari to their school-aged children, which means that there was a significant decrease, although

	With One's Parents	With One's Spouse	With One's Children	of School Age	of Preschool Age
1994: Russian	11	14.9	n/a	14	13.8
1994: both	19.3	18.6	n/a	20.7	20
1994: Mari	62.7	45.9	n/a	23.3	25.6
2001: Russian	13	19.4	n/a	21.8	18.8
2001: both	10.1	15.2	n/a	13.1	6.9
2001: Mari	70.4	64.2	n/a	34.6	34
2011: Russian	15.7	21.5	n/a	20.7	22.9
2011: both	6.5	6.1	n/a	11.5	7.5
2011: Mari	68.9	41.4	n/a	15.7	17.3

Table 15: Language used in communication by adult Mari with members of their family in 1994, 2001 and 2011 (%, adapted from Mezhnatsionalnye otnosheniia 1995, 2002, Sotsiologicheskie issledovaniia 2013)

not so steep, if one takes into account that about half of respondents did not answer the question. Continued migration of Mari to urban areas still played the most important role in interrupting intergenerational language transmission: in 2001, 73.3% of Mari in Yoshkar-Ola spoke with their children in Russian, 8.3% in Mari and 15% in both languages, while in the villages 9.2% of Mari spoke with their children in Russian, 73.2% in Mari and 16.9% in both languages. In 2002, 60% of ethnic Mari in the republic were rural dwellers. Thus, intergenerational language transmission was interrupted in a significant portion of families.

Again, the trends are best illustrated by the data on young people. In Karelia in the 1990s, the use of Russian among Karelian pupils in various domains of daily life decreased by roughly half and the use of the native language at home and in school increased by a fifth. The shares of those who used only Russian in school decreased from 71% in 1996 to 33% in

2002, those who used only Russian at home from 45% to 24.4% and those who used only Russian in other contexts from 57% to 25.7%. The shares of those who used mostly Russian in school increased from 28% to 39.7%, decreased at home from 47% to 38.5% and decreased in other contexts from 43% to 33.3%. The shares of those who started to use native Karelian more often in school increased from 1% to 20.5% and at home from 8% to 20.5%. A total of 14.1% used Karelian more in other contexts in 2002. The shares of those who used mostly Karelian were 6.4% in school, 16.7% at home and 2.6% in other contexts in 2002. Thus, despite some positive shifts, Russian continued to be the most used language (Klementiev 2013: 135–145). A 2007 survey demonstrated that in the following years, the trends reversed and Karelian continued to rapidly lose its ground also in the family, which virtually lost its function as the vehicle for intergenerational transmission of the language (Predvaritelnye itogi 2007).

4.3.3. Language attitudes concerning compulsory study, knowledge and official use

The study of the evolution in public attitudes towards languages provides a shortcut to understanding the change in the sociolinguistic situation. What did the public think about the compulsoriness of the titular languages? Some sociological research studies have explored popular opinion on linguistic issues in the public sphere in Russia's republics. For example, Dmitry Gorenburg (2003: 157–158) measured public support for cultural nationalism among the titular groups of ethnic republics by examining their language attitudes based on the data of the 1993 Western surveys (Colton and Laitin) and a 1994 Russian survey (Institute of Social-Political Research of the Russian Academy of Sciences) (see Table 16).

In Russia's ethnic republics, support appeared to be the lowest among the titular groups of the Finno-Ugric republics, as witnessed by the following data. According to the 1993 data used by Gorenburg, the single titular state language was supported by 13% among Karelians, up to 18% among Udmurts, 23% among Mari, and 26% among both Komi and Mordvins. Compulsory knowledge of the titular languages by all inhabitants was supported by 31% of Mari and Mordvins, 34% of Komi and Karelians, and 36% of Udmurts. Support for compulsory study of the titular state languages in all schools was expressed by 36% of Udmurts, 37% of Mordvins, 42% of Mari, 43% of Komi and 52% of Karelians.

Republic	Komi	Mari El	Mordovia	Udmurtia	Karelia	Tatarstan	Average for all of Russia's republics
Should the titular language be the sole official language in ethnic republics?							
Completely or partially agree	26	23	26	18	13	29	41
Completely or partially disagree	60	62	59	70	72	59	48
Should all inhabitants of an ethnic republic know the titular language of that republic?							
Agree	34	31	31	36	34	44	49
Disagree	52	50	55	47	53	32	16
Should titular-language study be compulsory in all schools in ethnic republics?							
Completely agree	43	42	37	36	52	66	65
Only if majority in region	22	17	24	30	17	10	17
Completely disagree	24	30	28	24	24	10	12

Table 16: Attitudes of titular groups to the official status of titular languages and their compulsoriness in 1993–1994 (%, adapted from Gorenburg 2003: 235–240)

Note: the rest gave no opinion.

In the early 1990s, sociological surveys in republics presented a somewhat different picture. The 1994 sociological survey in Tatarstan showed that 64.3% of Tatars and 58.3% of Russians supported the designation of two state languages of Tatarstan, 21.2% of Tatars and 2.9% of Russians supported Tatar as the single state language, and 87.1% of Tatars and 71% of Russians agreed that government employees should command both languages (Iskhakova 2002). The 1994 survey in Mari El found that 31.7% of Mari and 2.2% of Russians supported the single titular state language, while 56.6% of Mari and 41.5% of Russians supported two state languages and 6.8% of Mari and 50.7% of Russians only Russian. A total of 35.4% of Mari and

10.2% of Russians agreed with the need for compulsory knowledge of the titular state language by all inhabitants, while 31.1% of Mari and 58.1% of Russians disagreed. Altogether 25.3% of Mari and 24.6% of Russians agreed with such a need only for leading officials and workers in certain professions. A total of 59.2% of Mari and 21.8% of Russian respondents agreed that the study of titular state language should be compulsory in all schools of the republic, while 25.1% of Mari and 61.9% of Russians disagreed (Mezhnatsionalnye otnosheniia 1995).

The 1994 sociological survey in Udmurtia revealed a similar picture: 64.6% of Udmurts and 46.4% of Russians supported two state languages (Shkliaev 1998: 163). In a survey carried out in Komi in 1996, 22.5% of Komi pupils agreed and 36.6% somewhat agreed with the compulsory study of the titular state languages by all pupils, while a quarter disagreed. Among the Russian pupils, 6.7% agreed and 17% somewhat agreed (Opros 1996, Mironova 2012). In Mordovia in 1991, only 6.7% of Mordvins agreed that Erzia and Moksha should be the only state languages of the republic while 57.1% disagreed. The same survey found that 17.9% of Mordvins agreed with their compulsory study while 49% disagreed, and 17.2% agreed with their compulsory knowledge and 71.8% disagreed (Shilov 2002).

By the early 2000s, the attitudes had somewhat changed. In 2001, 35.9% of Mari and 6.3% of Russians agreed with the need for compulsory knowledge of the titular languages by all inhabitants, while 18.4% of Mari and 60.8% of Russians disagreed. Further, 37.1% of Mari and 24.8% of Russians agreed with such need only for leading officials and workers in certain professions. A total of 62.1% of Mari and 19.4% of local Russians were for compulsory teaching of the titular state language to all pupils, while 23.7% of Mari and 65.7% of Russians disagreed (Mezhnatsionalnye otnosheniia 2002: 110; Sharov 2002, 2008).

In 2004, 35.8% of Komi and 13.3% of local Russian respondents were for compulsory teaching of their titular state languages to all pupils, while 48.4% and 59.8% were for free choice, according to the data of the research institute (Opros 2004, Mironova 2012). According to data from the 2007 survey commissioned by the ministry of nationalities affairs, 58% of Komi and 26.6% of Russians were for compulsory teaching (Long-term Program 2009). In 2002, 31% of Udmurt respondents completely and 28.8% partially agreed with compulsory teaching, while only 3.4% of local Russians completely and 14.1% partially agreed (Smirnova 2002: 505). According to a 2003 survey, 46.7% of Udmurts and 16.1% of Russians were for compulsory teaching of Udmurt to all pupils (Natsionalnye otnosheniia 2003).

According to the 2002 survey carried out in Karelia, 12.5% of Karelian respondents agreed with the need to designate Karelian as a state language of the republic and believed it should be done because the language would be able to perform such a function. A total of 17.4% believed it should be done even if the language would not be able to perform the function. In addition, 21.8% believed it should be done in the future. Altogether 21.5% were against the official designation of the language. When asked whether Karelian should be taught in school, 74% agreed and 13% disagreed (Klementiev 2013: 143–144).

In 2012, 93.6% of Tatars and 69.1% of Russians in Tatarstan agreed with the need for compulsory knowledge of both state languages by government employees, while 91.4% of Tatars and 63.2% of Russians felt it should be compulsory among service-sector workers in the same period (State Program of Tatarstan 2013). In contrast, 54.2% of Mari and 16.9% of Russians agreed in 2012 with the need for compulsory knowledge of the titular languages by all inhabitants. A total of 23% of Mari and 29.5% of Russians agreed with such need only for leading officials and workers in certain professions, while 11.2% of Mari and 33.9% of Russians disagreed. The same survey found that 53.6% of Mari and 20.9% among local Russians thought that compulsory teaching of Mari as a state language in all education institutions was the way to increase the prestige of the language (Shabykov & Kudriavtseva 2015).

When asked about their opinion on measures needed in order to achieve a state of official bilingualism and to raise the prestige of the titular languages, more Udmurt respondents were for the introduction of Udmurt in public places than for its compulsory official use: in 2003, 90.7% were for the opening of free language courses, 80.7% for the renewal of Udmurt lessons on TV and radio, 75.3% for the translation of official names of legal entities into two languages, 64.1% for bilingual signposts, 60.2% for the establishment of a list of professions with the requirement of compulsory knowledge of two languages and 46.7% for the introduction of Udmurt as a compulsory subject for all secondary school pupils.

Similarly, the Mari respondents in 2012 thought that the following actions were needed: 60% were for the creation of a satellite TV channel Mariiskii Mir, 58.2% for the popularization of the Mari culture on the Russian central TV channels and 53.6% for compulsory teaching of Mari as a state language in all educational institutions. Further, 35.3% were for the production of movies, documentaries and cartoons in the Mari language,

24.5% for announcements in two languages in public places, 21.2% for the use of advertisements in Mari, 20.7% for the creation of a Mari-language online TV channel and 16.5% for the introduction of financial bonuses to those public officials who learn the language. The support of the local Russians for these actions was on average half of these levels (respectively, 31.1%, 28.1%, 20.9%, 17.3%, 13.3%, 10.6% and 8.2%), with the exception of the last measure, as even more Russian respondents than Mari, or 17.1%, were in favour of the bonuses (Shabykov & Kudriavtseva 2015).

Among youth who were studying (ages 18–23), the following reasons were given for the limited scope of official bilingualism: 71.4% of Mari and 58.6% of Russians thought it was due to a lack of knowledge of two languages by all inhabitants of the republic. Further, 53.6% of Mari and 20.7% of Russians saw it as the result of a lack of respect towards the Mari language (while 3.6% of Mari and 6.3% of Russians saw a lack of respect for Russian), 25% and 51.7%, respectively, due to a lack of desire to study the language, 25% and 10.3% because was not a working language of public authorities, 21.4% and 17.2% because of a lack of contemporary textbooks, 14.3% and 17.3% because there were not enough opportunities to study in Mari, 7.1% and 10.3% because Mari is not a language of management of public affairs and the same amount because of a lack of financial resources.

Among Mari youth who were studying, 57.1% saw a solution in bilingualism of mass media, 40% believed official events had to begin with greetings in two languages, 32.1% were for compulsory teaching of Mari in all educational institutions, 21.4% for compulsory language courses for public officials and 7.1% for official management of public affairs in two languages. Support for these measures among the Russian youth was on average one third lower (respectively, 41.4%, 24.9%, 17.2% and 13.8%), except for the last measure, which was supported by 17.2% (Shabykov et al. 2014a).

4.3.4. Language attitudes and incentives for free choice

Given the prevailing negative attitudes to the compulsoriness of titular language use, it is relevant to study attitudes to voluntary language use in wider social contexts. The indicators that are informative of people's willingness to use languages include beliefs about the future prospects of the language and its role as a marker of identity, public value attached to the language and the desire of parents for their children to know their language. In addition, the data on opinions about the adequacy of policy

measures in general and of school performance in particular directly shed light on the policy impact. When asked for their opinion about the future of the languages in the 2007 cross-regional survey, slightly more than half among the Mari and Karelian respondents and about two thirds of respondents in the other republics thought that the languages would remain at the current level, while a noticeable portion thought that the languages would gradually disappear (Finno-ugorskie narody 2008: 191–192).

The perception of language as the main marker of ethnic identity in Tatarstan increased from 54.1% among the Tatars and 56.8% among the Russians in 1989 to, respectively, 71.8% and 66.6% in 2000, and to 79% and 72.5% in 2010. In Mari El, the respective numbers also increased in the 1990s but decreased in the 2000s from 79.3% among the Mari and 72% among the Russians in 2001 to, respectively, 75% and 65.7% in 2010. Scholars found a correlation between the perception of the language as an ethnic value that defines one's attachment to the group and levels of language competence (Shabykov et al. 2014b).

The opinions of the Mari on the public value of their language, that is, its (in)appreciation in the wider society, were divided almost equally between those who saw a high or relatively high value, on one hand, and those who perceived a low or not high enough value, on the other hand. In the other four republics, the prevailing opinion was that the titular languages had a low or not a high enough public value. For example, among the Komi respondents in 2003, 9.9% thought that the language had a high value and 23.4% a sufficiently high value. Among the ethnic Russian respondents in Komi, the respective shares were only 3.4% and 13.8%. By 2007, only 5.9% of the Komi respondents thought that the language had a high value and 18% a sufficiently high value (Finno-ugorskie narody 2008: 178–182).

In 1994, 87.2% of the Mari respondents believed that their children needed to know their native language and only 1.2% disagreed; in 2001, 87% of the Mari respondents still thought so, while 7.8% disagreed (Mezhnatsionalnye otnosheniia 1995, 2002). In 2007, 79.4% of the Mari respondents agreed with the statement, including 48.6% of those who also thought it was desirable for children to read and write in the language, 23.5% who thought it was desirable to speak and understand and 7.3% who thought it was enough to understand speech, while 6.8% said there was no need. In 2011, 86.8% of the Mari respondents agreed, 2.5% disagreed and 9% were indifferent (Sotsiologicheskie issledovaniia 2013). In the other republics, the respective shares in 2007 were somewhat lower, with 16% of Udmurts

and 12.1% of Mordvins feeling there was no need for their children to learn the languages (Finno-ugorskie narody 2008: 175–176).

The respondents in different republics held diverging opinions on policy effects. A total of 53.1% of the Mordvin respondents likely or definitely thought that the state undertook sufficient measures for the development of languages. In contrast, 58.7% of Komi and 41.5% of Udmurts likely or definitely thought the state did not undertake sufficient measures. The opinions of the Mari were again divided nearly equally. No data on Karelians were provided (Finno-ugorskie narody 2008: 189–192).

Another issue that comes close to revealing policy effects is the data on public opinion about the role of school performance in maintaining and developing the languages. Here, again, opinions in the different republics diverged. About a third of respondents in Karelia and Mordovia (36.9% and 32.9%, respectively) and slightly less than a third but still the plurality in Udmurtia (29%) thought that the school's capacity to develop the languages had definitely increased in the last years. In Komi and Mari El, the plurality of about a quarter (respectively, 22.2% and 25.6%) thought that the capacity had not changed. In Mari El, a somewhat larger share of respondents thought that the capacity of school had definitely increased (19.3%) than that it had definitely decreased (13.6%). In Komi, these shares were spread more or less equally (Finno-ugorskie narody 2008: 184–188).

In general, a correlation was found between the level of language competence of the respondents and the desire of parents for their children to learn the language. This brings us back to the focus on schoolchildren. In the 1990s, language attitudes among pupils in Karelia displayed some positive changes. The share of Karelian pupils who were still "ashamed of speaking their native language" decreased from 42% in 1996 to 19.2% in 2002, while the share of those who felt less shame increased from 57.1% to 70.5%. The opinion of native language teachers about school performance concerning teaching native languages in the 1990s changed in such a way that the share of those teachers who believed nothing had to be changed because enough was done decreased from 15% in 1996 to 7.7% in 2002, the share of those who wanted school to increase the number of teaching hours decreased form 69% to 67.9%, the share of those who wanted school to start teaching several subjects in Karelian increased from 10% to 15.4% and the share of those who wanted school to start teaching most subjects in primary school in Karelian increased from 3% to 9%. However, almost two thirds of teachers pointed to the low preparedness of the school to start teaching

several subjects in the language. Therefore, the measures taken for school development were assessed as insufficient (Klementiev 2013: 135–145).

After the start of the 2007 education reform, Russian scholars conducted some cross-regional sociological surveys in order to determine the demand for "ethnocultural education", exploring language attitudes of pupils, their parents and experts, including school teachers and administrators (see Etnokulturnoe obrazovanie 2010, Mezhetnicheskie otnosheniia 2016). The 2015 survey did not distinguish the ethnicity of respondents, it only gives the data on general attitudes, which thus is not comparable. The survey has found low motivation of pupils and their parents for learning native language. School teachers noted the decrease in the demand for language learning. About half of experts think the main reason of the pupils' attitude was the need to prepare for the state final examination.

In this section, I systematized the available sociological and sociolinguistic data. The census questions were not consistent and there is no reliable survey data, but it is sufficiently sizeable to draw some conclusions about the processes on the ground. The data showed that the language loss continued throughout the post-Soviet period. The intensity of language loss slowed down somewhat during the 1990s has been accelerating markedly accelerated since the 2000s. The rates of language retention will continue to decline, inter alia, because the share of people with a lack of language knowledge tends to be higher among the younger age cohorts in the age pyramid for all titular groups. Was there any detectable policy impact in this slowdown, as compared to trends triggered by general social factors? The following sections will address this question.

5. Policy impact

5.1. Evaluation of policy impact

One might argue that the slowdown in assimilationist tendencies in the 1990s and intensified language loss in the 2000s is to be partly attributed first to the increased provision in policy inputs and outputs and then to their contraction. However, this claim is difficult to verify without taking into consideration the further complexity in the link between the social structure and policy effects.

Impact evaluation is a complex task, because a number of historical and structural variables make it difficult to attribute outcomes to outputs in time

and space. From a historical perspective, the policy impact on the sociolinguistic situation is protracted in time in terms of policy inputs and outputs, which rarely have immediate effects and rather extend over generations. My hypothesis, which has yet to be proved by a historical study, is that the impact of both the early Soviet nationalities policy of affirmative action and the late Soviet *de facto* policy of Russification was remarkable also because it emerged in conjunction with major societal changes that transformed the underlying social structure. The post-Soviet policies were not accompanied by major changes comparable to those in the Soviet times, at least not in their ethnic dimension. By historical standards, the policies were pursued too briefly and were too narrow in scope (see Zamyatin, forthcoming).

In Tatarstan, policy outputs largely met the objectives of expansion in the public sphere, according to the evidence provided. However, it was a case of too little, too late: even this was not enough to incur the desired outcomes in official contexts in Tatarstan, as not enough was done to overcome the existing trends embedded in contexts sustained by social, political and economic factors. Political and economic factors constrained policy implementation both at the central and regional levels. Most importantly, the social structure of the vertical ethnic and social stratification sustained the continued trends in assimilation and language shift and, thus, decisively influenced policy outcomes. The Finno-Ugric republics were the only ones among Russia's republics where the shares of the titular groups tended to systematically decrease, and shares of ethnic Russians increase, throughout the post-Soviet period. However, similar processes are ongoing also in Tatarstan, where the knowledge and use of Tatar continue to decrease (State Program of Tatarstan 2013).

From a structural perspective, it is the impact of the Soviet language policy is easier to distinguish. The USSR was nominally a federation but in reality functioned as a unitary state. The Kremlin took into account the situation in republics and the position of their leadership but pursued its policy through a hierarchical structure. Accordingly, one could see how the major policy shifts were reflected in policy outputs. Notably, the late Soviet strategy of building a single Soviet identity included measures for the promotion of Russian. This shift had uneven effects across republics and was detrimental to the position of non-Russian languages, above all, within the RSFSR. Diminished input resulted in an incremental decline in the provision of education and mass media in the titular Finno-Ugric languages. The changed atmosphere and lesser provision led to a decrease in language knowledge

and use and an increase in negative attitudes towards them. Arguably, it was largely the postponed impact of the 1960s Soviet nationalities policy that drove the continued, extensive shift from the titular languages to Russian also into the post-Soviet period (Finno-ugorskie narody 2008: 188).

In contrast, the Russian state in the 1990s functioned as a federation in which the federal center and the regions pursued diverging interests. In this situation, one could speak not about levels of policy but rather about different policies pursued by the federal center and the republics. Policy outcomes depended on the balance of power between central and regional actors. The post-Soviet policy was different from the early Soviet policy of the 1930s in that the Kremlin did not support the republics' revivalist projects in the 1990s, seeing them as a threat to state integrity. The Kremlin did not initially interfere with the regional language policies, but the intensity of the constraints from the centre grew over time. In the 2000s, it initiated as part of "bringing regional legislations into line with federal legislation" a wave of amendments to the republics' language and education laws passed in 2000–2001 and 2010–2011 that significantly narrowed the policy scope (see Zamyatin 2013c).

Finally, the Kremlin forced republics to put their "national revival" projects, that is, nation-building agendas on hold, when Russian nation-building officially became the strategic goal in late 2012 and assimilationist policy components were strengthened (see Zamyatin 2016a). Thus, in the early 2010s, the language policies in many republics, including the Finno-Ugric ones, were *de facto* terminated because no separate executive programs were approved, and the statutes of field-specific ministries were changed. There are some exceptions, however: for example, the program on ethnic relations in Udmurtia contains a subprogram entitled "Maintenance and Development of the Languages of the Peoples of the Udmurt Republic" (Zamyatin 2014c, see State Program of Udmurtia 2013). In 2017, the Kremlin insisted on the abolishment of the compulsory teaching of Tatar and other non-Russian languages in republics. The authorities portrayed the teaching of these languages to be at the expense of Russian. The actual target of the measure were those numerous non-Russians who still maintain their ethnic identities but declare Russian as their native language (see Zamyatin 2018a).

