

From compound nouns to case marking: Prolatives in South Saami and Lule Saami

Jussi Ylikoski (UiT The Arctic University of Norway)

Abstract

This article discusses the morphology, syntax and semantics of the previously underdescribed denominal formations in *-raejkiem* and *-raejkien* in present-day written South Saami, and their etymological and functional counterpart *-rájge* in Lule Saami. As the topic has been mostly described in occasional dictionary entries but largely ignored in grammatical descriptions, the present article provides the first grammatical description of formations such as South Saami *loedteraejkiem* ‘along the track’ and *okseraejkien* ‘through the door’, and the corresponding *luoddarájge* and *uksarájge* in Lule Saami. The detailed morphosyntactic and semantic analysis suggests that *-raejkiem/-raejkien* and *-rájge* – originating in the genitive and accusative forms of the nouns for ‘hole, opening’ – have many case-like features that make them look like modern equivalents of the so-called prolative (‘along, through, via’) case reconstructed in the (Pre-)Proto-Saami predecessors of these westernmost Uralic languages. In a wider perspective, the development of the case-like *-raejkiem/-raejkien* and *-rájge* prolatives from compound nouns challenges received views about diachronic interrelations of compounding, derivation and inflection.

Keywords: compound nouns, local cases, Lule Saami, prolative, South Saami

1. Introduction

South Saami and Lule Saami, spoken in central parts of Norway and Sweden, are two of the westernmost languages of the Uralic language family. With approximately 500 and 700 speakers, respectively, both languages are being transmitted to new generations; they have an established status as literary languages, and they are used in modern media and various other, albeit limited, domains of society. This article describes and discusses the existence and use of two case-like formatives in modern literary South Saami and Lule Saami, with occasional references to their counterparts in other Saami languages.¹

According to the received view, the grammatical structures of the Saami languages belong to the most “Indo-Europeanized” among the Uralic languages; their morphology exhibits a comparatively high degree of fusionality, and their syntax is in many ways quite similar to that of their Scandinavian neighbors. On the other hand, the Saami languages are quite ordinary Uralic languages of Europe, and the westernmost Saami languages can actually in many respects be characterized as more conservative than their sister languages to the east. As regards the topic of this paper, Table 1 illustrates the inventories of the eight acknowledged productive morphological cases in South Saami and Lule Saami noun declension – clearly smaller inventories than in the best known Uralic languages: Hungarian, Finnish and Estonian – but larger than in any of the Indo-European languages of Northern Europe.

South Saami

Lule Saami

¹ I wish to thank Henrik Barruk, Lotta Jalava, Laura Janda, Maja Lisa Kappfjell, Lars-Gunnar Larsson, Bruce Morén-Duolljá and Sandra Nystø Ráhka for their valuable help and comments on earlier versions of this paper. While expressing my special thanks to the native speaker linguists Maja Lisa Kappfjell (South Saami) and Sandra Nystø Ráhka (Lule Saami) for insightful and inspiring comments about my findings and emerging intuitions of their languages, I wish to emphasize that I have deliberately refrained from extending and diversifying 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. It goes without saying that I am solely responsible for the views expressed in this paper.

	Singular	Plural	Singular	Plural
Nominative	<i>okse</i>	<i>oksh</i>	<i>uksa</i>	<i>uvsa</i>
Genitive	<i>oksen</i>	<i>oksi</i>	<i>uvsa</i>	<i>uvsaj</i>
Accusative	<i>oksem</i>	<i>okside</i>	<i>uvsav</i>	<i>uvsajt</i>
Illative	<i>oksesse</i>	<i>okside</i>	<i>uksaj</i>	<i>uvsajda</i>
Inessive	<i>oksesne</i>	<i>oksine</i>	<i>uvsan</i>	<i>uvsajn</i>
Elicative	<i>okseste</i>	<i>oksijste</i>	<i>uvsas</i>	<i>uvsajs</i>
Comitative	<i>oksine</i>	<i>oksigujmie</i>	<i>uvsajn</i>	<i>uvsaj</i>
Essive		<i>oksine</i>		<i>uksan</i>

Table 1. The South Saami and Lule Saami case systems exemplified with the words for ‘