Under the general framework of federal legislation, differences between regions still mattered. It was the level of autonomy achieved by such republics as Tatarstan or Bashkortostan that allowed them to pursue assertive

language policies even after the 2000s. Moreover, it was arguably a relatively high level of popular support for nationalism in the republics like Tatarstan or Sakha also after the 2010s that sustained the scale of cultural activism. In fact, cultural activism under the authoritarian regime is a byword for cultural nationalism. Grassroots activism continued to play the key role in language revival, for example, in school-based language revitalization in Yakutsk (see Chevalier 2017). The control of the republics' policymakers over the decision-making on language issues vis-à-vis the Kremlin and the predominance of ethnic elites among the regional elites ensured the provision of adequate inputs and outputs.

The Finno-Ugric republics did not enjoy such autonomy and largely lacked the control, inter alia, because the titular groups there were in minority situations, represented the lower social strata and expressed a low level of support for nationalism. The unfavourable social structure prevented ethnic elites from taking control over the republics. Only in Mari El did a short-lived wave of mass ethnic mobilization in 1992–1993 enable the policymakers to pursue an assertive policy, which also had greater impact in comparison to the other republics. The lack of control incurred a gap between policy adoption and its implementation, inter alia, because bureaucracy impeded the implementation (see Zamyatin 2014c). Due to the absence or gradual erosion of political will to implement revivalist projects, policies remained much more symbolic than material. Thus, the social structure characterized by the vertical ethnic and social stratification predetermined a narrow scope of policies and their unsatisfying outcomes.

It is possible to link outputs and outcomes by the chronological assumption that, if there were some positive changes, they are probably linked to policy measures, even if "after" does not necessarily mean "because". Official surveys were typically not conducted at regular intervals, with some exceptions. Nonetheless, these exceptions contain some pieces of data in individual republics that provide insight into the link between outputs and outcomes. Further, in the same way as the patterns on policy inputs in the republics tended to correlate with those of outputs, patterns in outputs seemed to correlate with those of outcomes. The data on policy impact are patchy, and it is virtually impossible to substantiate the link between outputs and outcomes beyond a mere correlation. As the patterns across republics were comparable, one can induce from individual cases and argue by analogy about the republics for which there is no respective

data available that there were similar changes attributable to policy impact, which is again only a probabilistic argument.

5.2. Policy impact in the Finno-Ugric republics and its limits

The process of language loss has continued, judging already from the census data on language retention rates. The decrease in language knowledge was characteristic of most groups. In this context, the jump in the share of those Mari who reported Mari as their native language during the 1990s is a bit surprising and should be interpreted as a reidentification of what one's native language is rather than an actual increase in knowledge thereof. The relatively stable share of individuals maintaining their linguistic identity throughout the period might in itself have been a policy effect. Similarly, another effect might have been the relatively stable share of individuals with a high language competence, when, throughout the period, more than three quarters of the Mari respondents reported Mari as their native language and stated that they could speak, read and write. However, the role of social factors remained decisive. The measures taken as part of Karelia's language acquisition policy were also extensive, but, in contrast to Mari El, among the Karelian respondents, the share of those who reported a high command of the language decreased by almost a fifth over just a few years in the 2000s.

It seems that policy pursued towards specific target groups has a higher impact than on the target populations in general. A clear pattern of progress is distinguishable in the level of language knowledge among pupils, which could be seen, for example, in the diachronic data on Karelian pupils from the 1990s and early 2000s. Furthermore, the data on the pupils is much closer to reality in terms of policy effects. For example, only about half of Mari school graduates reported a high command of the language in 2000, and their share decreased to less than half a decade later. The decrease in the level of language competence could have been anticipated based on the level of policy outputs, as only half of pupils in Mari El and less than a half in the other republics were provided with the opportunity to learn their native languages. The low competence in reading and writing is primarily an outcome of the failure to provide native language teaching.

The data on language use demonstrated that, throughout the period, the titular languages were on the retreat at work and at home. At the same time, there is a stable demand for mass media in the titular languages.

However, the demand for news in the titular languages under the conditions of bilingualism of the target audience also remains narrow. Yet, if restricted, there was a demand for thematic programs. TV and radio broadcasting are more popular. However, the expert estimations based on survey data showed that the existing editions of printed matters do not satisfy the demand (see Finno-ugorskie narody 2008: 207). In the specific context of school, the data on the use of Karelian among Karelian pupils in the 1990s demonstrated some positive dynamics, although the trends reversed in the 2000s.

I have found no data on language use in official contexts. Further, there is only occasional data available on the attitudes towards the use of titular languages in official contexts and typically no systematic data on changes in them. For example, some positive changes in popular attitudes could be detected in Udmurtia between 2000 and 2003 regarding the installation of bilingual signposts and the introduction of language requirements for some professions, although still less than half among the local Russian respondents supported the latter measure (see Etnosotsiologicheskoe issledovanie 2000, Natsionalnye otnosheniia 2003, Vorontsov 2004). The latter is an example of a general majority attitude against the compulsoriness of titular languages.

It was an unintended policy effect that that the predisposition of the Russian-speaking majority against compulsory knowledge, study and official use has hardened over time, as revealed, for example, by the data on attitudes in Mari El. At the same time, it seems to be a policy effect that the support of the titular group for compulsoriness has increased. The data on attitudes are not completely compatible, but one can find certain trends in the indicators. The data on public opinion about the need of the designation of state languages are available only until the mid-1990s. Later, the question lost its centrality and ceased to be asked in surveys.

Support for the compulsory study of the titular state language in all schools between 1994 and 2001 increased among the Mari respondents by 2.9% but decreased among local Russians by 2.4%. The plurality of the Mari respondents (slightly more than a third) supported the need for compulsory knowledge of the titular languages by all inhabitants. Between 1994 and 2001, the share insignificantly increased by 0.4% among the Mari and decreased by 3.9% among local Russians. At the same time, the share of those Mari who agreed with the need for compulsory knowledge of the titular languages for leading officials and workers in certain professions

increased by 11.8% and the share of those who disagreed with this decreased by 12.7% (Kudriavtseva & Shabykov 2002). Furthermore, this support for compulsory knowledge significantly increased between 2001 and 2012 by 18.3% among the Mari respondents and by 10.6% among the local Russians. The shares of those who disagreed decreased by 7.2% among the Mari respondents and by 26.9%, or almost twice over, among the local Russians (Shabykov & Kudriavtseva 2015).

The increase in support for the compulsoriness of the titular language among the Mari might have been an effect of language promotion efforts in the 1990s. The increase in support in the 2000s might have actually been driven by resentment of the lack of policy. At the same time, the use of the titular language in mass media and the internet was much more in demand among the Udmurt and Mari respondents, especially among young people, than in official contexts and work environment. In contrast, the Russian respondents in Mari El were more inclined to support the use of the titular languages in official contexts than in social contexts, perhaps because the former did not imply that they would personally be somehow touched.

The cross-regional 2007 survey showed that the policy had not overcome the pessimistic attitudes and more than half among the respondents in all republics did not expect any improvement in the situation of the languages in the future. The majority of respondents thought that the languages had a low or not high enough public value, and the share of individuals who held that view continued to increase, for example in Komi. Yet, the majority of parents of titular nationality still wanted their children to know the language, although only a minority expected them to acquire a high level of command.

While political rhetoric and publicity about policy might have played a role, the public opinion about the sufficiency of policy measures and school capacity might directly reflect the actual effectiveness of policy. Judging by their attitudes, the titular groups in Karelia and Mordovia were more exposed to policy effects in the 2000s. In Komi and Udmurtia, the attitudes demonstrate a public perception of insufficient inputs and outputs. In Mari El, public attitudes might have reflected the perception of decreasing policy effects in the 2000s, because otherwise the republic's policy figures were better than those of the other republics. More evidence for this is provided by the increase in the perception of language as the main identity marker in the 1990s and the decrease in the 2000s.

In this section, I evaluated policy impact, linking outputs and outcomes. I provided some evidence that in the 1990s, an increase in outputs correlated with the positive dynamics in outcomes, especially in terms of access to native language learning and language knowledge, as demonstrated by the data in the cases of Karelia and Mari El. Since the early 2000s, a decrease in outputs was also reflected in decreased outcomes, especially in the case of Mari El. In all republics, policies had insufficient inputs and outputs inadequate for the task of inducing the desired outcomes. In general, the policies failed not only to reverse the language shift but even to have any significant impact, and the social structure continued determine the sociolinguistic situation.

6. Conclusion

The study has demonstrated that the scale of policy impact was not up to the task of changing the symbolic and interactional order because they were sustained by the existing social structure. The policies faced a number of problems and obstacles that reinforced each other. These included the continued dominance of monolingual ideologies, the prevalence of symbolic over instrumental policy and insufficient policy input in terms of institutional and financial support due to a lack of political support and enthusiasm among implementers, as well as the corresponding inadequate policy outputs that were not able to change the dominant language ideologies. Despite symbolic recognition of their official status, the titular languages remained stigmatized *de facto* minority languages in public perception. As a result, the policies failed to change the dominant symbolic and interactional order due to their inability to overcome the pattern of one-sided national-Russian.

Why did the policies have such a minor impact? The policies were not able to achieve the desired impact not only because of their narrow inputs and outputs. Suzanne Romaine pointed out that language "policies have negligible impact on home use, which is essential for continued natural transmission of language" (Romaine 2002: 194). She cites Joshua Fishman, who emphasized that this lack of intergenerational language transmission and informal daily life support make a language endangered, not the lack of official status or school teaching (Fishman 1997). She further points at confusion between policy and planning and emphasizes that empowering communities and individuals with language rights does not mean the rights will be used.

In the Russian context, only a few individual language rights were set in legislation and this was done using not a rights-based approach but rather a top-down policy approach (see Zamyatin 2015). In the early 1990s, the republics' policymakers quite assertively pursued the expansion of the titular languages though the introduction of their compulsory character. However, the principle of non-discrimination on the basis of language prevented the policymakers from interfering with language use of individuals in their private affairs. Public policy could be pursued only in the public sphere. In general, this approach worked in the SSRs with sole state languages, but its application was not calibrated for the ASSRs of Russia that established two state languages but lacked a tradition of official use of the titular languages in the first place.

Under these circumstances, the revivalist policy would have been effective only if reinforced by grassroots initiatives in an active civil society. However, the efforts of authorities were not adequately supplemented by other actors, such as ethnic NGOs (see Zamyatin 2014c). Partly, this might be a Soviet legacy of what Federica Prina (2015: 155) refers to as "an inherent weakness of civil society, with citizens often reluctant to become involved with activism" under the predominant political culture. Another aspect is self-censorship and unwillingness to overstep pre-established boundaries of political discourse (Prina 2015: 156). One should also mention that the authoritarian regime discourages activism and even makes it punishable, for example imposing the fear of losing one's job, and even threatening with violence. Under the conditions of the parochial subject political culture prevailing in the Russian regions, the people did not believe they could influence policy, and elites were subject to relatively little direct influence from apathetic masses.

Popular language attitudes have been a more relevant variable in the case of policy formation in the context of democratization in the 1990s. When comparing the indicators across the periods, one has to note that the data for the early 1990s also reflected the period of high activities of national movements, which in the Finno-Ugric republics with their low popular support for nationalism, however, never reached the stage of mass ethnic mobilization, except for a short time in Mari El. Nevertheless, policymakers were able to include the compulsory teaching of the titular state languages in the laws, despite the low overall popular support for this measure in Komi, Mari El and Mordovia. Hence, these were beliefs and attitudes of the elites that mattered more than popular language attitudes when it came to policy formation.

Policy input depended on the ability of ethnic pressure groups to bargain for their vision on language issues among other segments of regional elites (see Zamyatin 2014c: 229). Public debate in the mass media was the arena for expressing common attitudes, but media coverage as well as the results of surveys on popular opinion were often used by both the authorities and interest groups to justify their positions (see Zamyatin 2013c: 140–141). By the early 2000s, mass politics everywhere had given way to elite politics. If a consensus was reached among the elite, public opinion could be ignored, as in the case of the introduction of compulsory study of the titular languages. However, in the case of an absence of consensus, a side effect of the assertive policy was that it provoked resentment among the local Russians and especially among the regional Russian elites, as in Mari El. In the 2000s, the resentment resulted in a backlash, when the new, predominantly Russian ruling elite put the policy on hold in Mari El, or when the bureaucracies impeded policy implementation in the other republics (see Zamyatin 2014c). From the perspectives of time and place, the regime change at the central and regional levels was followed by a narrowing of policy scope and hindered implementation.

However, the problem of the linkage between elites and masses is more complex. In the 1990s, this linkage could be characterized as a system of state corporatism, when one peak ethnic organization was officially recognized as an interest group expressing the interests of the titular group. In the 2000s, state corporatism was easy convertible under the authoritarian tendencies into state control over the peak organization, for example, through centralized control of funding (see Prina 2015: 168–175). In these circumstances, the policy design itself gave third parties little autonomy and accepted them only as minor partners in policy formation. The top-down policy itself left little room for active participation of third sector organizations, that is, "a limited perceptiveness of civil society initiatives" (Prina 2015: 156). It was not a user-oriented policy, because the concerns of the policy users were not considered properly.

The measures were directed mostly at status planning and acquisition planning and often implied compulsoriness. A contrast in the perceptions of policymakers and public perceptions about the official and social functions of languages could be seen in the data on the hierarchy of public opinion about measures needed in order to achieve the state of official bilingualism and to raise the prestige of titular languages. As it was shown, users were more interested in the development of mass media in the language than

in compulsory study of titular languages in school, and much less interested in their official use by public authorities and in the work environment. Only later did the language planners start to pay more systematic attention to prestige planning and public attitudes, and to promote the languages locally (Zamyatin 2014c). These measures found some resonance among grassroots activists. However, the scale of cultural activism remained much lower than in some other places and inadequate for the task.

Therefore, the policy evaluation has shown that the populations, including the titular groups and their elites themselves, were not ready for a change in the social status of languages, because there was no corresponding change in the social structure. The strategy of expanding the compulsoriness of the titular languages was a forced choice of the titular elites because it was a much more difficult task to encourage the free use of languages given the prevailing nihilist attitudes among the titular groups. In any case, it is nearly impossible to expand the practical use of a language with lower prestige and status in a situation of functional distribution of diglossia (Zamyatin 2015). Under the conditions of broken intergenerational language transmission within most families, the erosive trends of language shift and ethnic assimilation also continued throughout the post-Soviet period despite policy efforts.

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Notes

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Ein bedeutender Fortschritt in der Erforschung der Frühgeschichte des Ostseefinnischen

Valter Lang: *Läänemeresoome tulemised* [Die Ankünfte des Ostseefinnischen]. Muinasaja teadus 28. Tartu: Tartu Ülikooli Kirjastus 2018. 320 S.

Eine der klassischsten Fragestellungen der Finnougristik in Finnland und Estland ist die Frage, ab wann im Ostseegebiet uralische Sprachen gesprochen wurden. Insbesondere in der finnischen Finnougristik, die sich multidisziplinär mit der nationalen Geschichte beschäftigt, ist die Herkunft der finnischen Sprache und Bevölkerung eines der favorisierten Themen. Zum selben Komplex gehört die Diskussion darüber, inwieweit die Forschungsergebnisse der Archäologie und der Sprachwissenschaft vergleichbar sind.

Das kürzlich erschienene Buch von Valter Lang bietet Antworten und wesentlich präzisierte Perspektiven auf diese Fragen. Der Titel des Werks, die (vielen) Ankünfte des Ostseefinnischen, gibt den ersten Hinweis auf den Inhalt. Die Entstehung des Ostseefinnischen und die Frühgeschichte der Ostseefinnen werden mit dem Blick des Archäologen konstruiert, mit der Präzision materieller Funde verschiedenen Alters und in intensivem Dialog mit den neuesten Thesen der Sprachforschung.

Das sich dabei abzeichnende Gesamtbild von der Ankunft der uralischen Sprachen im Ostseegebiet, insbesondere von der stufenweisen Verbreitung der vorostseefinnischen Sprachform von Zentralrussland und dem Wolgagebiet nach Westen ist um ein Vielfaches genauer und zeigt die für die ostseefinnische Ethnogenese wichtigsten Grundlagen der Bestimmung von Zeit und Ort auf. Die Forschung zu diesem Themenkreis macht dadurch einen großen Schritt voran, weshalb es angebracht ist, im Folgenden die zentralen Thesen des Buches und ihre Grundlagen näher vorzustellen.

Die Fragestellungen des Buches werden von Anfang an sorgfältig problematisiert. Sie gehen vor allem aus den Publikationen von Sprachwissenschaftlern, aber auch aus früheren Arbeiten von Archäologen

hervor. Lang sucht Antworten, indem er materielle Funde vorstellt und interpretiert und zum Schluss folgert, welche Alternative die mögliche oder wahrscheinliche ist. Die Zeitspanne reicht von der späten Steinzeit bis zur eigentlichen Eisenzeit. Der zeitliche Schwerpunkt liegt auf den von der Bronzezeit bis zur frühen Eisenzeit vorherrschenden Kulturen, die Lang bereits früher detailliert untersucht hat (Lang 2007, 2015, 2016), und auf dem Wandel der Sprachsituation. Ein zweiter Impuls für die genauere Untersuchung dieses Zeitraums geht von der Sprachwissenschaft aus, vor allem von den Artikeln von Petri Kallio (2006, 2015) und Jaakko Häkkinen (2009, 2010), in denen die früheren Datierungen kritisch beurteilt werden und die davon ausgehen, dass die Aufgliederung der uralischen Ursprache und die Verbreitung im Ostseegebiet erst auf die frühe Metallzeit zu datieren ist.

Valter Langs Buch bestätigt und präzisiert die Begründungen dafür, dass dies die wahrscheinlichste Erklärung ist und dass sich dafür ein soziohistorischer Kontext skizzieren lässt. Die in der zweiten Hälfte des 20. Jahrhunderts vorherrschend gewordene Hypothese, die Verbreitung der uralischen Sprachen in der Umgebung des Finnischen Meerbusens sei auf die Zeit der typischen Kammkeramik, in das 4. Jahrtausend v. Chr. zu datieren, geht nach Langs Ansicht, die sich auf die Schlussfolgerungen von Jaakko Häkkinen, Kallio und Asko Parpola (2012) stützt, von einem zu frühen Zeitpunkt aus. Andererseits ist es auch schwierig, Beweise anzuführen, die diese Hypothese unwiderruflich widerlegen. Jedenfalls muss die auch in der Debatte über die Besiedlungsgeschichte Finnlands stark beachtete Kontinuitätstheorie (s. z.B. Carpelan 2000; Carpelan & Parpola 2001; Koivulehto 2001, 2006), d.h. die Hypothese einer mit der Steinzeit beginnenden, uralische Sprachen und vor-ostseefinnische Formen sprechenden Bevölkerung nördlich des Finnischen Meerbusens im Licht der Untersuchungen aus dem 21. Jahrhundert einer neuen Deutung weichen.

Die wichtigsten Thesen zur Frühgeschichte der Ostseefinnen kristallisieren sich im vorliegenden Buch wie folgt heraus:

(1) Die Sprecher der vor-ostseefinnischen, westuralischen Sprache kamen aus dem Wolgagebiet über die südliche Route an der Düna, längs der östlichen Zone des Baltikums. Es handelte sich nicht um einzelne Vertreter der Wildbeuterkultur, sondern um eine Bevölkerung mit neuartiger gemeinschaftlicher Form und recht eng beieinander lebenden Gemeinschaften,

die an ihren Siedlungsstätten Schutzvorrichtungen bauten.

(2) Die frühe Metallzeit und insbesondere die Innovationen in der Bronzezeit ermöglichten die sprachliche Verbreitung, die auch Berührungspunkte mit der Entwicklung der Populationsgenetik aufweist, besonders mit der Datierung und Verbreitung der Haplogruppe N3 des Y-Chromosoms, die eindeutig östlicher Herkunft ist.

(3) In der frühen römischen Eisenzeit sind deutliche kulturelle, teils die Sprachgrenzen überschreitende Veränderungen zu beobachten, die schließlich zur Entstehung des Späturfinnischen, d.h. des ostseefinnischen Zweigs führen. Gebietsmäßig ist die Entstehung des Urfinnischen mit dem Kulturkreis verknüpft, der Nordestland, die westestnischen Inseln, Südwestfinnland und das Mälaren-Tal in Schweden umfasst.

Im Folgenden werde ich diese drei Hauptthemen näher betrachten. Sowohl die zur frühesten Geschichte der uralischen Sprachen gehörende Verbreitung der Sprachfamilie im Ostseegebiet als auch die Entstehung des (Spät)urfinnischen, die der Verbreitung einzelner ostseefinnischer Sprachen voranging, beruhen auf einem Erklärungsmodell, das im Vergleich zu früher vorgeschlagenen Szenarien wesentlich präziser ist. Der Titel *Läänemeresoome tulemised* (englischsprachige Zusammenfassung *Finnic be-comings*) spiegelt gerade dieses Gedankengebäude wider. Dies ist der Kern des Buches.

(1) Valter Langs Erklärung für die Verbreitung der vor-ostseefinnischen Sprachform im Ostseegebiet ist folgende: Sowohl im Gebiet Estlands als auch Finnlands kommen einige Keramiktypen der jüngeren Steinzeit vor Beginn der Bronzezeit außer Gebrauch. In diesen Zeitraum fällt eine Unterbrechung, die einen Teil der Voraussetzung für einen Sprachwechsel schafft. Dessen Grundvoraussetzung ist die Migration einer kulturell und von ihrer Gesellschaftsstruktur her komplexeren und wirtschaftlich stärkeren Bevölkerung (S. 109). Im Gebiet Südestlands, Nordlettlands und des östlichen Baltikums entstehen in der Kontaktzone der vor-ostseefinnischen und frühbaltischen Sprachen neuartige, aus dem Osten kommende Gemeinschaften, deren aus mehr als einem Haus und einem Haushalt bestehenden Siedlungsstätten geschlossen und durch unterschiedliche Befestigungen geschützt sind. In diesen vorwiegend männlichen Gemeinschaften wurde eine vor-ostseefinnische Sprache gesprochen.

Dieser Erklärung kann die Annahme zur Seite gestellt werden, die schon um die Wende vom 19. zum

20. Jahrhundert von Wissenschaftlern wie Vilhelm Thomsen und E. N. Setälä vertreten wurde, wonach die Bevölkerung, die sich von Osten nach Westen verbreitete, Einflüsse von Sprechern der baltischen Sprachen erhielt. Der in der zweiten Hälfte des 20. Jahrhunderts vorgebrachte Gedanke von der Kontinuität der baltischen Kontakt zu beiden Seiten des Finnischen Meerbusens (Kaisa Häkkinen 1996: 151–152; Koivulehto 1983) tritt in Langs Buch in den Hintergrund; er ist der Ansicht, dass die Hauptregion der Kontakte im Gebiet zwischen dem heutigen Estland und Moskau lag.

Das Buch geht nur sehr kurz auf die Entwicklung der saamischen Sprachen ein. Lang hält sich in diesem Bereich an Parpolas (2012: 150–155; vgl. auch Lang 2015) Hypothese, dass die vor-ostseefinnischen und die vor-saamischen Sprachen sich als separate Zweige nach Westen verbreiteten. Im Hinblick auf die Beziehung zwischen dem Ostseefinnischen, dem Mordwinischen und dem Saamischen, nach alter Terminologie hinsichtlich der Entwicklung der finnisch-wolgaischen Ursprache, bleiben weiterhin Fragen offen.

Eine der – allerdings nicht explizit ausgesprochenen – Implikationen von Langs Buch ist, dass man, wenn die Verbreitung der vor-ostseefinnischen Sprachform wesentlich durch die Vermittlung einer neuen Kulturform geschah, einen ähnlichen Ausgangspunkt auch für die Ankunft des Vor-Saamischen nördlich und nordöstlich des Finnischen Meerbusens annehmen müsste. Der Mechanismus des Sprachwechsels war dort jedoch ein anderer, und die sprachlichen Spuren der vorsaamischen Jäger- und Sammlerkultur sind erheblich stärker als die des Ostseefinnischen.

(2) Im Mittelpunkt der Entwicklung der materiellen Kultur steht die Keramik, aus dem einfachen Grund, dass sie der häufigste Fundtyp ist, der von der Ansiedlung früherer Menschengruppen in einer bestimmten Region zu einer bestimmten Zeit zeugt. Lang schließt sich (S. 112, 121) vorsichtig dem Standpunkt von Mika Lavento und Janne Saarikivi an, wonach Keramik in den frühen Gemeinschaften vor allem von Frauen hergestellt wurde, die möglicherweise aus einer anderssprachigen Gemeinschaft stammten als die Männer und folglich die Herstellungstraditionen vermitteln konnten, die sie in ihrer früheren Gemeinschaft erlernt hatten. Die Keramikgruppen spiegeln demnach auch hauptsächlich offene Eheschließungsnetze wider.

Den in den Keramiktypen zum Ausdruck kommenden Wechsel der Kulturformen in der späten

Eisen- und der frühen Metallzeit interpretiert Lang auf neue Art: Da die späte Kammkeramik und Schnurkeramik außer Gebrauch kamen, reflektiert die Veränderung einen größeren ethnokulturellen Wandel, und von der Entstehung der Ostseefinnen kann man erst danach sprechen. Zu erwähnen ist allerdings, dass im Prinzip auch die frühere Forschung hiervon ausgegangen ist, denn es wurde lange angenommen, dass sich das (Spät) urfinnische erst in der Eisenzeit als Zweig der uralischen Sprachen herausgebildet hat. Auch die Herstellungstradition der Keramik der Kiukainen-Kultur bricht ab, und danach folgt ein Zeitraum mit wenigen Funden. Um einen totalen Abbruch handelt es sich beim Weichen der späten Kammkeramik und der Schnurkeramik wohl nicht, denn eine gewisse genetische Kontinuität der Bevölkerung überdauerte auch diese Schwellenphasen.

Langs Erklärungsmodell legt den Schwerpunkt auf die Veränderungen in der Zeit der Textilkeramik und der Bronzezeit. Sowohl in Finnland als auch in Estland lassen sich die bronzezeitlichen Einflüsse aus dem Westen und dem Osten deutlich voneinander unterscheiden. Der Verfasser betrachtet im Detail die in diese Epoche gehörenden Keramiktypen im Gebiet zwischen Estland, dem OstbaItikum, Südwestfinnland, Karelien und dem Ilmensee einschließlich ihrer regionalen Besonderheiten. Er erweitert sein früheres (Lang 2015) Erklärungsmodell und unterscheidet zwei Untergruppen der von ihm als „Tapiola-Keramik" bezeichneten Gruppe, eine nordöstliche und eine südwestliche, die beide ihre Wurzeln im Wolgagebiet haben.

Lang ist der Auffassung, dass eine analoge Entwicklung auch bei den vorgeschichtlichen Stätten eingetreten ist. Zu den wichtigsten Erscheinungen der frühen Metallzeit im Baltikum gehören die frühen befestigten Wohnsiedlungen. Diese begegnen am zahlreichsten an der Daugava, im Nordosten Litauen und im Nordwesten Weißrusslands, der naturgeografisch mit demselben Gewässergebiet der Daugava verbunden ist. In diesen befestigten Siedlungen lebten Gemeinschaften, die mehr als eine Familie oder einen Haushalt umfassten. Die Chronologie der Fundtypen zeigt, dass sich dieser Gemeinschaftstyp im Baltikum stufenweise von Süden (Südosten) nach Norden (Nordwesten) verbreitet.

Die aus dem Osten kommenden Einflüsse werden im Buch schon früher (S. 77–81) durch den Hinweis auf die jüngsten Befunde der Populationsgenetik angesprochen. Diesen zufolge scheint sich die Haplogruppe N1c1 (N3a) des in väterlicher

Linie vererbten Y-Chromosoms von Osten nach Westen zu verbreiten, wobei der Schwerpunkt auf denselben Routen liegt, die auch Lang untersucht. Auch wenn es sich vorläufig nur um allererste Ergebnisse handelt, deren Beurteilung zweifellos künftig präzisiert werden wird, besteht hier eine offensichtliche Parallele zur Verbreitungsrichtung der Sprache und der von Lang untersuchten kulturellen Einflüsse. Tatsächlich handelt es sich um das erste und im Licht des Buches revolutionäre Mal, dass auch in der Populationsgenetik eine konkrete Parallele zu den auf dem Dialog zwischen Sprachwissenschaft und Archäologie basierenden Thesen über die Entwicklung in der vorgeschichtlichen Zeit im nördlichen Ostseegebet aufgezeigt werden kann.

(3) Das dritte Hauptthema und eines der größten Verdienste von Valter Langs aktueller Untersuchung betrifft die Entstehung des (spät) urfinnischen oder ostseefinnischen Zweiges, eine Entwicklung, die zeitlich bereits in die Eisenzeit fällt. Die frühe Eisenzeit gilt seit Langem als der kulturelle Rahmen, der am besten zur Entwicklung des (Spät)urfinnischen passt, da der äußerst starke Kontakteinfluss des Urgermanischen u.a. wegen der Chronologie der germanischen Sprachen in die Eisenzeit zu datieren ist (Hofstra 1985; Kaisa Häkkinen 1996: 157–162; Kallio 2012).

Langs Buch zeichnet auch von dieser Entwicklung ein gut begründetes und glaubhaftes Bild, genauer im 6. Kapitel (S. 193–). Nach der Ankunft der westuralischen Sprachform im Ostseegebiet lautet die nächste Frage, welches Schwellenstadium zur Entstehung des ostseefinnischen Zweiges führt. Als Ergebnis dieser Phase sind die dominierenden Eigenheiten der im 20. Jahrhundert bekannten ostseefinnischen Sprachen erkennbar. Valter Lang berücksichtigt auch die Sprachkontakte als einen der Schlüsselfaktoren des Sprachwandels. Die baltisch-ostseefinnischen Kontakte erscheinen in Langs Szenario als natürlicher Teil der von Mittelrussland in das Tal der Daugava führenden sprachlichen Verbreitung. Die lexikalisch reichhaltigeren und chronologisch in vielen Teilen etwas späteren germanischen Kontakte lokalisiert Lang in die nördlichen Ostseeregionen.

Die Sprachkontakte werden als Kontinuum behandelt, wie es in den letzten Jahrzehnten auch in der sprachwissenschaftlichen Forschung üblich geworden ist. Die Verstärkung der westlichen Einflüsse der germanischen Kontakte und die allmähliche kulturelle Veränderung, die im Lauf der Jahrhunderte vor allem in Nordestland und Südfinnland eintrat, wird sorgfältig dargestellt und ebenfalls zu einer

logischen Kette von Schlussfolgerungen geordnet.

Lang bietet eine neue und revolutionäre Interpretation der urfinnisch-germanischen Kontakte: es handelte sich nicht um die Einwanderung einer germanische Sprachen sprechenden Bevölkerung in das urfinnische Gebiet, sondern um den umgekehrten Prozess! Als das (Vor) ostseefinnische im Daugava-Gebiet Gestalt angenommen hatte, wies es eine starke baltische Prägung auf (S. 213). Die Migration setzte sich an die westliche und nördliche Küste Estlands fort, wo bereits paläogermanische Bevölkerungen lebten. Die Hauptgruppe siedelte sich um die Mitte des 9. vorchristlichen Jahrhunderts und danach dort an. Von dort aus setzte sich die Verbreitung über den Finnischen Meerbusen fort, auch in den östlichen Teil Mittelschwedens (S. 214). Es entstand eine neues Gebiet enger kultureller Wechselwirkung.

Für das Späturfinnische stellt das Buch einen exakten kulturellen Kontext auf (S. 219), der sich an der schon früher von Lang (2007: 170) beobachteten Übereinstimmung und der von Parpola (2012: 153) vorgeschlagenen Erklärung orientiert. In diesem Zusammenhang ist festzustellen, dass bereits Ella Kivikoski (1964: 114–148) dieselbe Beobachtung über die Verbindungen zwischen Nordestland, Südwestfinnland und Schweden in der frühen Eisenzeit gemacht hat. Mit größter Wahrscheinlichkeit befand sich das Kerngebiet der Veränderungen, die zum Späturfinnischen führten, im Küstengebiet Nordestlands. Gerade hier sind in der vorrömischen Eisenzeit in der zweiten Hälfte des ersten Jahrtausends v. Chr. neben Steingräbern die ersten Tarandgräber anzutreffen. Von diesem Innovationszentrum aus verbreitete sich der Gräbertyp in andere Gebiete am Finnischen Meerbusen, auch nach Norden (vor allem nach Nordwesten) und nach Osten.

Im Buch werden auch für die spätere Entwicklung detaillierte Erklärungen gegeben, hauptsächlich durch die Verknüpfung früherer Untersuchungsergebnisse. Die wichtigsten Erklärungen und den für die Forschung entscheidendsten Kern habe ich oben vorgestellt.

Valter Langs Buch ist nicht nur im üblichen Sinn „gelungen", sondern darf aus gutem Grund als bahnbrechend für die Forschung über die Frühstadien des ostseefinnischen Sprachgebiets gelten. *Läänemeresoome tulemised* beruht auf gründlicher Kenntnis des Themenkreises, auf der vielseitigen Evaluierung verschiedener Forschungsergebnisse und Aspekte sowie auf analytisch begründeten Synthesen. Die Gesamtinterpretation ist mitreißend und spricht für sich.

Das Buch ist ein so wichtiger Beitrag zur multidisziplinären Forschung über die Vorgeschichte Nordeuropas, dass es so bald wie möglich ins Englische übersetzt und einer größeren Forschergemeinschaft zugänglich gemacht werden sollte. Bei dieser Gelegenheit könnten einige Details überarbeitet werden, etwa die Liste (S. 203) der frühesten (nordwest-) indogermanischen Lehnwörter. Hier werden einige Wörter angeführt, deren Verbreitung in den uralischen Sprachen deutlich über das Westuralische hinausgeht, z.B. estn. *idaneda*, finn. *itää* 'keimen' und estn. *punuda*, finn. *punoa* 'zwirnen, flechten', und die deshalb nicht nur als nordwestindogermanisch angesehen werden können.

Das Buch regt auch dazu an, das sprachwissenschaftliche Bild von den sprachlichen Prozessen der vorgeschichtlichen Zeit zu präzisieren. Die Trennung zwischen dem Saamischen und dem Ostseefinnischen wird als gegeben betrachtet, doch die Einzelheiten des Trennungsprozesses sind aus heutiger Sicht weitgehend ungeklärt. Der gegenwärtige Trend scheint die Annahme zu sein, dass das Saamische und das Ostseefinnische als separate Sprachformen in die Ostseeregion, auch in dieselben Gebiete, kamen. Die Entwicklung des Ostseefinnischen und des Saamischen zu eigenen Sprachformen bietet reichlich Stoff für künftige Untersuchungen.

Wie aus dem oben Gesagten hervorgeht, ist der Rezensent beeindruckt von Valter Langs Untersuchung *Läänemeresoome tulemised*, von der Auffassung und der Interpretation, die hinter dem Text stehen. Das Buch beantwortet mit sorgfältigen Begründungen die Frage nach der Herkunft und frühen Entwicklung der ostseefinnischen Sprachen und der Bevölkerung, mit der sich die Forschung im ganzen 20. Jahrhundert und auch zuvor auseinandergesetzt hat. Die Perspektive ist neu, berücksichtigt zugleich die frühere Forschung, jedoch ohne zur Wiederholung führenden Ballast. Im Hinblick auf die künftige Forschung ist das Werk zweifellos bahnbrechend.

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Ein neues Handbuch über die ungarische Sprachgeschichte

Kiss Jenő & Pusztai Ferenc: *A magyar nyelvtörténet kézikönyve* [Handbuch der ungarischen Sprachgeschichte]. Budapest: Tinta könyvkiadó 2018. 548 S.

Das von Jenő Kiss und Ferenc Pusztai herausgegebene Handbuch der ungarischen Sprachgeschichte bietet den Lesern neue Perspektiven auf die Geschichte der Sprache. Obwohl das Werk von der Seitenzahl her nicht besonders umfangreich ist – einschließlich der Anhänge zwar über 500 Seiten, doch es hat schon umfangreichere gegeben – bietet es eine ganzheitlichere Annäherungsweise an die Geschichte der Sprache als seine Vorgänger, indem es auch die außersprachliche Geschichte und die soziolinguistische Entwicklung der letzten Jahrhunderte berücksichtigt. Im Kern des Sprachwandels stehen der Sprachbenutzer und die Sprachgemeinschaft.

Das Ungarische ist infolge seiner langen schriftlichen Geschichte ein dankbares Objekt für die Untersuchung des Sprachwandels. Schon auf den ersten Seiten werden als Beispiele Fragmente aus neun Bibelübersetzungen aus 600 Jahren angeführt. Dies ist ein hervorragender Schnellkurs über die konkrete Veränderung der geschriebenen Sprache. Selbst ein flüchtiger Vergleich macht vieles sichtbar.

In der zweiten Hälfte der Einleitung werden Fragen zur Veränderung der Sprache angeführt und beantwortet. Man wüsste gern, woher die Fragen stammen, denn in vielen geht es allgemein um den Sprachwandel, doch es sind auch einige überraschende Fragen darunter. Dieser Teil bietet eine vergnügliche Lektüre, weckt aber die Frage, für wen das Buch eigentlich gedacht ist. Für ein Lehrbuch sind die Fragen angemessen, aber an welches Publikum will sich das „Handbuch" richten? Unter den überraschenden Fragen sei diejenige erwähnt, in der es darum geht, ob die Beschleunigung des Sprechtempos mit dem Sprachwandel verknüpft ist. Die Verfasser verweisen tatsächlich auf eine Untersuchung, der zufolge das Sprechtempo des Ungarischen in den letzten Jahrzehnten gestiegen sei. Konkrete Beispiele werden nicht gegeben, obwohl der Einfluss des Tempos auf die Veränderung zugestanden wird. Auf die Frage „ist das Ungarische eine europäische oder

eine europäisierte Sprache“ wird am Ende des Buches und auch dieser Rezension eingegangen.

Das zweite Kapitel über die ungarische Sprachgeschichte als Gegenstand der Forschung (S. 43–98) enthält viele bekannte grundlegende Fakten. In diesem Kapitel werden die sprachgeschichtlichen Stufen des Ungarischen vorgestellt und gleich zu Beginn für die Länge der vorungarischen Stufe zwei Alternativen genannt, von denen sich die eine auf die traditionelle Auffassung und die andere auf die neuere Lehnwortforschung stützt. Die Variationsweite beträgt ca. 500 Jahre. Als Instrumente der sprachgeschichtlichen Forschung werden schriftliche Dokumente, das Paradigma der scheinbaren Zeit sowie die Erforschung der verwandten Sprachen und der Kontaktsprachen angeführt. Über die ungarischen Sprachdenkmäler informiert eine separate Darstellung von Erika Terbe, der Überblick über die Entwicklung der Orthografie stammt von Klára Korompay.

Das dritte Hauptkapitel bietet eine Darstellung der ungarischen Sprachgeschichte aus traditioneller Sicht. Die von Károly Gerstner verfasste kompakte Beschreibung der Konsonant- und Vokalgeschichte (S. 103–128) folgt den Stufen der Sprachgeschichte und stellt die bekannten lautgeschichtlichen Veränderungen und Tendenzen dar. Zsófia Sárosi hat die Darstellung der Morphemgeschichte verfasst (S. 129–153), in der auf allgemeiner Ebene die morphologische Entwicklung der Wortstämme sowie der Ableitungssuffixe und der Flexionszeichen und -endungen beschrieben wird. Auch dies ist aus vielen früheren Quellen bekannt. Unter anderem wird der Ursprung sowohl der Personalendungen der Verben als auch der Possessivsuffixe der Nomina mit der Agglutination der Pronomina und die Arbeitsteilung der Endungen der Konjugation mit der Vermeidung von Homonymie erklärt. Dieser Abschnitt bietet wenig Neues, da ein großer Teil der Elemente der Flexionsmorphologie nicht im Einzelnen erklärt wird. Insofern unterscheidet er sich deutlich z.B. von der vorangehenden Darstellung der Lautgeschichte. Der Geschichte der Wortklassen ist ebenfalls ein eigener Abschnitt gewidmet (verfasst von Attila Hegedűs und Mária D. Mátai), in dem die frühesten und späteren Stadien der verschiedenen Wortklassen dargestellt werden.

Anschließend wird ausführlich die Geschichte der Syntax behandelt (S. 168–225, verfasst von Magdolna Gallasy, Lea Haader und László Horváth), was durch die Betrachtung von Textdenkmälern aus verschiedenen Zeiten fruchtbar ist und detailliert geschieht,

sowie die Geschichte der Texte (S. 226–246, verfasst von Magdolna Gallasy), wobei die Genres sowohl vorliterarischer als auch literarischer Texte betrachtet werden. Die Darstellung der Geschichte der Lexik ist traditionell, und es hat den Anschein, dass die Lehnwortforschung im Bereich des Ungarischen in den letzten Jahrzehnten keine solchen grundlegenden Veränderungen ausgelöst hat wie z.B. im Fall des Ostseefinnischen. Zur Darstellung der Geschichte der Lexik gehören auch Abschnitte über die Bedeutungsveränderungen (S. 271–283, Ferenc Pusztai) und über die Geschichte der Eigennamen (S. 283–307, Mariann Slíz).

Die beiden letzten Hauptkapitel des Buches befassen sich mit Themen, die in den Standardwerken und Lehrbüchern zur Sprachgeschichte bisher weniger behandelt wurden, nämlich mit der Geschichte der Sprachvariation und der ungarischen Sprachgemeinschaft. Die Sprachvariation wurde bisher kaum aus sprachgeschichtlicher Perspektive behandelt.

Das erste Unterkapitel über die Geschichte der Sprachvariation befasst sich mit der Geschichte der Dialektvariation (Dezső Juhász, S. 314–349). Obwohl Dialekte gesprochene Sprachformen sind, werden auch sie vornehmlich anhand von Sprachdenkmälern behandelt. Die Anzahl der Beispiele für die vorungarische Dialektvariation ist gering. In diesem Unterkapitel werden überraschend genau einige Besonderheiten der Morphologie behandelt, die ich im früheren Teil über die Geschichte der Morphologie erwartet hatte: nämlich die Entwicklung der vieldiskutierten Formen der 1. Person Plural des Präsens und der 3. Person Singular des Imperfekts der bestimmten Konjugation. In diesem Zusammenhang dienen sie als Beispiele für die Dialektvariation, und die heutige Vertretung wird unter den Ziffern 12 und 13 der Kartenbeilage dargestellt. Im Bereich der Morphologie wird auch angemerkt, dass die sog. Familien-Lokalkasus (*-nott, -nól, -nyi*) zwar erst in der Zeit des Mittelungarischen in schriftlichen Dokumenten begegnen, wahrscheinlich aber auf das Vorungarische zurückgehen. Die Begründung für diese Datierung wird freilich nicht genannt; der Grund ist ja, dass diese Lokalkasusendungen Entsprechungen in den obugrischen Sprachen haben. Die Fragen der Dialektvariation in den anderen sprachgeschichtlichen Stadien des Ungarischen, insbesondere die Geschichte und Variation der Vokale, werden anhand der Sprachdenkmäler detailliert dargestellt.

Den Überblick über die Entwicklung der Standardsprache hat

Jenő Kiss verfasst (S. 350–377). Zu Beginn werden vielleicht etwas überraschend die Berufssprachen behandelt. Der Anlass dafür scheinen die in historischen Quellen und Sprachdenkmälern begegnenden Berufsbezeichnungen zu sein, die zu einem großen Teil in Familiennamen auftreten. Über die Entwicklung der Sprache sagt diese Terminologie ihrer eigenen Zeit jedoch nicht allzu viel aus. Als Teil der Berufssprachen wird kurz auch auf die Entwicklung der Wissenschaftssprache eingegangen. Dabei werden die seit Jahrhunderten anhaltende bewusste Entwicklung der Sprache und die Wichtigkeit der ungarischsprachigen Terminologie und des wissenschaftlichen Begriffsapparats betont. Die eigentliche Entwicklung der Standardsprache wird wieder in der Reihenfolge der Epochen der Sprachgeschichte behandelt, in denen jeweils eigene außersprachliche Faktoren die Entwicklung der Sprache beeinflussten. Die bedeutendste Entwicklungsphase in der Zeit des Neuungarischen ist natürlich die sog. Sprachreform um die Wende vom 18. zum 19. Jahrhundert, eine Epoche der eifrigen bewussten Weiterentwicklung der Sprache. Die Zeit der Sprachreform wird zwar auf zwei bis drei Seiten behandelt, doch aus irgendeinem Grund bleibt die Behandlung oberflächlich und wenig gehaltvoll. Oder verhält es sich so, dass die Reform letztlich doch nicht so bedeutsam war, wie generell zu verstehen gegeben wurde? Insbesondere im Hinblick auf die Entwicklung der Standardsprache ist interessant, dass die Darstellung bis zum Zeitpunkt der Niederschrift, in das Jahr 2016 reicht. Bei der Entwicklung der jüngsten Zeit werden die Urbanisierung, die Binnenwanderung und der Slang hervorgehoben, während der Einfluss der Veränderung der Medien auf die Entwicklung der Standardsprache äußerst wenig Beachtung findet. Man würde annehmen, dass sie neben der Globalisierung ein mindestens ebenso wichtiger Faktor ist.

Das fünfte und letzte Kapitel des Buches befasst sich mit der Geschichte der Sprechergemeinschaft des Ungarischen (S. 382–415). Es beginnt mit einem allgemein gehaltenen Unterkapitel über Demografie, in dem die Geschichte der ungarischsprachigen Bevölkerung von der Einwanderung bis ins 21. Jahrhundert umrissen wird. Die demografische Entwicklung ist natürlich eng mit der staatlichen Geschichte Ungarns verknüpft, und die Gebietsverluste im Gefolge des Friedens von Trianon werden mehrfach erwähnt. Dieser Teil ist stark gesellschaftspolitisch gefärbt. Für die anderen Kapitel oder Unterkapitel wurden keine Mottos gewählt,

doch diesem Abschnitt wurde ein Zitat aus einem Interview mit György Györffy (1989) beigefügt: „kein europäisches Volk ist in seinem Gebiet Ureinwohner". Dies führt den Leser unnötigerweise in nationalistische Gedankengänge. Das Unterkapitel enthält auch einen Abschnitt, in dem der Begriff Ethnie erörtert wird. Die historische und kulturhistorische Entwicklung der ungarischen Sprachgemeinschaft wird im letzten Teil dargestellt. Bei der Beschreibung der Epoche des Vorungarischen werden zwei Punkte stark hervorgehoben: erstens, dass das Ungarische, weil es nach der Lösung aus der Verbindung mit den obugrischen Sprachen eine lange Phase der Differenzierung erlebt hat (dies wird in keiner Weise problematisiert; in Finnland vertreten ja viele Forscher eine andere Auffassung), zu den „älteren" Sprachen des Gebiets gehört, verglichen z.B. mit den slavischen oder romanischen Sprachen. Zwar hat das Ungarische vor allem im Vergleich zu den anderen finnisch-ugrischen Sprachen eine ungewöhnlich lange Sonderentwicklung durchlaufen, doch die Bewertung von Sprachen aufgrund ihres „Alters" ist fragwürdig. Früher wurden gelegentlich Sprachen als alt bezeichnet, in denen viele archaische Züge erhalten geblieben sind. In gewisser Weise sind natürlich alle Sprachen gleich alt. Ein zweiter Umstand, der in diesem Kapitel erneut betont wird, ist, dass das Ungarische in Europa entstanden ist und nicht in Asien wie seine obugrischen Verwandten. Ein überraschend großer Teil der Betrachtung der Epoche des Altungarischen ist der Beziehung zwischen dem Ungarischen und dem Slowakischen gewidmet; mir ist nicht bekannt, an welche Diskussion dieser Abschnitt anknüpft. Man hat den Eindruck, dass es dafür einen Impuls außerhalb des hier zu besprechenden Werks gibt. Aus dem abschließenden Kapitel geht deutlich hervor, dass die ungarische Sprache seit der Einwanderung in den Sog vielerlei sprachlicher Kontakte geriet. Diese Information ist nicht neu, aber im Hinblick auf die Entwicklung der Sprache natürlich wichtig.

Das Buch enthält zahlreiche nützliche Anhänge: Das enzyklopädische Lexikon der Sprachgeschichte ist das erste seiner Art, das mir zu Gesicht gekommen ist. Dass es zusammengestellt wurde, dürfte darauf zurückzuführen sein, dass das Werk nicht nur als Hand-, sondern auch als Lehrbuch dienen soll. Die zahlreichen Karten sind übersichtlich. Auch ein Sachregister findet sich.

Wie gut erfüllt das Buch seinen Zweck? Das Inhaltsverzeichnis weckt mehr Erwartungen als der

tatsächliche Inhalt erfüllt. Dies gilt besonders für die letzten Kapitel, die Informationen über bekannte außersprachliche Umstände wiederholen, ohne neue Überlegungen zu der Beziehung zwischen der Sprache und der außersprachlichen Geschichte zu bieten. Die lange schriftliche Geschichte des Ungarischen hätte mit ihren Dokumenten die Voraussetzungen dafür liefern können. Vielleicht will man den Leser selbst zu diesen Überlegungen anregen, da die entsprechenden Themen einem Handbuch der Sprachgeschichte beigefügt wurden. Als Lehrbuch ist das Werk eine hervorragende Einführung in das Thema, auch wenn leider viele Grundlagen vor allem aus der Geschichte der Morphologie fehlen. Das gleiche gilt natürlich auch für das Werk als „Handbuch": Nicht alles ist darin zu finden, und viele Dinge werden in den verschiedenen Teilen des Buchs aus unterschiedlichen Perspektiven behandelt.

Ulla-Maija Forsberg

Von Sprachkontakten zum Sprachtod oder zur Superdiversität?

Linguistic Genocide or Superdiversity? New and Old Language Diversities. Ed. by Reetta Toivanen and Janne Saarikivi. Linguistic Diversity and Language Rights: 14. Multilingual Matters. Bristol • Buffalo • Toronto 2016. 362 S.

In der Uralistik ist man ständig damit konfrontiert, dass Sprachen, die wir untersuchen, bedroht sind und aussterben. Das Problem beschränkt sich nicht allein auf die uralischen Sprachen, denn unterschiedlichen Schätzungen zufolge sind 50–90 % der Sprachen der Welt vom Aussterben bedroht. Diese Entwicklung wurde vor allem seit dem 20. Jahrhundert durch die Kolonisation, die Modernisierung und die Globalisierung beschleunigt. Als Folge dieser Faktoren sind auch neue Kreolsprachen, Mischsprachen sowie neue ethnische Identitäten, Städter- und Einwanderergruppen entstanden. Die Welt hat sich verändert, und die Veränderung wird immer schneller. Dieser Prozess bringt nicht nur den Tod von Sprachen mit sich, sondern auch eine neuartige – und weitgehend unerforschte – ethni-

sche und sprachliche Variation, die sich nicht nur auf die gesprochene Sprache beschränkt, sondern auch die geschriebene Sprache berührt.

Licht auf diese Fragen wirft das von Reetta Toivanen und Janne Saarikivi herausgegebene Buch, das schon im Titel zwei Perspektiven einander gegenüberstellt: Sprachtod oder Superdiversität. Das Vorwort der beiden umreißt den Inhalt des Werks unter der Überschrift Neue und alte Sprachdiversitäten: Variation und Bedrohung der Sprache in sich wandelnden Minoritätsgemeinschaften. Neben der herrschenden Landessprache werden einige dominierende Weltsprachen auf Kosten der lokalen Sprache und der Mehrsprachigkeit favorisiert. Die stärkste dieser auch als Killer bezeichneten Sprachen ist natürlich das Englische. Es ist in gewisser Weise widersprüchlich, dass die moderne Ausbildung im Zuge ihrer Verbreitung die Vielfalt der Meinungen und Weltanschauungen reduziert und alles vereinheitlicht, was in ihren Einflussbereich gerät. (Dasselbe ist auch in der Kultur zu beobachten: Wenn man der Volksmusik der Mansen oder Mari ein universales Disko-Comping hinzufügt – was heute so oft geschieht – werden sie einander gleicht und verlieren Besonderheit.)

Die 12 Beiträge des Werks sind in drei thematische Gruppen gegliedert, und von einigen Ausnahmen abgesehen steht in ihrem Mittelpunkt eine uralische Sprache. Der erste Teil trägt den Titel Language communities or networks of communication? Old and new linguistic diversity. Im ersten Kapitel dieses Teils befassen sich Niko Partanen und Janne Saarikivi mit der Fragmentierung des Karelischen und der karelischen Gemeinschaft sowie mit den damit verbundenen sprachlichen Prozessen wie der intensiven Entlehnung, dem Kodewechsel, dem Kodekopieren und der Entstehung neuer Konstruktionen, die allesamt die sprachliche Variation vergrößern. Während die Variation in der früheren „ursprünglichen" Sprechergemeinschaft vornehmlich areal, sozial und situativ war, besteht sie in der heutigen erlöschenden Gemeinschaft aus Kodewechsel und Mischsprache. Die Statistiken über die Sprachauffassungen und den Sprachgebrauch der Karelier, die Partanen und Saarikivi bei ihren Feldstudien in Russisch-Karelien gesammelt haben, enthüllen die Unausweichlichkeit des Verschwindens der Sprache. Wie sie unter Hinweis auf Dell Hymes feststellen, bedeutet kommunikative Kompetenz nicht nur die Beherrschung der Grammatik und des Wortschatzes einer Sprache, sondern setzt auch die Teilnahme am Leben

der Sprechergemeinschaft voraus, denn nur durch Teilnahme erlernt ein Kind die sozialen Dimensionen der Sprache.

Heini Lehtonen befasst sich mit der Gestaltung der Sprache und der Wechselwirkung in multiethnischer Umgebung bei Jugendlichen in Helsinki, die sie bereits in ihrer Dissertation untersucht hat. Ihr Material stammt aus zwei Sekundarstufen, deren Schüler rund zwanzig verschiedene Erstsprachen sprechen. Lehtonen untersucht in ihrem Artikel What's up Helsinki? Linguistic diversity among suburban adolescents vor allem, wie und in welchen Funktionen die Jugendlichen Wörter und Ausdrücke anderer Sprachen in unterschiedlichen sozialen Situationen verwenden und wie sie sich mit deren Hilfe in der Gemeinschaft positionieren. Ihrer Ansicht nach sollte man dem sog. Superdiversitätsparadigma gemäß Diversität als Ausgangspunkt der sprachlichen Analyse und nicht als Ausnahme betrachten. Der in den Artikel eingefügte knappe Vergleich mit dem Helsinkier Slang des 20. Jahrhunderts bleibt recht oberflächlich.

Boglárka Janurik untersucht in ihrem Artikel den ersanisch-russischen Kodewechsel in den Sendungen der mordwinischen Radioanstalt *Vajgel'* und stützt sich dabei auf das sog. Kontinuitätsmodell. Diesem Modell zufolge kann man einen Text recht mechanisch in fünf Stadien gliedern, davon ausgehend, welches die Matrixsprache und welches die eingebettete Sprache ist und in welchem Verhältnis beide vorkommen. Janurik schreibt ersanisch mit lateinischen Buchstaben nach den Transliterationsregeln des Russischen, also gewissermaßen so, als handle es sich um Russisch; dadurch wird u.a. die Palatalität der Konsonanten nur am Wortende angezeigt, und diese Schreibweise ist meines Erachtens nicht akzeptabel. Hätte man nicht eher kyrillische Buchstaben verwenden sollen?! – Christian Pischlöger kartiert in seinem Artikel die Verwendung des Udmurtischen in den sozialen Medien und vergleicht sie mit den kymrischen Internetdomänen. Er macht besonders auf den Purismus aufmerksam, der in den udmurtischen Medien begegnet.

Der zweite Teil des Bandes befasst sich mit der Standardisierung von Sprachen und Ethnizitäten und fragt, ob dies eine „mission impossible" sei. Den Anfang macht Hanna Lantto, die die gegenwärtige und historische Wechselwirkung zwischen den beiden Sprachen von Bilbao, dem Baskischen und dem Spanischen, betrachtet. Der Einfluss begann bereits vor zweitausend Jahren mit dem Kontakt zwischen Lateinisch und Baskisch und setzt

sich bis heute fort, nachdem sich das örtliche Latein im Lauf der Zeit zum Spanischen entwickelt hatte. Das Ergebnis ist häufiger Kodewechsel und gegenseitiger Einfluss der Sprachen aufeinander. Lantto zufolge ist schon in spanischsprachigen Dokumenten aus dem 13. Jahrhundert eine starke baskische Interferenz zu beobachten – und schon damals herrschte eine puristische Einstellung zu diesem Phänomen.

Oksana Myshlovska analysiert in ihrem Artikel Nationalising fluid and ambiguous identities den Status und die Ethnizität der ukrainischen Minderheit in Russland und der russischen Minderheit in der Westukraine und untersucht, welche Rolle Status und Ethnizität im politischen und soziolinguistischen Diskurs haben. Sprache ist nicht dasselbe wie Nationalität, sondern beide und die Auffassungen von ihnen variieren in vielerlei Art.

Erika Katjaana Sarivaara untersucht den Wandel der saamischen Sprache und der Identität der Saamen: Von der Assimilation zu Beginn des 20. Jahrhunderts ist man auf den Weg zur Revitalisierung gelangt. Anhand der Äußerungen der Befragten umreißt sie die in Finnland geführte Diskussion über die Frage, wer „richtige" Saamen sind (oder sein dürfen). – Reetta Toivanen analysiert die Situation im mehrsprachigen und von mehreren Kulturen geprägten Inari. Ihrer Ansicht nach basieren persönliche oder Gruppenidentitäten nicht mehr auf Geschlecht, Muttersprache, Ethnizität oder Herkunft, sondern werden durch einen internationalen Bezugsrahmen geformt. Die Identität ist mit anderen Worten heute ein globales Projekt, das den örtlichen Ansprüchen angepasst wird. Toivanen beschreibt den Effekt des internationalen Bezugsrahmens der Menschenrechte auf die Beziehungen zwischen den verschiedenen Bevölkerungsgruppen in Inari, Nord-, Skolt- und Inarisaamen sowie Finnen, und die durch die Bewegung der indigenen Völker beflügelte Entwicklung der Identitäten der Saamen. Finnland hat das Übereinkommen 169 der ILO über indigene Völker bekanntlich immer noch nicht ratifiziert.

Der dritte Teil des Bandes ist der Wiederbelebung der Sprache gewidmet: Language revitalisation: Protection standards or tolerance for variation. Konstantin Zamyatin untersucht den Unterricht der Minderheitensprachen in Russland im Licht der Europäischen Charta der Regional- oder Minderheitensprachen. Russland hat die Charta 2001 unterzeichnet, aber nicht ratifiziert. Die Schulreformen der letzten zwei Jahrzehnte haben die Stellung der Minderheitensprachen an den

Schulen verschlechtert. Der Unterricht in der Minderheitensprache ist freiwillig und wird nur angeboten, wenn die Kinder und ihre Eltern ihn fordern. In einer Situation, in der die Minderheitensprache geringschätzig angesehen wird und ihr Erlernen keinen sichtbaren Nutzen verspricht, fordern die meisten diesen Unterricht nicht, zumal die Auffassung vorherrscht, Zweisprachigkeit sei schädlich. Nur in den Republiken, in denen mehr als die Hälfte der Einwohner zu einer Minderheitsbevölkerung gehört, nämlich in Tschuwaschien, Tatarstan und Baschkortostan, wird die Minderheitensprache teilweise auch als Unterrichtssprache verwendet, in allen anderen Gebieten kann sie nur Unterrichtsfach sein. Interessanterweise ist in diesen Republiken auch die Position der dort gesprochenen kleineren Sprachen besser als in den nach ihnen benannten Republiken. Mit anderen Worten werden zum Beispiel Mari und Udmurtisch in den marischen und udmurtischen Dorfschulen in Tatarstan und Baschkortostan als Unterrichtssprache verwendet, nicht aber in den Schulen der Republiken Mari und Udmurtien.

Johanna Laakso untersucht den Begriff Sprachdiversität in ihrem Artikel Metadiversity, or the uniqueness of the lambs. Zwar wird in vielen europäischen Staaten die Sprachdiversität als Ziel der Sprachpolitik genannt, doch wird sie eher geduldet als gefördert, es handelt sich also nur um leere Worte. Laakso stützt sich bei ihren Thesen weitgehend auf die Resultate des von ihr geleiteten ELDIA-Projekts (European Language Diversity for All). Dieselbe umfangreiche Erhebung von ELDIA verwenden Ulriikka Puura und Outi Tánczos in ihrem Artikel über den Revitalisierungsdiskurs des Karelischen und Wepsischen. 2004 wurde ein Gesetz über staatliche Unterstützung für das Karelische, Wepsische und Finnische erlassen, und das Wepsische erhielt im Jahr 2000 den Status der zahlenmäßig kleinen indigenen Völker Russlands. Aktive Maßnahmen zur Wiederbelebung der Sprachen gibt es jedoch kaum, und statt von Revitalisierung spricht man von Bewahrung. Die Bewahrung der Sprache wird mit der traditionellen Kultur verknüpft und tritt nicht als selbständige Frage hervor. Die Identität der Menschen ist eher lokal als national.

Das Thema der Untersuchung von Svetlana Edygarova sind die permischen Sprachen und die Ideologie, die deren Standardsprache hervorhebt: Nach dem Muster des Russischen wird im öffentlichen Gebrauch keine dialektale Ausdrucksweise, sondern nur die sog. Standardsprache akzeptiert. Wie

Edygarova feststellt, ist die Standardsprache für viele eine fremde Sprachform, denn sie wird selten verwendet, in der Schule unzureichend gelehrt, und die Sprecher haben keine emotionale Bindung an sie. Aus demselben Grund werden auch viele in den letzten Jahrzehnten geschaffene Neologismen abgelehnt. Im Hinblick auf die Erhaltung der Sprache vertritt diese Einstellung eine falsche Strategie: Wenn man den Sprechern eine fehlerhafte oder dialektale Sprache attestiert, werden sie nicht ermutigt, die Sprache zu verwenden, sondern ihr eher entfremdet.

Das Werk Linguistic genocide or superdiversity untersucht den Wandel der Minderheitensprachen und ihrer Sprachgemeinschaften. Wie die Herausgeber Saarikivi und Toivanen in ihrem Vorwort feststellen, streben sie keine Dekonstruktion der traditionellen Sprachgemeinschaften an, sondern wollen zeigen, dass der Begriff Superdiversität jene neuen sprachlichen und ethnischen Identitäten widerspiegelt, die entstehen, wenn die alte Lebensweise der Sprachgemeinschaften schwindet. Insgesamt bietet das Werk eine neuartige Perspektive auf die Situation der uralischen Sprachen und deren Erforschung und öffnet ein neues Fenster für die Untersuchung des Wandels dieser Sprachen.

Sirkka Saarinen

Etymologische Erörterung ungarischer Wörter

László Honti: *A magyar* és *a nyugati ótörök szókészleti kapcsolatairól* [Über die lexikalischen Beziehungen zwischen dem Ungarischen und dem Westalttürkischen]. Segédkönyvek a nyelvészet tanulmányozásához 196. Budapest: Tinta könyvkiadó 2017. 218 S.

László Honti, der Grand Old Man der Ostjakologie und der finnisch-ugrischen Sprachgeschichte, ließ sich durch das 2011 von András Róna-Tas und Árpád Berta veröffentlichte zweibändige Wörterbuch (*West Old Turkic. Turkic loanwords in Hungarian*) dazu anregen, eine Stellungnahme zu den in diesem

Wörterbuch als ungesichert bezeichneten türkischen Etymologien zu verfassen. Hontis Erörterung beschränkt sich nicht auf die türkischen Hypothesen der erwähnten Wörter, sondern er behandelt diese fast 50 Wörter gründlich und betrachtet ihre gesamte Forschungsgeschichte mit allen Quellen. Jedes Wort erhält ein eigenes Kapitel, in dessen erstem Teil er detailliert alles durchgeht, was in der etymologischen Literatur jemals darüber geschrieben wurde, während der zweite Teil aus seinen eigenen Kommentaren und deren Resultat besteht. Ein Teil der Wörter kann seiner Ansicht nach als türkische Entlehnung gelten, für einen Teil findet sich eine andere Etymologie oder ihre Herkunft bleibt unbekannt.

In Ungarn wurden in der zweiten Hälfte des 20. Jahrhunderts vier bedeutende etymologische Wörterbücher veröffentlicht: *A magyar nyelv történeti-etimológiai szótára* (= TESz 1–4, 1967–1984), *A magyar szókészlet finnugor elemei* (= MSzFE 1–4, 1967–1981), *Uralisches etymologisches Wörterbuch* (= UEW 1–3, 1988, in dessen Redaktion Honti selbst mitwirkte) und *Etymologisches Wörterbuch des Ungarischen* (= EWUng 1–3, 1993–1997). MSzFE und UEW wurden vorwiegend von Finnougristen verfasst, TESz und EWUng eher von Hungarologen. In gleichaltrigen Wörterbüchern (TESz vs. MSzFE, UEW vs. EWUng) gelangt man (auch bei den in Hontis Werk erwähnten Wörtern) erstaunlich oft zu völlig unterschiedlichen Herkunftserklärungen, für ein Wort können also, je nach dem jeweiligen Wörterbuch, mehrere verschiedene Ursprünge postuliert werden.

Unter den Wörtern, die in Hontis Werk behandelt werden, sind viele hochfrequente Wörter, deren Herkunft unklar ist. Beispielsweise wurde das Wort *úr* 'Herr' (und das nach dem Vorbild des Deutschen und der slavischen Sprachen davon abgeleitete *ország* 'Staat') als iranisch, türkisch und finnisch-ugrisch betrachtet. Honti zufolge kann *úr* als Verschmelzung eines auf die finnisch-ugrische Ursprache zurückgehenden Wortes und eines türkischen Lehnwortes gelten (S. 71–72). Zur selben Schlussfolgerung gelangt er auch in einigen anderen Fällen. Da die ungarischen Wörter lautlich abgeschliffen sind, sich also häufig auf nur eine Silbe verkürzt haben, sind unter ihnen viele Homonyme, d.h. die Grenzziehung zwischen Homonymie und Polysemie ist von zentraler Bedeutung. Die lautliche Abgeschliffenheit erschwert auch die Konstruktion unbestreitbarer etymologischer Erklärungen.

Hontis Werk enthält zahlreiche interessante Beobachtungen. Er erklärt u.a., weshalb *sajtó* 'Presse;

Zeitung' etymologisch derselben Wortfamilie zugeordnet werden könnte wie *sajt* 'Käse' (50–51), weist nach, dass ungarisch *táltos* 'Seher, Magier' ugrischer (und nicht türkischer) Herkunft ist (62–67), und legt dar, wie die Stammformen der Wörter *mese* 'Märchen; Rätsel' und *magy(ar)* 'ungarisch' durch Kontamination und semantische Entwicklung zusammengefallen sind (dieses Kapitel ist das längste des Werks: 129–147).

Ein separates Kapitel widmet Honti der Vertretung der Sibilanten der Ursprache in den heutigen ugrischen Sprachen (168–178). In einem eigenen Kapitel erörtert er auch das mögliche Vorkommen der Geminat-Affrikate bereits in der finnisch-ugrischen Ursprache (178–188). Unetymologische Konsonanten (hauptsächlich das in einigen Wörtern der ungarischen Gegenwartssprache vorkommende *g*) behandelt Honti im Kapitel 32 und dessen Unterkapiteln (101–117). Er führt das rätselhafte *g* in den Akkusativformen des 1. und 2. Personalpronomens im Ungarischen (*engem, téged*) auf **ηk* zurück, auf dasselbe betonende Suffix, das den Personalpronomina im Mansischen angefügt wird.

Hontis Werk kann über die vorgelegten Ergebnisse zur Wortgeschichte hinaus als gutes Lehrmaterial der etymologischen Forschung gelten: Zusätzlich zur Analyse der Lautgestalt muss man die verwandten Sprachen und ihre Dialekte einbeziehen. Man muss auch die Ableitungen und Komposita betrachten, sofern sie zusätzliche Informationen über die Bedeutung des Wortes bieten (vgl. z.B. den Vergleich identischer Ableitungstypen im Zusammenhang mit den Verben *gyúl* 'sich entzünden' und *gyújt* 'anzünden' [37–38]). Man muss andere (verwandte) Sprachen und die dort begegnenden Parallelen vor allem bei der Entwicklung der Semantik der Wörter untersuchen. Auch in frühen Untersuchungen kann man gelegentlich Hinweise und wertvolle Informationen finden, darf also auch sie nicht geringschätzen. Etymologische Forschung erfordert die Genauigkeit und Geduld eines Uhrmachers. In vielen Fällen ist das Ergebnis dieser Arbeit ein Puzzlespiel, in dem jedes Teil seinen Platz findet, d.h. die Herkunft des Wortes wird geklärt. Nicht immer gelangt man anhand des verfügbaren Materials zu einer eindeutigen Lösung. Hontis Werk bietet begründete Lösungen für viele etymologische Rätsel. Gleichzeitig führt es den Leser auf interessante Forschungsreisen in die Geschichte der Wörter und ihrer Bedeutungen.

Sirkka Saarinen

Literatur

EWUng = *Etymologisches Wörterbuch des Ungarischen 1–3*. Hrsg. Loránd Benkő. Akadémiai Kiadó. Budapest 1993–1997.

MSzFE = *A magyar szókészlet finnugor elemei I–IV*. Hrsg. György Lakó. Akadémiai Kiadó. Budapest 1967–1981.

Róna-Tas, András & Árpád Berta: *West Old Turkic. Turkic loanwords in Hungarian. Part 1: Introduction, Lexicon: "A–K"*. Turcologica 84. Harrassowitz Verlag. Wiesbaden 2011.

Róna-Tas, András & Árpád Berta: *West Old Turkic. Turkic loanwords in Hungarian. Part 2: "L–Z". Conclusions, Apparatus*. Turcologica 84. Harrassowitz Verlag. Wiesbaden 2011.

TESz = *A magyar nyelv történeti-etimológiai szótára 1–4*. Hrsg. Loránd Benkő. Akadémiai Kiadó. Budapest 1967–1984.

UEW = *Uralisches etymologisches Wörterbuch I–III*. Hrsg. Károly Rédei. Akadémiai Kiadó – Otto Harrassowitz. Budapest – Wiesbaden 1988.

Detachment constructions in European languages and beyond

M. M. Jocelyne Fernandez-Vest: *Detachments for Cohesion. Toward an Information Grammar of Oral Languages*. Empirical Approaches to Language Typology 56. De Gruyter Mouton 2015. XVII + 290 pp.

The book, as its title illustrates, examines Detachment Constructions in oral languages from various perspectives. The term *oral languages* includes both strictly oral languages without a written tradition and the spoken variants of written languages. The use of Detachment Constructions is presented in several different discourse styles cross-linguistically, comparing European languages belonging to the Indo-European and the Finno-Ugric groups, and also considering other languages briefly.

Dislocated NPs either in front or at the end of utterances are traditionally referred to as detachments (or dislocations). Detachment Constructions are used mainly in spoken languages as a device for information structuring. They usually mark the topic when it is inactive in the hearer's consciousness. (Lambrecht 1994, 181–184.)

The author distinguishes Initial and Final Detachments and introduces previous research to exemplify their different functions. Initial Detachments usually share

common reference with the Theme and are used to introduce new topics. Final Detachments, on the other hand, often share common reference with the Rheme or other elements in the shared knowledge, and they function as Mnemes and ensure cohesion in the discourse. Moreover, Initial and Final Detachments diverge morphosyntactically as well: on Final detachments, the grammatical function is marked, whereas Initial Detachments are left without marking as a rule. Furthermore, Detachments can have different roles depending on context. This is demonstrated with the analysis of argumentations: in monological argumentation, detachments can be used for convincing, while in dialogical reasoning, they can have a highlighting function.

Orality and the features of oral languages are one of the central issues of the book. The relationship of oral and written language has been inadequately investigated so far. The author fills this gap with the comparison of different text types in their written and spoken form. Detachments, as is expected, are found more often in the spoken register than in the written form. However, the type of discourse also influences their occurrence. Apart from the Information Structuring devices of oral languages, their structure – which relies mostly on prosody – and their constituent order also differ from that of written texts. Additionally, there are language specific differences between spoken and written registers: the analytic constructions of spoken Finnish, for example, are often replaced with Non-Finite Constructions in writing.

The author also ventures to study how Detachments are delivered in oral translation. This task is challenging due to the lack of appropriate material. Thus, the author resolves to compare theater lines and translations of comics in Finno-Ugric and Indo-European languages, also considering Asian languages briefly. The texts for comparison were chosen carefully, with special attention paid to their oral features. The theatre lines in comparison provide evidence of the differences in Information Structuring between French, Finnish and Estonian. The comic translations show how different languages accept the use of detachments. Initial Detachments are used in all of the languages, while the delivery of Final Detachments is usually more problematic. The translations of the comics in some of the topic-prominent Asian languages, which consider the notion of topic more central than the notion of subject (Li and Thompson, 1976, 459–461), show that detachment constructions are used in a wide variety of

languages. The comic translations also provide evidence that detachments may show different behavior even in closely related languages. All in all, it seems fruitful to investigate detachments and other information structuring devices cross-linguistically in further detail.

Detachments are usually combined with other Information Structuring devices in spoken languages. Among these, the book introduces Discourse Particles and intonation in more detail. Discourse Particles are used widely in colloquial Finnish, but their use is excluded from official and planned discourses. The comparison of oral and written Finnish proves that Discourse Particles play a crucial role in the Information Structuring of the spoken register, and their absence in the written register changes the communicative impact of the text. The use of Discourse Particles is further investigated in the other Finnic languages. For this purpose, the author has chosen to compare proverbs, which emerge from the oral tradition. Discourse Particles are used in the Finnish proverbs more often than in the other Baltic-Finnic, Scandinavian and Germanic ones. Discourse Particles provide cohesion in these utterances and emphasize the rhythmic dimension of oral syntax. The influence of prosody on Information Structure has already been pointed out by Lambrecht (1994, 225), for example. Fernandez-Vest brings forth more evidence on this matter from Indo-European languages and also exemplifies it with previous research on Mandarin Chinese, in which tones, stress and intonation all exist and all have different functions.

Detachments in change, under the influence of language contact situations and grammaticalizations, are introduced only briefly in the book. This issue has been especially poorly investigated so far and needs to be researched further. The author exemplifies the possible outcomes of language contacts on Information Structuring with Swedish-Finnish and Californian Finnish. Swedish-Finnish serves as a good example on the change of Mnemes: as Swedish lacks a case system as extensive as that of Finnish, native Swedish speakers do not necessarily mark grammatical roles on Mnemes when they speak Finnish. The case of Californian Finnish, on the other hand, shows that speakers use different strategies in Information Structuring than those used by standard English and Finnish speakers. For example, a large variety of accent variants are used in their Finnish speech, which is atypical in standard Finnish. Unfortunately, this chapter in the book is rather short, probably due to the lack of material available.

The influence of standardization on the Northern Saami Detachment Constructions, is, however, better elaborated. The Northern Saami data analyzed in the book was collected at the time of creating the written standard for the language. The influence of neighboring languages on spoken Saami is visible: as an example, the Discourse Particles that are used by the older generation are replaced by adverbs of emphasis or cleft constructions, which are used in the Scandinavian languages for Information Structuring. Detachment Constructions, on the other hand, are better preserved, Initial Detachments especially. Final Detachments are used to some degree in written Saami as well, which may be supported by their use in colloquial Finnish. However, as their use is limited in other registers of Finnish and they are excluded from the Scandinavian languages, they may fall out of use.

There are some inconsistencies concerning example sentences throughout the book. In the analysis of Example (5) on page 13, the author refers to lines that are not included in the example and cannot be accessed in any way as they are from a private archive. Furthermore, in some examples, the translation may contain inaccuracies, but the example sentences are still understandable even without knowledge of the original languages.

The inconsistencies in the numbering of example sentences make it difficult to search for examples mentioned in other parts of the book. On page 59, for instance, the author refers to Saami answers and advises the reader to look for them in Example (44). This, however, is a French example sentence. Such irregularities occur several times in the book, but in most of the cases the relevant examples are repeated.

In conclusion, the book provides a good overview of the characteristics of detachments cross-linguistically and takes initiative towards the establishment of information grammar of oral and spoken languages. Many of the issues discussed in the book have been inadequately researched so far, and the author has managed to show a possible way towards their more profound investigation.

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Sprachmaterial und Grammatik zum livländischen Livisch

Salis-Livisch I. J. A. Sjögrens Manuskript. Ediert, glossiert und übersetzt von Eberhard Winkler und Karl Pajusalu. Veröffentlichungen der Societas Uralo-Altaica Band 88. Göttingen: Harrassowitz Verlag 2016. 392 S.

Salis-Livisch II. Grammatik und Wörterverzeichnis. Auf der Grundlage von J. A. Sjögren Sprachmaterialien verfasst von Eberhard Winkler und Karl Pajusalu. Veröffentlichungen der Societas Uralo-Altaica Band 89. Göttingen: Harrassowitz Verlag 2018. 403 S.

Das von J. A. Sjögren gesammelte und von F. J. Wiedemann herausgegebene Material der livischen Sprache (Wiedemann 1861a), das eine Grammatik und Sprachproben enthält, und das Wörterbuch des Livischen (Wiedemann 1861b), beide 1861 erschienen, sind eine einzigartige Quelle für die Erforschung des Livischen. Sie umfassen neben dem auch im 20. Jahrhundert in der Gemeinschaft gesprochenen Kurland-Livischen auch das im 19. Jahrhundert erloschene Salis-Livische. Die hier zu besprechenden Werke *Salis-Livisch I* und *Salis-Livisch II* im Folgenden der Einfachheit halber SL I und SL II) sind ein wichtiger Beitrag zu diesem Komplex. SL I liefert eine Sprachprobe, die aus den Manuskripten Sjögrens besteht, aus denen Wiedemann (1861a) die gedruckte Sprachprobe zusammengestellt hat. SL II enthält eine Grammatik und ein Wörterverzeichnis, die auf der Grundlage dieser Texte erstellt wurde. Beide Verfasser haben sich eingehend mit der Erforschung des Livischen befasst. Eberhard Winkler hat alte livische Materialien in modernen Formen herausgegeben, darunter auch salis-livisches Material (Winkler 1994), und Karl Pajusalu hat die Phonologie und den Wortschatz des Livischen untersucht.

SL I umfasst 392 Seiten und enthält sechs Hauptkapitel. Kapitel 1 bietet einen Überblick über Sjögrens Manuskripte und deren Hintergrund. Es enthält drei eigene Hauptkapitel und bildet ein eigenständiges Ganzes. Das 1. Kapitel dieses Teils gibt Informationen über Sjögrens Livland-Reise (1.1), über die Informanten (1.2) und ihre Livischkenntnisse (1.3), über die Kommunikation zwischen Sjögren und den Informanten (1.4) und über Sjögrens Arbeitspensum (1.5). Kapitel 2 informiert über Aufbau und Inhalt der Manuskripte. In

diesem Kapitel geht es einerseits um die äußere Gestalt der Manuskripte (2.1) und andererseits um inhaltliche Gesichtspunkte (2.2). Der letztere Teil ist weiter untergliedert in Wörterverzeichnis (2.2.1) und Sätze (2.2.2). Die Sätze werden in vier Unterkapiteln vorgestellt: Sätze ohne Vorlage (2.2.2.1) und solche mit Vorlage (2.2.2.2), Rätsel (2.2.2.3) und Übersetzungen von Bibelstellen (2.2.2.4). In Kapitel 3 wird dargestellt, was mit den Manuskripten geschah, als Wiedemann sie für den Druck redigierte. Zuerst werden die Teile von Wiedemann 1861a, die Salis-Livisches enthalten, in Form eines Inhaltsverzeichnisses vorgestellt; darauf folgt eine Tabelle, die anschaulich zeigt, welcher Teil des Manuskripts an welcher Stelle in Wiedemann 1861 vorkommt (3.1). Danach sind die Unterschiede in der Schreibung (3.2) und die Mängel der Wiedemannchen Edition (3.3) an der Reihe. Der letztere Teil gliedert sich in Fragen des Umfangs der Sprachprobe (3.3.1) und in inhaltliche Fragen (3.3.2).

Das Kapitel 1 enthält mit seinen den Text veranschaulichenden Abbildungen und Tabellen ein kompaktes Informationsmaterial über die von Sjögren gesammelten Materialien und ihre Hintergründe. Der Hintergrund der Manuskripte wurde gründlich untersucht. Auch diejenigen, die Wiedemann 1861a sorgfältig gelesen haben, sollten sich mit den gegebenen Informationen vertraut machen. Es handelt sich um Gesichtspunkte, die die Zuverlässigkeit des Materials betreffen. In ihrem Licht verdrängt SL I Wiedemann 1861a hinsichtlich der salis-livischen Sprachproben.

Kapitel 2 des Gesamtwerks präsentiert den Inhalt der Manuskripte insgesamt in heutiger Schrift. In Kapitel 3 werden die Texte des Kapitels 2 in Sätze, Satzgefüge und Phrasen geteilt und nummeriert sowie mit morphemweisen Übersetzungen, d.h. Glossen angeführt. Die deutschen Übersetzungen und Sjögrens kommentierende schwedische Übersetzungen stehen nebeneinander. Bei der Erstellung der Inhalte dieser Kapitel wurde gewaltige Arbeit geleistet. Schon die Elektronifizierung der Manuskripte in Kapitel 2 ist arbeitsaufwendig. Kapitel 3 enthält nach den Berechnungen des Rezensenten insgesamt 2156 Sätze, Satzgefüge und Phrasen, deren Glossierung gründliche Sachkenntnis erfordert. Zwar wurde der Grammatikteil SL II erst zwei Jahre später veröffentlicht, doch lässt bereits SL I die Materialkenntnis der Verfasser und ihre Sicherheit im Umgang mit grammatikalischen Fragen erkennen.

Die umfassende Analyse der grammatischen Einheiten enthält jedoch auch unklare Kommentare,

die im später erschienenen SL II nicht erklärt werden. Auf diese komme ich im Zusammenhang mit SL II zurück.

Kapitel 4 enthält ein Verzeichnis neuer Wörter sowie derjenigen Wörter, die sich deutlich von dem Wörterbuch des Salis-Livischen unterscheiden, das die Verfasser früher herausgegeben haben (Winkler – Pajusalu 2009), Kapitel 5 verzeichnet die Abkürzungen und Kapitel 6 die Quellen.

Der Band SL II über Grammatik und Wortschatz umfasst 403 Seiten und besteht aus vier Hauptkapiteln: zur Orthografie (I), zur Phonologie (II), zur Morphologie und Morphosyntax (III), zu den syntaktischen Grundeigenschaften (IV), sowie zum Wortschatz in Sjögrens Manuskripten und dem Register. Diese Kapitel enthalten 4–5 eigene Unterkapitel, deren Nummerierung jeweils mit 1 beginnt. Der Band enthält ferner Korrekturen zu in SL I dargelegten Fragen, den Wortschatz in Sjögrens Manuskripten, ein deutschsprachiges Register des Wortschatzes, Anhang 1 Sprichwörter in salis-livischer Sprache, Anhang 2 ein kontrastives Wörterverzeichnis zu Sjögrens Manuskripten und älteren Quellen, Abkürzungen und Quellen. Für die Kapitel I und II sowie III 4.1 (die Unterkapitel 4.1.1–4.1.9 über die Verbstammtypen) zeichnet Karl Pajusalu verantwortlich, für den Rest Eberhard Winkler (S. 14).

SL II on ein Musterbeispiel dafür, dass man in einer Grammatik nicht immer ein Sachregister benötigt. Die Inhalte der Kapitel I–IV sind mit ihren eigenen Hauptkapiteln und deren Unterkapiteln exakt nummeriert. Diese Kapitel enthalten insgesamt 19 Hauptkapitel, 68 Unterkapitel, 68 Unterkapitel der Unterkapitel und 56 Unterkapitel zu diesen. Durch diese Gliederung findet der Leser mühelos, was er sucht. Dass jedes Hauptkapitel wieder mit der Nummer 1 beginn, ist keine übliche Lösung, doch gerade sie schafft die Balance zwischen dem minutiös aufgegliederten Inhalt und einer vernünftigen Nummerierung. Auch im Hinblick auf den Seitenumfang der Grammatik – 174 Seiten – ist diese Lösung sinnvoll. Vor der Lektüre der Hauptkapitel kann man sich die Liste der Korrekturen zu SL I ansehen. So hat der Leser, der SL I durchgearbeitet hat, sofort Gelegenheit, Sachverhalte zu überprüfen.

Kapitel I bietet eine klare und kompakte Darstellung der Orthografie der Manuskripte Sjögrens und des vorliegenden Buches. In Kapitel II wird die Phonologie des Salis-Livischen unter intensiver Nutzung der in Sjögrens Manuskripten enthaltenen Wortfamilien dargestellt; dieses Kapitel erfüllt die informativen Anforderungen

an eine Beschreibung der Phonologie in einer modernen Grammatik in jeder Hinsicht, von der Darstellungsweise bis zu den behandelten Themen. Viele Leser dürfte auch erfreuen, dass das Kapitel unter Berücksichtigung der gesamten livischen Sprache geschrieben ist, auch wenn die Darstellung als solche sich auf das Salis-Livische konzentriert.

Kapitel III über Morphologie und Morphosyntax beginnt mit den Nominalstammtypen. Die Darstellung schreitet vom sachlich und kompakt präsentierten Numerus zum Kasus fort. Hier beginnt eine aus der finnougristischen Grammatiktradition bekannte Lösung: Im Zusammenhang mit der Darstellung der morphologischen Elemente wird auch ihre Verwendung, d.h. die Morphosyntax dargestellt. Zum Anteil der Morphosyntax merkt der Verfasser warnend an, dass es sich um eine Aufzeichnung handelt und das Material für eine Darstellung der gesamten Grammatik nicht ausreicht (S. 80). In diesem Kapitel wird neben der Verwendung der morphologischen Elemente auch diejenige von Wörtern verschiedener Wortklassen dargestellt. Die Darstellung setzt sich bis ans Ende des Kapitels III so fort, dass sich die Morphologie jeder Wortklasse und ihre Morphosyntax abwechseln. Kapitel III enthält viele informative und nützliche Tabellen und Verzeichnisse (S. 73, 77, 93, 98, 113–115, 131–132, 145–145, 150). Andererseits werden in eigenen Kapiteln Themen dargestellt, die keine Behandlung in separaten Kapiteln erfordert hätten und inhaltlich nicht mit dem Kapitel III harmonieren. Um zwei Beispiele anzuführen, seien Kapitel 1.4.3 über den Intensiv (S. 89) und Kapitel 2.6 über das Possessivpronomen (S. 101) genannt. Der erstere hat nichts mit der Morphologie zu tun, um die es in Kapitel III geht, und das letztere hätte im Zusammenhang mit den Personalpronomina behandelt werden können, wenn es nun einmal keine Possessivpronomina gibt.

In diesem Kapitel wird auch auf eine aus der Sicht der Grammatik recht bedeutungslose Frage eingegangen. Beispielsweise thematisieren die Verfasser auf Seite 85 die Verwendung des Terminus Dativ in der Dissertation des Unterzeichneten (Inaba 2015: 110–111); der Unterzeichnete hat auch für die Kasusform, die die Verfasser als Adessivallativ bezeichnen, den Terminus Dativ verwendet, mit der Begründung, dass in meinem salislivischen Material der größte Teil der Wörter im *l*-Kasus der Funktion nach habitiv sind, d.h. mit Belebtem verbunden. Es handelt sich um eine eher technische Entscheidung, die aufgrund der Frequenz von Wörtern im *l*-Kasus mit unterschiedlicher

Funktion getroffen wurde und darauf zurückzuführen ist, dass der Unterzeichnete die *l*-Kasus des Salislivischen im Vergleich zum kurland-livischen Dativ untersucht hat. Auf eine solche Frage einzugehen, ist in einer grammatikalischen Darstellung völlig überflüssig, zumal die Verfasser selbst trotz ihres als umfangreich bezeichneten Beispielmaterials nicht wesentlich mehr Beispiele für die lokale Verwendung der *l*-Kasus vorlegen als der Unterzeichnete und einige dieser Beispiele nicht rein lokal sind (Beispiele (66) und (69)). Anstelle dieser terminologischen Problematik hätte man viele Punkte durch kurze Hinweise auf entsprechende Phänomene im Kurland-Livischen erhellen können. Einer dieser Punkte ist die dativische Verwendung des Genitivakkusativs der Personalpronomina (s. S. 82; 174–175). Ebenso hätten die Verfasser im Zusammenhang mit der dativischen Verwendung des Genitivakkusativs und den *l*-Kasus Angaben über die Häufigkeit der Belege machen können. So ist etwa das Beispiel (91) auf Seite 86 *ood ome-lt sie pinn jära* hüten.Imp2Sg Refl-Abl Dem.GA Hund.GA Vpa 'Hüte dich vor dem Hunde' auch unter Einbeziehung der allgemein verfügbaren kurlandlivischen Korpora das einzige, in dem ein Belebtes bezeichnendes Wort in habitiver Funktion im Ablativ begegnet (s. Inaba 2015: 125–126). Solche Informationen würden Licht auf die Repräsentativität der Beispiele werfen. Bei dem erwähnten Beispiel (S. 86) begnügen sich die Verfasser jedoch mit demselben verwunderten Kommentar wie bei dem betreffenden Satz auf Seite 216 von SL I. Kam ihnen nicht in den Sinn, dass es sich um semantische Äquivalenz handelt?

In Kapitel IV geht es um die syntaktischen Grundeigenschaften, womit Satztypen, Strukturen, grammatische Funktionen, Kongruenz und grammatische Funktionen des Satzes gemeint sind. Gleich zu Beginn wird vor drei Faktoren gewarnt, die in diesem Kapitel eine Rolle spielen: 1) Sjögren sprach weder lettisch noch livisch, so dass er die Texte mithilfe eines Dolmetschers erhielt, der des Lettischen mächtig war, 2) die Texte sind mehr oder minder Übersetzungen, 3) die sprachliche Kompetenz zweier Informanten war offenbar geschwächt, denn sie berichteten von Gesprächen mit anderen Sprechern des Livischen.

In diesem Kapitel ist die Anordnung der behandelten Themen recht verworren. Beispielsweise werden in Kapitel 2 die zu den sog. Basissatztypen gehörenden Themen, wie Prädikativsatz, Possessivsatz und Existentialsatz, auf der gleichen Ebene behandelt wie die anhand der Nominalformen des Verbs gebildeten Konstruktionen. Bei der Lektüre des

Kapitels mag beim Leser die Frage aufkommen, aus welchem Grund die einzelnen Themen zur Behandlung ausgewählt wurden und an wen sich die Darstellung richtet. Dies liegt teilweise daran, dass in der Grammatik einige Termini benutzt werden, deren Verwendung als Kapitelüberschrift zumindest im finnougristischen Kontext ungewöhnlich ist. Hierzu gehören das direkte und indirekte Objekt (S. 171 §4.3.1 Direktes Objekt und S. 174 §4.3.2 Indirektes Objekt; s. auch S. 80 und S. 85). Eine solche terminologische Lösung kennt man aus Grammatiken derjenigen germanischen Sprachen, deren Kasussystem sich vereinfacht hat, so dass ein und dieselbe Form je nach der Position sowohl das Akkusativ- als auch das Dativobjekt vertritt. Im Salis-Livischen betrifft eine vergleichbare Situation nur die Genitiv-Akkusativ-Formen der Personalpronomina (im Singular), während Substantive in dativischer Funktion mit dem Allativadessiv markiert werden, der nicht zur Markierung des (Akkusativ)objekts verwendet wird. Daher bleibt der Grund für die Entscheidung in SL II unklar und man kann den Eindruck gewinnen, dass die salis-livischen Entsprechungen anhand der Grammatik einer der erwähnten germanischen Sprachen dargestellt wurden. Unklar bleibt auch, aus welchem Grund bei den anderen Komplementen nur die elativischen, illativischen und translativischen Satzglieder einbezogen wurden (4.3.3, S. 175–177). Andererseits enthält das Kapitel 2.2 (S. 137) über das Prädikativum nur Sätze mit dem Verb *old*. Ein Teil der zu dieser Kategorie gehörenden Sätze (s. Viitso 2008: 342; Inaba 2015: 153–167) wird in Kapitel 2.6 über das Futur behandelt (S. 160). Hinsichtlich der in der Grammatik zu behandelnden Themen und der zu verwendenden Termini hätte man sich an den Grammatiken der mit dem Livischen nahe verwandten Sprachen Estnisch und Finnisch oder direkt an den Beschreibungen des Kurland-Livischen (z.B. Viitso 2008: 315–345) orientieren können. In diesem Kapitel, wie auch in Kapitel III, hätte man die früheren Untersuchungen zur livischen Sprache durch Verweise stärker nutzen können. Die Verweise sind jedoch minimal.

Die erwähnten Mängel beeinträchtigen das Verständnis nicht. Im Hinblick auf die Kommentare zu den Sätzen in SL I hätte man jedoch gerade von der Grammatik in SL II Präzisierungen erwartet. Um ein Beispiel zu erwähnen: In SL I steht auf Seite 320 der Satz *tä-d-l vajag puude-l oll* ihr-Pl-Adal nötig rein-Adal sein.Inf 'Ihr müsst reinlich sein'. Im Kommentar zu diesem Satz heißt es, die (Kasus)kongruenz des Infinitiv-Subjekts *tädl* und des Infinitiv-Prädikativs *puudel* entspreche wahrscheinlich dem Muster

des Lettischen. Ein ähnlicher Kommentar wird auf S. 326 zu dem wort *rikkel* in dem Satz *mis sie ääbt-is rikke-l oll?* IPR DEM helfen-PRÄT reich-ADAL sein.INF 'Was half es, reich zu sein?' gegeben und betont, dass es sich nicht um echtes Livisch handelt. Gerade zu solchen Kommentaren hätte man in der Grammatik in SL II Präzisierungen erwartet, die jedoch nicht gegeben werden. Das Thema wird weder in dem Kapitel über die Verwendung des Adessivallativs noch im Kapitel über das Prädikativum erwähnt (s. S. 84–86 ; 157 §2.2; vgl. Inaba 2015: 153–167).

Die Kapitel III und IV enthalten einige Fehler hinsichtlich der Beispiele, die im Widerspruch zu in denselben Kapiteln dargestellten Sachverhalten stehen. Um zwei zu erwähnen: Bei dem Beispiel (29) auf Seite 82 ist bei dem genetivakkusativischen Satzglied nicht von Inkongruenz, sondern von Halbkongruenz zu sprechen (s. S. 182). Die Worte *sinn* und *tänn* in den Beispielen (713), (715) und (716) auf Seite 175 (s. auch S. 176 Beispiel (722)) sind nicht illativisch, sondern lativische Formen von Adverbien mit unvollständigem Paradigma, die nur von ihrer Funktion her den illativischen Formen der Substantive entsprechen (s. 149).

Der Wortschatz der Manuskripte Sjögrens ist klar dargestellt und angenehm gesetzt. In vielen Wortartikeln werden die Varianten der Belege übersichtlich nach morphologischen Kategorien gegliedert. Man kann das Wörterverzeichnis also nutzen, um die konkreten Belege der Wörter zu klären, ohne die Sätze in SL I zu lesen. Auch das Register zum Wortschatz (S. 333–355) gibt Aufschluss darüber, welche Wörter in den Manuskripten begegnen.

Der erste der beiden Anhänge enthält 36 Sprichwörter in salis-livischer Sprache, die dem von Mälk et al. herausgegebenen Werk entnommen wurden. Das kontrastive Wörterverzeichnis der Manuskripte Sjögrens und anderer alter Quellen in Anhang 2 informiert übersichtlich darüber, welche Wörter der Manuskripte in welcher Quelle und in welcher Form begegnen.

SL I und II bilden eine hervorragend verwirklichte Gesamtheit, die von der Sprachprobe bis zur Grammatik die lückenhaften und verfälschten Informationen über das Salis-Livische ergänzt und korrigiert, die u.a. in Wiedemann 1861a gegeben werden. Die Erstellung der Bände hat selbst bei Verwendung elektronischer Texte einen enormen Arbeitsaufwand erfordert. Die Bedeutung des Resultats dieser Arbeit für alle, die sich mit der Erforschung des Livischen beschäftigen, ist unbestreitbar, und SL I und II werden zweifellos in ihrem Kreis

breite Verwendung finden. Andererseits weckt u.a. SL II trotz der gelungenen Gesamtheit eine ironische Frage: Wäre eine allein auf das Salisch-Livische konzentrierte Grammatik nötig gewesen? Wer braucht so etwas? Aufgrund des geringen Umfangs des erhaltenen Materials liegt die größte Bedeutung des Salisch-Livischen im Vergleich mit dem Kurland-Livischen als Teil der livischen Sprache und in der Gesamtheit der ostseefinnischen Sprachen, d.h. im diachronen Kontext des Ostseefinnischen. Insofern hätte der grammatische Teil von SL II mit einem etwas einheitlicheren Ansatz geplant und verwirklicht werden können. Wie bereits erwähnt, berücksichtigt das Kapitel über die Phonologie das Kurland-Livische und unterscheidet sich damit von den späteren Kapiteln der Grammatik. Auch in den späteren Kapiteln ist die Rede vom Estnischen, Finnischen, Kurland-Livischen und Lettischen, aber die Erwähnungen sind zu einem gewissen Grad isoliert, was vermutlich darauf zurückzuführen ist, dass die Darstellungsweise von der finnougristischen und aus den Grammatiken der ostseefinnischen Sprachen bekannten Tradition abweicht. Insofern entsteht kein Bild von der livischen Sprache als Ganzem. Vieles hätte durch kurze Erwähnungen entsprechender Sachverhalte im Kurland-Livischen und Verweise auf Untersuchungen und Darstellungen des Kurland-Livischen erhellt werden können. Für eine solche diachrone Herangehensweise hätte Wiedemann 1861a als Muster dienen können.

Nobufumi Inaba

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Lars-Gunnar Larsson: *Per Holmberger och sockenlapparnas språk* [Per Holmberger und die Sprache der Gemeindelappen]. Acta Bibliothecae R. Universitatis Upsaliensis 52. Uppsala, 2018. 274 S.

In der Universitätsbibliothek Uppsala wurden 1911 die Handschrift Vocabularium Linguae Lapponum mendicantium ('Wortschatz der Sprache der Bettlerlappen') und ein vom selben Verfasser aufgezeichnetes „Bärenlied der Lappen" entdeckt. Letzteres wurde 1912 von K. B. Wiklund mit einem Kommentar veröffentlicht. Vieles blieb unklar: Wer hatte den Wortschatz und das Lied aufgezeichnet, von wem hatte er sie gehört, welche saamische Sprache vertraten die Texte?

Diese Fragen ließen Lars-Gunnar Larsson keine Ruhe; schon vor rund zwanzig Jahren begann er mit seiner Detektivarbeit, um sie zu klären. Hilfsmittel des Detektivs waren neben der Geschichtsforschung die traditionellen Methoden der Philologie, ergänzt um naturwissenschaftliche Erkenntnisse.

Larsson weist nach, dass der Wortschatz 1771 in Tolvfors in der Nähe von Gävle aufgezeichnet wurde, also ca. 170 km nördlich von Stockholm. Der Verfasser der Aufzeichnungen Per Holmberger (1745–1807), ein Schüler Linnés und späterer Lehrer und Pfarrer, war damals in diesem Gebiet als Hauslehrer tätig. Beweise für den Ort der Aufzeichnung sind neben Holmbergers Curriculum die im Wortschatz begegnenden, die Umgebung beschreibenden Tier- und Pflanzennamen. Da Holmberger das Saamische nicht beherrschte, schrieb er den Wortschatz nach dem Gehör in schwedischer Orthographie nieder. Er berichtet, er sei die Wörter mehrmals mit den Saamen durchgegangen. Zwar bezeichnet Holmberger seine Informanten als bettelnd herumziehende Saamen, doch Larsson weist nach, dass es sich um sog. Gemeindelappen (*sockenlappar,* s. Svanberg 1999) handelte, die es keineswegs zufällig so weit in den Süden verschlagen hatte, sondern die dort vielleicht schon seit Jahrhunderten ansässig waren. Aus dem Wortschatz lässt sich schließen, dass sie Handwerker, Korbmacher und Seiler, Schneider, Schuster waren, die (in geringem Umfang) auch Rentierzucht betrieben. Larsson betrachtet den Wortschatz aus phonetischer, morphologischer und syntaktischer Sicht und weist sowohl Übereinstimmungen als auch Abweichungen

gegenüber dem Südsaamischen nach; die sprachliche Grundlage ist also heterogen und die Sprachform bereits verschwunden.

Der Band enthält sowohl den ursprünglichen Wortschatz mit Übersetzungen als auch einen Anhang mit einem schwedisch-gemeindelappischen Wörterverzeichnis. Über seinen Inhalt hinaus ist das Werk ein Musterbeispiel für die Tüftlerarbeit eines Philologen: Es zeigt, wie der Verfasser Hinweisen nachgeht, aufgrund der Evidenz Alternativen ausschließt und schließlich in der Lage ist, Antworten auf seine Fragen zu finden. Die vielfach verzweigten Beweispfade produzieren spannende kleine Untersuchungen. Aus kleinen Teilen entsteht ein zuverlässiges Gesamtbild, und die Entdeckerfreude steckt auch den Leser an.

Sirkka Saarinen

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Johanna Laakso, Anneli Sarhimaa, Sia Spiliopoulou Åkermark & Reetta Toivanen: *Towards openly multilingual policies and practices. Assessing minority language maintenance across Europe.* Linguistic diversity and language rights: 11. Multilingual matters. Bristol • Buffalo • Toronto 2016. 259 S.

Johanna Laakso, Anneli Sarhimaa, Sia Spiliopoulou Åkermark und Reetta Toivanen leiteten das von der Europäischen Kommission in den Jahren 2010–2013 finanzierte, groß angelegte und ehrgeizige ELDIA-Projekt (*European Language Diversity for All*). An diesem Projekt beteiligten sich zahlreiche Forscher und Forscherinnen von Universitäten oder Forschungsinstituten vieler Länder. In seinem Fokus standen finnisch-ugrische Minderheitssprachen „vom Mittelmeer bis an die Küsten der Barentssee", nämlich Ungarisch in Slowenien und Österreich, Estnisch in Deutschland und Finnland, Nordsaamisch und Kvenisch in Norwegen, Seto und Võro in Estland, Karelisch und Wepsisch in Russisch-Karelien, Tornedalfinnisch in Schweden und Karelisch in Finnland.

Das vorliegende Werk beleuchtet die Ergebnisse des Projekts und wägt sie ab. Es beginnt mit einer Analyse der Grundbegriffe (u.a.

Mehrsprachigkeit, Muttersprache, Herkunftssprache, Minderheit, Identität) und der Konnotationen, diesich im Lauf der Zeit an diese Begriffe geheftet haben; die Analyse enthüllt die Wertgebundenheit und die voneinander abweichenden Interpretationen der Begriffe. Beispielsweise bedeutet Mehrsprachigkeit im westeuropäischen nationalstaatlichen Diskurs häufig, dass die Menschen durch Ausbildung Fremdsprachenkenntnisse erwerben sollten, seltener dagegen die den Vertretern einer Minderheitsbevölkerung auferlegte Notwendigkeit, neben ihrer eigenen Sprache die dominierende Sprache des Landes zu beherrschen. Die meisten Staaten der Europäischen Union präsentieren sich als einsprachig (die sog. Nationalsprache), obwohl auf ihrem Territorium in Wirklichkeit viele Sprachen gesprochen werden.

Um die tatsächliche Lage der Sprachen zu beurteilen, wurde im Rahmen von ELDIA ein neues Instrument entwickelt, das Vitalitätsbarometer der Europäischen Sprachen (*European Language Vitality Barometer*). Auf der Basis dieses Barometers kann man die Sprachen auf einer Skala von äußerst bedroht bis vorläufig lebenskräftig einordnen wie in den früheren Modellen (z.B. dem der UNESCO), aber die Beurteilung stützt sich auf ein erheblich detaillierteres und vielseitigeres Befragungsprogramm. Die darin enthaltenen thematischen Gesamtheiten sind a) biografische Angaben, b) Sprachgebrauch, c) Sprachkenntnis, d) Einstellung zu verschiedenen Sprachen und ihre Verwendung, e) Sprachgebrauch in öffentlichen und privaten Domänen, f) Medienkonsum und aktive Nutzung in verschiedenen Sprachen. Die Ergebnisse werden in kreisförmigen Polardiagrammen dargestellt, die vier Fokusbereiche aufweisen: Fähigkeit, Möglichkeit und Wunsch (die Sprache zu verwenden) sowie Sprachdienste. Die Fokusbereiche gliedern sich des Weiteren in vier Sektoren, die Sprachgebrauch und Wechselwirkung, Gesetzgebung, Medien sowie Bildung vertreten. Die sektorenweise Analyse der Fokusbereiche ermöglicht es, die tatsächliche Situation der Sprachen exakter als bisher darzustellen und zu skalieren.

Durch die Analyse der Position der finnisch-ugrischen Minderheitssprachen Europas gelingt es dem Werk, falsche Vorurteile zu entkräften und das Verständnis des Lesers für die vielfältigen Abhängigkeitsbeziehungen zwischen der Sprache und der umgebenden Gesellschaft und für deren Einfluss auf die Erhaltung der Sprache zu fördern.

Sirkka Saarinen

В. К. Кельмаков: *Острые углы удмуртской филологии* [Aktuelle Probleme der udmurtischen Philologie].
Ижевск 2017. 555 S.

Das Hauptziel des Buches von Valentin Kel′makov ist die kritische Betrachtung der in letzter Zeit erschienenen Neuausgaben der Werke der bekannten udmurtischen Schriftsteller Grigorij Vereščagin (1851–1930), Kuzebaj Gerd (1898–1937) und Nikolaj Bajterjakov (1923–1997), der Position von Vladislav Islent′ev (?–?) in der udmurtischen philologischen Forschung sowie der russischen Übersetzung der gesammelten Werke von Ašalči Oki (1898–1973). Zusätzlich enthält der Band weitere kritische Beobachtungen und Vorschläge des Verfassers zur Entwicklung der udmurtischen Philologie und zur gegenwärtigen Situation der udmurtischen Schriftsprache sowie zu einigen Texten von Islent′ev ja Vereščagin.

Kel′makov legt die Abänderungen dar, die in den jüngsten Neuausgaben der Werke von Grigorij Vereščagin, Kuzebaj Gerd und Nikolaj Bajterjakov gegenüber den Originalausgaben zu beobachten sind. Zum Teil handelt es sich um unbeabsichtigte Fehler, etwa um Fehlinterpretationen von undeutlich gedruckten Stellen der Originaltexte, die restlichen Änderungen wurden dagegen bewusst vorgenommen. Die Herausgeber der Werke erwähnen jedoch nicht einmal immer, ob sie die Absicht hatten, die ursprünglichen Werke zu bearbeiten, und wenn ja, warum und wie. Es fällt nicht schwer, sich Kel′makov Auffassung anzuschließen, es sei nicht angebracht, die Sprache alter Werke zu modernisieren.

Kel′makov zeigt, dass Vladislav Islent′ev nach wie vor ein bedauerlich mangelhaft bekannter früher Entwickler der udmurtischen Schriftsprache ist. Islent′ev richtete seine Aufmerksamkeit z.B. auf die verschiedenen Dialekte und Synonyme des Udmurtischen, was die heutigen Wissenschaftler in ihren Untersuchungen nicht in Betracht zu ziehen verstehen. Der russische Übersetzer der Werke von Ašalči Oki erwähnt in dem von ihm herausgegebenen Band, er habe davon abgesehen, den Übersetzungen irgendetwas Eigenes hinzuzufügen, doch Kel′makov entdeckt in der Übersetzung viele Fehler, Mängel und Hinzufügungen.

Kel′makovs Buch bietet eine wahrlich notwendige Kritik an der udmurtischen Philologie. Die angesprochenen Probleme würden eine breitere gesellschaftliche Erörterung verdienen. Warum werden die Editionsprinzipien der Werke nicht deutlich genannt? Wie ist es möglich, dass an Gesamtausgaben

zahlreiche Mitarbeiter und zusätzlich noch Herausgeber mitwirken und die Werke dennoch eine erhebliche Menge teils schwerer Fehler aufweisen? Sind von oben vorgegebene Resultatforderungen und die daraus folgende Eile der Grund?

Bei den Problemen, die Kel′makov aufzeigt, geht es teilweise eindeutig um die mangelnden udmurtischen Sprachkenntnisse der Verfasser. Meiner Ansicht nach wäre für die mangelnden Sprachkenntnisse auch die allgemeine Minoritätssprachenpolitik Russlands verantwortlich zu machen. Es ist ja nicht die Schuld eines Einzelnen, dass er seine Schulausbildung in russischer Sprache absolvieren musste, abgesehen von vielleicht zwei Wochenstunden Udmurtisch. Immer häufiger ist der Udmurtischunterricht nicht einmal muttersprachlicher Unterricht im eigentlichen Sinn, weil die Schüler die Sprache nicht mehr auf muttersprachlichem Niveau beherrschen. Wie gründliche Sprachkenntnisse darf man unter diesen Umständen erwarten, zumindest künftig?

Esa-Jussi Salminen

Arto Moisio & Okan Daher: *Tataarilais-suomalainen sanakirja. Татарча-финча сүзлек. Tatarça-fınçä süzlek* [Tatarisch-finnisches Wörterbuch].
Apuneuvoja suomalais-ugrilaisten kielten opintoja varten XVIII.
Helsinki: Suomalais-Ugrilainen Seura 2016. 418 S.

Das tatarisch-finnische Wörterbuch setzt die bereits seit langem bestehende Tradition des Fachs Finnougristik an der Universität Turku fort, Wörterbücher zu Sprachen zu erstellen, die zu seinem Forschungsbereich und zu dem der Forschungseinheit Wolgasprachen gehören. An sich ist es überraschend, dass keine andere Institution, weder in Tatarstan noch in Finnland, es bisher übernommen hat, fundierte tatarisch-finnische Wörterbücher herauszugeben, so dass diese Aufgabe der genannten Forschungseinheit und dem Finnougristen Arto Moisio zufiel.

Das Wörterbuch ist insofern außergewöhnlich, als es eigentlich dreisprachig ist, denn es berücksichtigt sowohl das Kasan-Tatarische als auch das Finnland-Tatarische: Als Lemmata dienen die kasan-tatarischen Wörter, denen die finnland-tatarischen Entsprechungen zur Seite gestellt werden; erst dann folgt die finnische Entsprechung. Die Idee ist

hervorragend und wurde sorgfältig umgesetzt.

Das Finnland-Tatarische und das Kasan-Tatarische haben eine sehr unterschiedliche Stellung: Das letztere ist eine von mehreren Millionen Sprechern und zu einem gewissen Grad in allen Bereichen verwendete Sprache, das erstere in eng begrenztem Gebrauch als Sprache einer Gemeinschaft in Finnland, die nur einige hundert Personen umfasst. Aus diesem Ungleichgewicht und der geringeren Standardisierung des Finnland-Tatarischen ergeben sich einige scheinbar unlogische Umstände. Im Vorwort heißt es, das Finnland-Tatarische habe Einflüsse aus dem Finnischen erhalten, doch im Wörterbuch tritt dies nicht zu Tage: Selbst im Anhang 2, einer Liste der für das Finnland-Tatarische spezifischen (vom Kasan-Tatarischen abweichenden) Wörter, scheint sich kein einziges finnisches Lehnwort zu finden!

Beim Finnland-Tatarischen wurden Lücken gelassen, z.B. gibt es dem Wörterbuch nach für den Telefonhörer keine finnland-tatarische Entsprechung. Heißt das, dass man auf Finnland-Tatarisch nicht vom Hörer spricht, sondern zum Beispiel ins Finnische wechselt? Hätte das Wörterbuch den Verfassern nicht die Gelegenheit geboten, Entsprechungen vorzuschlagen, wenn es noch kein eingebürgertes Äquivalent gibt?

Die Berücksichtigung beider Formen des Tatarischen ist offensichtlich der Grund, weshalb die Synonyme innerhalb einer Sprachform weitgehend unbeachtet bleiben. Beispielsweise werden bei den Lemmata *грушa* 'Birne' und *персик* 'Pfirsich' nur die Entsprechungen im Finnland-Tatarischen, die Wörter echt türkischer Herkunft *armut* und *şeftali* sowie die finnischen Übersetzungen angegeben. Es wird nicht ersichtlich, ob die erwähnten Wörter türkischer Herkunft im Prinzip auch im Kasan-Tatarischen bekannt und vielleicht empfehlenswert sind, in der Praxis aber die russischen Lehnwörter *грушa* und *персик* häufiger verwendet werden. Bemüht man sich bei der Entwicklung des Kasan-Tatarischen nicht, eigenständige Wörter zu bevorzugen? Das Wörterbuch vermittelt den Eindruck, dass das Finnland-Tatarische systematisch eigenständige Wörter, das Kasan-Tatarische dagegen Lehnwörter bevorzugt, was jedoch nicht die ganze Wahrheit sein dürfte.

Esa-Jussi Salminen

Sagen aus Lappland.
Herausgegeben, übersetzt und kommentiert von Hans-Hermann Bartens. Berlin: Frank und Timme 2018. 463 S.

Hans-Hermann Bartens hat ein umfangreiches und gehaltvolles Kompendium der saamischen Sagentradition veröffentlicht, das von seiner profunden Kenntnis des Themas zeugt. Ein Teil der Publikationen von Wissenschaftlern oder Geistlichen, die in früheren Jahrhunderten saamische Erzähltradition gesammelt haben, liegen in deutscher Übersetzung vor, doch die meisten in dem hier zu besprechenden Band enthaltenen Texte sind entweder nur auf Saamisch oder mit finnischer, russischer, ungarischer oder skandinavischer Übersetzung erschienen. Bartens hat auch bisher unveröffentlichtes Archivmaterial (zum Beispiel Tonaufnahmen der Feldforschung der Universität Turku) verwendet. Das Material stammt aus drei Jahrhunderten.

Anders als die früheren Publikationen präsentiert Bartens' Werk den Lesern die Sagentradition des gesamten, ausgedehnten saamischen Areals, das von Mittelschweden nach Nordosten bis zur Halbinsel Kola reicht. Vertreten sind also auch die Extreme des saamischen Sprachkontinuums, das Südsaamische in Schweden und Norwegen und die saamischen Sprachen Russlands, deren Tradition am wenigsten bekannt sein dürfte. Bartens erklärt denn auch, er habe die Sagen aus diesen Gebieten besonders hervorheben wollen. Er hat auch einige Memorate aufgenommen, die eine persönliche übernatürliche Erfahrung des Erzählers schildern.

Die vorgestellten Sagen sind in 22 Themenkreise gegliedert, vom Ursprung der Saamen und ihrer Lebensweise bis zu einer Erzählung über das Ende der Welt. Verschiedene Geisterwesen wie Wassergeister, Stalo und Teufel waren Attraktionszentren, über die viele Sagen aufgezeichnet wurden, ebenso wie über Zauberer und Sejtas. Tod und Tote, Vorzeichen, Die Krankheit und Menschen in verwandelter Gestalt bilden ebenfalls eigene Gesamtheiten. Die Sagen über verschiedene Unterirdische bilden mit rund 60 Seiten den größten Komplex. Die saamischen Sagen sind in der Regel nicht besonders lang, doch die unter der Überschrift Mythisches und Irdisches versammelten Erzählungen der östlichen, d.h. der Kola-Saamen überraschen nicht nur durch ihre Vielfalt, sondern auch durch ihren von den anderen abweichenden Inhalt.

Das Vorwort enthält als Hintergrundinformation eine verblüffend

kompakte Darstellung grundlegender Fakten über die Saamen und ihre heutige Situation und Stellung. In seinem Nachwort gibt Bartens einen fundierten Überblick über die Geschichte der Aufzeichnung und Erforschung der saamischen Folklore vom 17. Jahrhundert bis heute, beschreibt die Grundsätze, nach denen er seine Sammlung zusammengestellt hat, und erläutert die Struktur der Kommentare zu den Texten.

Auf jeden Text folgt ein Kommentar, in dem die Quelle und der Ort der Aufzeichnung/Erzähler (falls bekannt) angegeben, die verschiedenen Varianten der Handlung und ihre Verbreitung dargestellt und dem Leser unbekannte Begriffe und schwer verständliche Handlungsabläufe erläutert werden. Die Kommentare sind ein überwältigender Beweis dafür, wie eingehend Bartens die saamische Tradition und alles, was darüber geschrieben wurde, beherrscht.

Sagen aus Lappland ist ein ausgezeichneter Querschnitt durch die saamische Erzähltradition. Denjenigen, denen die saamische Kultur unbekannt ist, bietet das Buch eine spannende und überraschende Reise in die mündliche Überlieferung dieses einzigen indigenen Volkes der Europäischen Union. Dank seiner Kommentare ist es zugleich ein unersetzliches Hilfsmittel für alle, die finnisch-ugrische Sprachen und Kulturen erforschen.

Sirkka Saarinen

Shibanov A. A.: *Подражательные слова в удмуртском языке* [Onomatopoeic Words in the Udmurt Language].
УИИЯЛ УрО РАН. Ижевск: Издательство «Шелест», 2017. 201 S.

In the introduction, the author indicates the purpose, objectives and relevance of the study. He also recalls that one of the theories regarding the emergence of human language is based on onomatopoeia and is directly related to onomatopoeic words.

A historical account of the research on this issue in Udmurtology is presented at the beginning of the second chapter, taking into account publications starting from the very first grammar (1775) up until separate articles published before 2013. The study of onomatopoeic and descriptive words has been carried out mostly in articles and grammars, where they are usually mentioned in sections devoted to adverbs or interjections; thus, there are no books devoted to this category of words in the Udmurt language, and only the most recently published grammar (2011)

considers them a separate part of speech. Despite a scrupulous analysis of the works, it does not seem entirely logical to mention the authors of two grammars of the Udmurt language (F. J. Wiedemann, 1851 and T. G. Aminoff, 1896), who state that "there is no kind of information" contained in onomatopoeic words.

From the point of view of lexico-semantic classification, A. A. Shibanov justifiably subdivides this group of words into onomatopoeic and descriptive words, although many other researchers of both Udmurt and other languages propose entirely different classifications. Accepting the logic of the classification used by the author, we are left with an open question of whether the group of words used to call or drive away animals belongs to the category of onomatopoeic words.

When it comes to structure, onomatopoeic and descriptive words are divided into roots and derivatives; the author thoroughly analyses the root words, identifies all structural types and presents the most common ones (CVC, CVCVC, CVCC, CVCCVC), although he does not mention the basis for the quantitative analysis or other statistical methods that led to this conclusion. A particularly valuable part of the work is a table in that presents Udmurt consonants and their compatibility in different positions (the beginning, middle and end) of the word; these data are very important, because the essence of this group of words depends primarily on the consonants used.

The third chapter is devoted to the meanings and word-forming potential of these words: the analysis considers word-formation types, which are the basis of formulating onomatopoeic words, and also mentions their categorisation into word classes. Sometimes, unfortunately, I cannot agree with the author's opinion on which part of speech a certain word belongs to. For example, in the sentence ***Шоной-паной*** *ӟечырась эшсэ…* ('Wandering from side to side ...') the word form *шоной-паной*, though considered by the author to be an adjective, is most likely an adverb, since it refers to the participle and determines the action expressed by the verb form.

When it comes to their semantics, onomatopoeic and descriptive words can have a single meaning (which happens extremely rarely) or multiple meanings. At the same time, the author finds that the same word can act both in the role of the onomatopoeia itself and the onomatopoeic word.

The fourth chapter deals with the syntactic functions of onomatopoeic and descriptive words. Since the analysed word forms inherently denote

the method, means, etc. of the action, they, as a rule, refer to the verb and act as adverbials in the sentence. Furthermore, according to the author's remarks, they are most likely to be combined with verbs of motion. These words can also occur as a predicate in a sentence, but only under one condition – the words must be determined by a pre- or postpositional verb. Quite often, the onomatopoetic word serves as a definition, denoting the quality of the noun, to which the sound or action that it produces is attributed as a sign.

According to the results of A. A. Shibanov's study, manner-descriptive words seldom appear in the role of a subject or complement: the number of such examples he found was two and one, respectively. In my opinion, several more such examples could be found, but the main issue is the lack of a large, open-access database of the Udmurt language, which would give somewhat different results in a study like this, and would also render the process of searching for and counting examples much easier.

A. A. Shibanov's monograph is an integral, logically arranged scientific publication. The above-mentioned shortcomings of the work in no way detract from its value and relevance for Udmurt studies.

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Tamás Hofer 1929–2016

Der Wegbereiter der ungarischen ethnologischen und kulturanthropologischen Forschung und langjährige Leiter des Ethnographischen Museums verstarb am 6. April 2016. Hofer ist bis heute international bekannt als Interpret der Begriffe und Ideen der ethnologischen Forschung und der Kulturanthropologie.

Hofer wurde am 29.12.1929 in Budapest geboren und legte 1948 am Ferenc-Toldy-Gymnasium die Reifeprüfung ab. Zum 100. Jubiläum der ungarischen Revolution und des Freiheitskrieges hatte das Ethnographische Museum einen an junge Leute gerichteten Wettbewerb über das Thema ausgeschrieben. Der Gymnasiast Hofer zeichnete Erinnerungen an den Freiheitskampf von 1848 auf, indem er alte Männer im Dorf Szentmártonka befragte. Die ethnologische Methode der Befragung bildete das Gerüst seines Beitrags, und so erschien es naheliegend, dass er als Studienfach an der Eötvös-Lóránd-Universität in Budapest gerade die Ethnologie wählte. Er hörte Vorlesungen von Edit Fél, die nach ihrer Rückkehr aus Paris die Studenten in die Ethnosoziologie einführte. Die Vorlesungen des Philosophen György Lukács vertieften seine Wertvorstellungen, die von István Tálasi wiederum sein Wissen über die Traditionen. Als Professor der Ethnographie war Tálasi als penibler Lehrer bekannt, der von den Studierenden Folgerichtigkeit in der Forschung und zudem Belesenheit forderte.

1953 schloss Hofer sein Studium ab und begann seine Tätigkeit am Ethnographischen Museum, zuerst als wissenschaftlicher Sekretär und ab 1958 als Abteilungsleiter. Sein wissenschaftliches Interesse galt dem Wohnen, genderisierte Nutzung der Räume und deren Verbindung zu sozialen Beziehungen. Feldforschung unternahm er in verschiedenen Teilen Ungarns, u.a. im Süden in Kéty, im Norden in Kemence und Páty sowie im Nordosten in Tiszaigar. Als Museologe schrieb er Drehbücher für mehrere ethnologische Dokumentarfilme. Dank seiner wiederholten Feldforschungen konnte Hofer die Phase des Wandels und Umbruchs der ungarischen Landwirtschaft von der Privatisierung zur Kollektivierung aus nächster Nähe verfolgen. Ein Projekt des Ethnographischen Museums war seit Anfang der 1950er Jahre die Dokumentation eines ungarischen Dorfes,

wofür das Dorf Átány im Komitat Heves in Nordostungarn ausgewählt wurde. Edit Fél hatte 1951 Testbefragungen in dem Dorf durchgeführt, und ab 1952 beteiligte sich der junge, damals 24-jährige Tamás Hofer an den Aufzeichnungen. Die beiden Wissenschaftler führten 28 Jahre lang Feldforschungen in Átány durch, wo sie insgesamt 500 Tage verbrachten. Ihre Forschungsmethoden waren Tiefeninterview und teilnehmende Beobachtung. Als besonders wichtig galt die Dokumentation des Alltagslebens. Zum Projekt des Museums gehörte ferner das Sammeln von Exponaten, und die Untersuchung der materiellen Kultur wurde ein zweiter wichtiger Bereich.

Átány wurde ein international bekannter Forschungsgegenstand. Die Ergebnisse wurden zuerst auf Deutsch – *Bäuerliche Denkweise in Wirtschaft und Haushalt. Eine ethnographische Untersuchung über das ungarische Dorf Átány* (1972), *Geräte der Átányer Bauern* (1974) – und Englisch – *Proper Peasants. Traditional Life in a Hungarian Village* (1969) – publiziert; erst 1997 erschien in ungarischer Sprache *Arányok és mértékek a paraszti gazdálkodásban* (Beziehungen und Quantitäten im bäuerlichen Haushalt). Edit Fél und Tamás Hofer zeichneten eine bäuerliche Lebensform auf, die im Verschwinden begriffen war und heute bereits gänzlich verschwunden ist. Die Monografien zeigten eine Lebensform, die auf der Zweiteilung von Wohn- und Arbeitsräumen beruhte. Das Dorf mit seinen Wohngebäuden bildete den Mittelpunkt der gesamten Dorfgemeinschaft, die Wirtschaftsgebäude einschließlich Weinkeller und Viehställe eine zweite, stark genderisierte, männliche Welt. Edit Fél führte die Befragungen im Dorf durch, Hofer auf der Männerseite. Aus den Befragungen gingen die Wertvorstellungen der Dorfbewohner hervor, mit denen der wirtschaftliche Wohlstand, die Normen eines guten Lebens und die Beziehung der Benutzer zu den verwendeten Gegenständen gemessen wurden. Zwar wurden über 3000 Objekte in die Museumsbestände übernommen, doch dieser Prozess verlief nicht problemlos, da man Gegenstände, die in Gebrauch waren, nicht abgeben wollte. Die Befragten repräsentierten ebenso wie die Forscher den stillen Widerstand gegen die Kollektivierung in den 1950er Jahren. In der Zeit des Sozialismus war es nicht ratsam, Untersuchungsergebnisse zu publizieren, die das damalige sozialistische Gesellschaftssystem kritisierten; daher wurden die Ergebnisse mit Unterstützung der deutschen Wissenschaftler Richard Weiss und Gerhard Heilfurth in Deutschland und später in Chicago veröffentlicht. Zu Ehren des 80. Geburtstags von Tamás Hofer organisierte das Ethnographische Museum 2009 eine

Ausstellung über das Leben des Dorfes, *Egy falu az országban – Átány* (Ein Dorf im Staat: Átány).

Das zweite gemeinsame Forschungsgebiet von Edit Fél und Tamás Hofer war die Volkskunst (*Magyar népművészet* 1994). Sie näherten sich dem Thema über die Objekte und ihre Funktion an, wobei sie den Begriff der Repräsentation anwendeten. Die Erforschung der Volkskunst führte zur theoretischen Analyse des Nationalismus mit dem Ziel, die Stellung der Ungarn im Grenzgebiet zwischen Ost und West zu untersuchen (*Hungarians between 'East' and 'West'. Three Essays on National Myths and Symbols* 1994). Zu diesem Thema organisierte Hofer mehrere multidisziplinäre internationale Seminare sowie die Ausstellung *Magyarok Kelet és Nyugat között – nemzeti legendák és jelképek* (Die Ungarn zwischen Ost und West – nationale Legenden und Symbole), die 1996 auch im Finnischen Nationalmuseum gezeigt wurde.

Hofer erörterte ferner forschungsethische Probleme und die Grenzen zwischen verschiedenen Forschungsgebieten. Er wandte Begriffe der Kulturanthropologie, vor allem die Bedeutung von Symbolen für das nationale Selbstgefühl, auf die ethnologische Forschung an. Nach Hofers Ansicht kann ein Kulturanthropologe auch Phänomene in seinem eigenen Volk untersuchen, und sein besonderes Interesse galt dem Vergleich von kulturellen Erscheinungen im europäischen Maßstab. In seiner letzten Veröffentlichung behandelte er den grenzüberschreitenden Charakter von Ethnologie und Kulturanthropologie: *Antropológia és/vagy néprajz. Tanulmányok két kutatási terület vitatott határvidékéről* (Anthropologie und/oder Ethnologie. Schriften von der umstrittenen Schnittfläche zweier Forschungsgebiete 2014).

1980 trat Hofer in den Dienst des Ethnologischen Forschungsinstituts der Ungarischen Akademie der Wissenschaften, wo er als Abteilungsleiter und später als stellvertretender Leiter bis 1992 tätig war. Danach kehrte er an das Ethnographische Museum zurück, das er bis zu seiner Pensionierung 1997 leitete.

Hofer war vielfältig aktiv. Er war 16 Jahre lang Chefredakteur der Zeitschrift Ethnographia und in den Jahren 2006–2016 Ehrenvorsitzender der Ungarischen Kulturanthropologischen Gesellschaft. Als Gastdozent war er sowohl in Europa als auch in den USA tätig (The University of Chicago 1966–1967, The University of North Carolina at Chapel Hill 1974, Collegium Hungaricum Wien 1988, Universität Münster, Georg-August-Universität Göttingen und Eberhard Karls Universität Tübingen 1990,

Rutgers Center for Historical Analysis New Jersey 1991, Woodrow Wilson International Center Washington 1993, Wesleyan University 1976, Ecole des Hautes Etudes en Sciences Sociales (EHESS) Paris 2002 und Internationales Forschungszentrum Kulturwissenschaften (IFK) Wien). Für seine vielfältige Tätigkeit wurde er 1993 mit dem Széchenyi-Preis und 1996 mit dem Gottfried-von-Herder-Preis ausgezeichnet.

An der Eötvös-Lóránd-Universität hielt Hofer nur ein Studienjahr lang Vorlesungen. Dennoch hatte er bedeutenden Einfluss auf die ungarische ethnologische Forschung. Ethnologen, Kulturanthropologen und Historiker veröffentlichtem ihm zu Ehren mehrere Festschriften: *Közelítések. Néprajzi, történeti, antropológiai tanulmányok Hofer Tamás 60. születésnapjára* (Annäherungen. Ethnologische, historische, anthropologische Studien zum 60. Geburtstag von Tamás Hofer 1992), *Ethnische Symbole und ästhetische Praxis in Europa: Tamás Hofer zum 70. Geburtstag am 21. Dezember 1999, A nemzet antropológiája (Hofer Tamás köszöntése)* (Die Anthropologie der Nation [Ein Gruß an Tamás Hofer] 2002). Tamás Hofers Schriftenverzeichnis erschien in der Publikationsreihe der Ungarischen Akademie der Wissenschaften, *Népi kultúra – népi társadalom* XV (1990); auch dieser Band wurde aus Anlass seines Geburtstags zusammengestellt.

Tamás Hofer war in seinem Heimatland und auch international geschätzt. Er betonte die Bedeutung des Gesprächs für die Forschung und beteiligte sich deshalb gern an internationalen und inländischen Seminaren. Neugier war seine Tugend, und deshalb wagte er es, sich seinem Untersuchungsgegenstand aus verschiedenen Perspektiven anzunähern, die teils andere Disziplinen als die Ethnologie vertraten.

Ildikó Lehtinen

Evdokija Rombandeeva 1928–2017

Evdokija Rombandeeva, die bedeutendste muttersprachliche Erforscherin des Mansischen, verstarb am 3. Januar 2017 in Hanty-Mansijsk. Sie wurde am 22. April 1928 im Dorf Hošlog im Gebiet Berëzovo im damaligen Nationalen Kreis der Ostjaken und Wogulen (dem heutigen autonomen Kreis der Chanten und Mansen) in eine Familie von Jägern und Fischern geboren. Rombandeeva erhielt ihre Primärausbildung an der siebenjährigen Internatsschule in Sośva und wurde anschließend am nationalen pädagogischen Institut in Hanty-Mansijsk zur Lehrerin ausgebildet. Nach Abschluss der Ausbildung arbeitete sie zwei Jahre an der Schule des Dorfes Hošlog, von wo sie 1949 nach Leningrad zog, um an der philologischen Fakultät der Staatlichen Universität zu studieren. Neben ihrem Studium übersetzte Rombandeeva für den Schulgebrauch bestimmte Kinderbücher aus dem Russischen ins Mansische und verfasste ein russisch-mansisches Wörterbuch, das 1954 erschien.

Von 1957 bis 1968 arbeitete Rombandeeva in der Leningrader Einheit des Instituts für Sprachwissenschaft der Wissenschaftsakademie der Sowjetunion und legte 1964 ihre Kandidatendissertation über die Kausativverben des Mansischen vor. 1968 ging sie an das Institut für Sprachwissenschaft der Wissenschaftsakademie in Moskau, wo sie bis 1990 tätig war. In dieser Zeit veröffentlichte Rombandeeva die erste wissenschaftliche Grammatik des Mansischen (*Мансийский (вогульский) язык* 1973) und eine Monografie über die Syntax des Mansischen (*Синтаксис мансийского (вогульского) языка* 1979). 1982 publizierte Rombandeeva ein gemeinsam mit E. A. Kuzakova verfasstes mansisch-russisches und russisch-mansisches Wörterbuch (*Словарь мансийско-русский и русско-мансийский*), das als Hilfsmittel für den Schulunterricht konzipiert war. Ihre Grammatik des Mansischen bearbeitete sie mit M. P. Vahruševa zu einer normativen Grammatik für pädagogische Institute (*Мансийский язык* 1985).

1990 begann ein neuer Abschnitt in Evdokija Rombandeevas Leben: Sie kehrte in den Autonomen Kreis der Chanten und Mansen zurück und organisierte dort unter Leitung des Instituts für Geschichte, Philologie und Philosophie der Sibirischen Abteilung der Wissenschaftsakademie der Sowjetunion das Labor für finnougristische Forschungen. Im folgenden Jahr entstand auf der Basis dieses Labors das Forschungsinstitut für die Revitalisierung der obugrischen Völker, dessen Abteilung für Sprache,

Literatur und Folklore Rombandeeva leitete. Das Forschungsinstitut wurde seither mehrmals umorganisiert; eine der Institutionen, die seine Arbeit weiterführten, war das Obugrische Institut für angewandte Forschung, an dem Rombandeeva in ihren letzten Lebensjahren arbeitete.

In ihrer Zeit im Autonomen Kreis der Chanten und Mansen veröffentlichte Rombandeeva zahlreiche Werke, nicht nur über die Sprache, sondern auch über die Kultur und Geschichte ihres Volkes, der Mansen (*Душа и звёзды (предания, сказания и обряды народа манси)* [Die Seele und die Sterne (Sagen, Erzählungen und Bräuche des mansischen Volkes)] 1991, *История народа манси (вогулов) и его духовная культура* [Die Geschichte der Mansen (Wogulen) und ihre geistige Kultur] 1993). Rombandeeva gab von finnischen und ungarischen Finnougristen sowie russischen Forschern im 19. und 20. Jahrhundert aufgezeichnete mansische Volksdichtung sowohl in russischer Übersetzung als auch in der heutigen kyrillischen Orthographie des Mansischen heraus (u.a. *Героический эпос манси (вогулов): Песни святых покровителей* [Das Heldenepos der Mansen: Lieder der heiligen Geister] 2001, *Мифы, сказки, предания манси (вогулов) в записях 1889, 1952, 1958–1960, 1968, 1978, 1992, 2002 годов* [Mythen, Märchen und Sagen der Mansen in Aufzeichnungen aus den Jahren 1889, 1952, 1958–1960, 1968, 1978, 1992, 2002] 2005).

1998 verteidigte Rombandeeva ihre Doktordissertation über die Struktur der heutigen mansischen Sprache. Die Entwicklung ihrer Muttersprache beeinflusste sie u. a. dadurch, dass sie die früher in Russland gebräuchliche mansische Orthographie, die die Lautstruktur der Sprache mangelhaft wiedergab, erneuerte. Rombandeeva nahm zehn zusätzliche Zeichen in Gebrauch, um die Länge der Vokale zu markieren.

Evdokija Rombandeeva erhielt im Autonomen Kreis der Chanten und Mansen zahlreiche akademische und gesellschaftliche Auszeichnungen. Sie war seit 1985 korrespondierendes Mitglied der Finnisch-Ugrischen Gesellschaft.

Sirkka Saarinen

János Gulya 1933–2017

János Gulya, langjähriger Professor für Finnougristik an der Georg-August-Universität Göttingen, verstarb am 11. Februar 2017 im Alter von 84 Jahren. Er war am 1. Februar 1933 in Budapest geboren. Nachdem er 1951 am Janus-Pannonius-Gymnasium in Pécs die Reifeprüfung abgelegt hatte, studierte er an der Lórand Eötvös –Universität in Budapest Ungarisch und finnisch-ugrische Philologie. Nach dem Abschluss absolvierte er ein weiterführendes Studium an der Ungarischen Akademie der Wissenschaften; die Aspirantur schloss Studien in Moskau (1955–1957), Tartu und Helsinki ein. 1958 war Gulya am Institut für Finnougristik der Universität Budapest tätig und ging anschließend als wissenschaftlicher Mitarbeiter an das Institut für Sprachwissenschaft der Ungarischen Akademie der Wissenschaften. Die Prüfung zum Kandidat der Wissenschaften legte er 1960 an der Akademie der Wissenschaften ab.

Neben seiner Forschungsstelle an der Akademie der Wissenschaften arbeitete Gulya in den Jahren 1975–1977 als Dozent an der József-Attila-Universität in Szeged. 1975 war er Generalsekretär des IV. internationalen Finnougristenkongresses, der in Budapest stattfand. Im selben Jahr wurde er an der Ungarischen Akademie der Wissenschaften zum Doktor promoviert.

1976 versah Gulya die Professur am Finnisch-ugrischen Seminar der Georg-August-Universität Göttingen, wo er im folgenden Jahr zum Ordinarius ernannt wurde. Dieses Amt übte er bis zu seiner Emeritierung 2001 aus. Nach seiner Pensionierung war János Gulya Vertretungsprofessor an der Universität Szeged 2001/02 und Gastprofessor an der Staatlichen Universität Jugoria im Autonomen Kreis der Chanten und Mansen 2004/06.

János Gulyas wissenschaftliche Forschungen konzentrierten sich auf die obugrischen Sprachen, insbesondere untersuchte er den östlichen Vach-Dialekt des Chantischen und dessen Satzstrukturen (*Aktiv, Ergativ und Passiv im Vach-Ostjakischen* 1970, *A mondatszerkezetek rendszere a vahi osztjákban* [Das System der Satzstrukturen im Vach-Ostjakischen] 1994). 1997 erschien sein Lehrbuch *Eastern Ostyak Chrestomathy*. Gulya veröffentlichte mehrere Bände Folklore der obugrischen Völker, vor allem Märchen, in ungarischer und deutscher Übersetzung.

János Gulya erhielt zahlreiche akademische Ehrungen, er war u.a. Ehrendoktor der Universität Szeged (1997) und wurde mit dem Ritterkreuz des Finnischen Ordens der Weißen Rose ausgezeichnet (1997). Gulya war seit 1973 korrespondierendes Mitglied der Finnisch-Ugrischen Gesellschaft.

Sirkka Saarinen

László Vikár 1929–2017

László Vikár, Volksmusikforscher und Professor emeritus der Musikhochschule Ferenc Liszt, verstarb in Budapest am 12. Mai 2017 im Alter von 87 Jahren. Er war am 8. Juni 1929 in Szombathely geboren. Vikár begann sein Studium an der Musikhochschule Ferenc Liszt 1947 in der Abteilung für Gesangslehrer und Chorleiter und wechselte 1952 zum Fach Musikwissenschaft über, wo Zoltán Kodály, Jenő Ádám und Zoltán Vásárhelyi seine Lehrer waren. Nach seinem Abschluss 1956 nahm Vikár ein weiterführendes Studium unter der Leitung von Kodály auf und erhielt 1961 den Titel eines Kandidaten. Zum Dr. der Musikwissenschaft promovierte er 1989.

Innerhalb der Musikwissenschaft richtete sich Vikárs Interesse auf die Ethnomusikologie und die Volksmusikforschung. Von 1960 bis 1995 war er in verschiedenen Funktionen in der Abteilung für Volksmusik der Ungarischen Akademie der Wissenschaften tätig, in den Jahren 1977–1991 als Leiter der Abteilung und bis zu seiner Pensionierung als wissenschaftlicher Berater. Gleichzeitig nahm Vikár 1970–2003 auch an der Musikhochschule Ferenc Liszt verschiedene Aufgaben wahr, ab 1982 als Dozent und ab 2000 als Professor. Als Gastprofessor war er mehrfach auch in Kanada und den USA tätig.

Nach Vikárs Ansicht ist eine der Hauptaufgaben der Ethnomusikologie die Dokumentation von Melodien, und ohne Feldforschung kann man nicht Ethnomusikologe werden. Von seiner Studienzeit in den 1950er Jahren bis zum Ende der 1970er Jahre sammelte Vikár Volkslieder auf seinen Forschungsreisen, die zunächst in die Siedlungsgebiete der Ungarn, dann ans Wolgaknie führten. Seine Sammlung ungarischer Lieder enthält insgesamt 4400 Weisen aus dem Gebiet der heutigen Republik Ungarn sowie aus Oberungarn und Transsilvanien. Im Wolgagebiet arbeitete Vikár mit dem Sprachwissenschaftler Gábor Bereczki zusammen und nahm in den Republiken Mari, Tschuwaschien, Tatarstanin ja Baschkirien 3600 Weisen auf Band auf. Sie erschienen mit Noten und Texten in vier umfangreichen Bänden (*Cheremis folksongs* 1971, *Chuvash folksongs* 1979, *Votyak folksongs* 1989, *Tatar folksongs* 1999). Mit diesen grundlegenden Werken dürften sich alle vertraut gemacht haben, die die finnisch-ugrischen oder türkischen Sprachen und Kulturen des Wolgagebiets erforschen; auch ein Teil der Tonaufnahmen wurde veröffentlicht. 2002 erschien Vikárs Tagebuch über neun Reisen ins Wolgagebiet, die er mit Bereczki unternommen hatte; sie

dauerten insgesamt ca. 400 Tage, an denen sie in ca. 300 Dörfern forschten (*Volgán innen, Volgán túl. Naplójegyzetek a magyar őshaza vidékéről* [Diesseits der Wolga, jenseits der Wolga. Tagebuchaufzeichnungen aus der einstigen Heimat der Ungarn]). Im folgenden Jahr veröffentlichte er die Aufzeichnungen über seine ungarischen Feldforschungen (*Dunán innen, Dunán túl. Gyűjtőnapló 1952. január 17–1964. május 1* [Diesseits der Donau, jenseits der Donau. Sammlungstagebuch 17.1.1952–1.5.1964] 2003). Neben seiner Sammeltätigkeit veröffentlichte Vikár zahlreiche Untersuchungen über die Volksmusik der Ungarn und anderer finnisch-ugrischer Völker. 1995 erhielt László Vikár den renommierten Széchényi-Preis.

Sirkka Saarinen

Galina Nikitina 1951–2017

Galina Nikitina wurde am 27.10.1951 im Dorf Lonki-Vorcy (Лонки-Ворцы) in der Nähe der Stadt Igra geboren. Am Lehrerseminar in Možga schloss sie 1971 die Ausbildung zur Lehrerin ab. Anschließend studierte sie Geschichte an der Staatlichen Universität in Iževsk, wo sie 1976 das Examen ablegte. Ihr Aufbaustudium im Fach Ethnologie absolvierte Nikitina an der staatlichen Lomonossow-Universität in Moskau unter Leitung von Prof. Klavdija Kozlova. Kozlova hatte sich auf die ethnologische Erforschung der Völker des Wolgagebiets spezialisiert, und ihre auf Archivquellen basierende historische Perspektive beeinflusste auch die Themenwahl Nikitinas, die sich auf die sozialen Institutionen der Udmurten konzentrierte. 1985 legte Nikitina die Kandidatenprüfung ab, und 1999 promovierte sie über das Thema „Die udmurtische Dorfgemeinschaft in der Zeit des Sozialismus (1917–1930)" (*Удмуртская сельская община удмуртов в советский период (1917-начала 30-х гг.)*).

Nikitina arbeitete ab 1985 als Wissenschaftlerin und später als Leiterin in der Abteilung für Ethnologie und Soziologie des Wissenschaftlichen Forschungsinstituts von Udmurtien. Ab 2000 war sie als stellvertretende wissenschaftliche Leiterin des Instituts und ab 2011 als Leiterin der geschichtswissenschaftlichen Abteilung tätig.

Als Professorin für Ethnologie beteiligte Nikitina sich aktiv an der Lehrtätigkeit des Instituts für Ethnologie und Geschichte der Staatlichen Universität von Udmurtien. Ihre Vorlesungen behandelten u.a. die Kindheit und die Stellung der Bauern aus der Perspektive der Gemeinschaftlichkeit.

Als gebürtige Udmurtin und als Frau konnte Nikitina ihre eigene Lebenserfahrung in ihren wissenschaftlichen Untersuchungen nutzen. Sie kannte die Bräuche und ungeschriebenen Regeln des sozialen Lebens, was sich unverkennbar auf ihre wissenschaftliche Tätigkeit auswirkte. Nikitina untersuchte die udmurtische Gesellschaft aus einer breiten Perspektive. Ihr wissenschaftliches Interesse galt der Gemeinschaft, darin auch der Stellung des Kindes, und schließlich den Veränderungen im gesellschaftlichen Leben. Charakteristisch für Nikitinas Forschung ist die Evaluation der wissenschaftlichen Ergebnisse aus der Sicht der gesellschaftlichen Verantwortung. Sie erwartete von der Forschung keine eindeutige Antwort auf gesellschaftliche Probleme, verglich aber gern die Bräuche des traditionellen und des heutigen Lebens. Dieser Aspekt spielt sowohl in ihren

Untersuchungen zum Dorfrat und seiner Stellung als auch zur Kindererziehung eine herausragende Rolle.

Die Monografie *Сельская община бускель в пореформенный период (1861–1900 гг.)*, die sich mit dem Dorfrat oder *buskel'* befasste, war bei ihrem Erscheinen 1993 aktuell. Es war eine Zeit des gesellschaftlichen Umbruchs von Kollektivgütern zu privaten Höfen, und die Veränderungen ließen die Bedeutung der traditionellen Kultur, der Gemeinschaft, der Familie, der Nachbarschaftshilfe und des Gemeinwerks erneut hervortreten. Nikitina betonte, dass der Dorfrat vor allem eine die Landwirtschaft regulierende Institution war, die implizites Wissen von Generation zu Generation weitergab. Die zweite Aufgabe des Dorfrats war gesetzlich festgelegt; der Rat repräsentierte die unterste Ebene und Entscheidungsbefugnis in der administrativen Hierarchie. Nikitina richtete die Aufmerksamkeit auch auf die Familie als Hintergrundfaktor, der den Dorfrat lenkte.

Als Untersuchungsmaterial nutzte Nikitina neben der Landwirtschaftsreform Statistiken und historische Darstellungen aus den Jahren 1861–1900. Eine zweite zentrale Quelle waren die Gerichtsprotokolle, die sich mit der Landwirtschaft, aber auch mit dem religiösen Leben und dem Brauchtum der Gemeinschaften befassten. Die dritte Quellengruppe umfasste die Feldforschungen des Wissenschaftlichen Forschungsinstituts von Udmurtien und der Ethnologen des Udmurtischen Nationalmuseums in Udmurtien, Tatarstan, Baschkortostan und der Region Kirow in den Jahren 1979–1980. Die Untersuchung über die volkstümliche Kindererziehung der Udmurten (*Народная педагогика удмуртов* [1997]) berücksichtigte ebenfalls die Probleme der Lehrkräfte in der Zeit der Globalisierung. Zwar ist das Werk vom Material und der Behandlungsweise her wissenschaftlich, wird aber durch zahlreiche Proben aus der mündlichen Überlieferung, Redensarten und Volksliedern aufgelockert. In der Untersuchung richtete Nikitina die Aufmerksamkeit auf die verschiedenen Altersstufen der Kindheit. Im Abschnitt über die frühe Kindheit stützte sie sich auf die materielle Kultur. Die zahlreichen Abbildungen zeigen Babytragen, Toilettenstühle für Kinder, Wiegen, Kinderwagen und Laufllerngeräte. Im Mittelpunkt des Kapitels über angehende Jugendliche steht das Brauchtum, und Nikitina stellt fest, dass die gemeinsamen Bräuche der Mädchen und Jungen die jährlichen Feste der Erwachsenen nachahmten, die den Zweck hatten, das Wohlergehen der Gemeinschaft zu verbessern.

Nikitinas wissenschaftliches Werk berücksichtigt gesellschaftliche, gerade in diesem Moment interessante Themen. Die historische Untersuchung

der Dorfgemeinschaft findet Berührungspunkte mit den Strukturreformen der Landwirtschaft nach dem Zusammenbruch der Sowjetunion. Die Analyse der Kindererziehung weist in die Zukunft, indem sie aufzeigt, wie groß die Rolle verschiedener gesellschaftlicher Institutionen bei der Erziehung der Kinder zu Mitgliedern der Gemeinschaft war. Erfolgreich verbindet Nikitina historische Archivquellen und Befragungen. Die Präsenz der materiellen Kultur wird in den Untersuchungen über die Kindererziehung und über Frauentrachten betont (*Национальная одежда, традиции и инновации* [Nationaltracht, Traditionen und Innovationen] 1991).

Ab 2001 konzentrierte Nikitina sich auf die Untersuchung der mit den Veränderungen der udmurtischen Gesellschaft verbundenen Probleme, ethnischer Prozesse, der Urbanisierung und der Integration. Im Plenarvortrag beim 11. Finnougristenkongress machte Nikitina gemeinsam mit Aleksej Zagrebin auf den schmerzhaften Kollektivierungsprozess in der Zeit des Sozialismus und auf die Verfolgung von Udmurten und Mari aufmerksam (*Финно-угорские народы России в социальных трансформациях XX века: опыт и проблемы адаптации.* [Die finnisch-ugrischen Völker Russlands in den sozialen Veränderungen des 20. Jahrhunderts: Erfahrung und Anpassungsprobleme] 2010). Die Landflucht behandelte Nikitina in Artikeln, die auf Befragungen und Beobachtungen beruhten (Invisible tears of disappearing Udmurt villages 2012).

Bei den internationalen Finnougristenkongressen in Debrecen (1990), Jyväskylä (1995), Helsinki (2000) und Oulu (2015) trat Nikitina überzeugend auf. Bei den jährlichen russischen Ethnologiekongressen war sie ein willkommener Gast und verfocht ihre auf die Soziologie und auf historische Quellen gestützte Linie. Nikitina gehörte den Redaktionskomitees mehrerer Publikationsreihen des Fachs an; erwähnt seien hier die Travaux ethnographiques der Finnisch-Ugrischen Gesellschaft und das Yearbook of Finno-Ugric Studies.

Nikitina war nicht nur durch die Wissenschaft, sondern auch durch ihre praktische Tätigkeit gesellschaftlich aktiv. Sie war 1990–1993 Abgeordnete im Stadtkomitee von Iževsk, Mitglied im Vorstand des Bundes der Udmurten Udmurt Keneš und ab 1997 Vorsitzende des Komitees der udmurtischen Frauen. 1999 wurde ihr die Verdienstauszeichnung für Wissenschaftler verliehen.

Nikitinas vielseitige Perspektiven, ihre Fähigkeit, sowohl die Herausforderungen des traditionellen wie des heutigen Lebens zu berücksichtigen, und ihre Art, die Stimmen der udmurtischen Bauern hörbar zu machen,

gaben ihrem wissenschaftlichen Werk eine eigenständige Prägung. Galina Nikitina war eine offene, fröhliche Wissenschaftlerin, die ihr Fach durch und durch kannte. Sie begeisterte die Studierenden und forderte ihre Kollegen zu tiefschürfenden Gesprächen heraus.

Ildikó Lehtinen

Aleksei Peterson 1931–2017

Der estnische Museumsleiter Aleksei Peterson verstarb am 27.7.2017 in Tartu. Er war am 29.10.1931 in Valgamaa geboren. 1951 nahm er das Studium der Ethnografie an der Universität Tartu auf, und 1993 legte er an der Universität Sankt Petersburg die Prüfung zum Kandidaten der Geschichtswissenschaften ab.

Peterson war viele Jahre, von 1958 bis 1992, Leiter des Estnischen Nationalmuseums. Sein wissenschaftliches Interesse galt der im Verschwinden begriffenen volkstümlichen Kultur der finnisch-ugrischen Völker, vor allem der Wepsen und Udmurten. Auf seine Initiative hin unternahmen die wissenschaftlichen Mitarbeiter des Museums jährlich Forschungs- und Sammelreisen zu den finnisch-ugrischen Völkern Russlands. Es kamen über hundert Reisen zusammen, die das Museum um eine wertvolle Sammlung von mehr als 10 000 Gegenständen bereicherten. Teil des Projekts war eine umfassende visuelle Dokumentation, von Fotos und Zeichnungen bis zu ethnografischen Filmen. Die ethnografischen Filme wurden später zu einem wichtigen Zweig in Petersons Lebenswerk, und er verfasste die Drehbücher für mehrere Filme, u.a. *Vepslased 20. sajandi alguses* (Die Wepsen zu Beginn des 20. Jahrhunderts, 1981), *Lõunaudmurdi küla 20. sajandi alguses* (Ein südudmurtisches Dorf zu Beginn des 20. Jahrhunderts, 1983), *Põhjaudmurdid 20. sajandi alguses* (Die Nordudmurten zu Beginn des 20. Jahrhunderts, 1995) und *Eesti küla sajandivahetusel* (Ein estnisches Dorf um die Jahrhundertwende, 2011).

1995 gründete Peterson die Zeitschrift *Muuseum*, als deren Chefredakteur er bis 2006 tätig war.

Peterson machte sich Sorgen um die Zukunft des Estnischen Nationalmuseums und leitete Ende der 1980er Jahre das Gespräch über neue Räumlichkeiten ein. Das 2016 eröffnete neue Estnische Nationalmuseum war sein Traumbild.

Als Museologe interessierte Peterson sich für die Erweiterung der Sammlungen und für die Bestandspolitik, die auch das Thema seiner Kandidatendissertation waren: *Принципы комплектования этнографических музейных коллекций и их обработки на примере Эстонского национального музея* (Die Grundsätze der Ergänzung und Bearbeitung ethnografischer Museumssammlungen nach dem Modell des Estnischen Nationalmuseums, 1993). In seinen Publikationen untersuchte Peterson

die Wissenschaftsgeschichte der estnischen Ethnografie aus der Perspektive der Museen. Nach seiner Pensionierung veröffentlichte er 2006 das Tagebuch seiner udmurtischen Forschungsreisen, *Udmurdi päevikud / Удмуртъёс дорын чаклам-гожъямъёс*.

Peterson hatte hervorragende Beziehungen zu finnischen Forschungsinstituten und Museen. Er war Mitglied der Finnischen Literaturgesellschaft, der Finnischen Altertumsgesellschaft und der Finnisch-Ugrischen Gesellschaft. In Anerkennung seines ethnografischen Lebenswerks wurde Peterson 2005 mit dem Jakob Hurt-Preis ausgezeichnet.

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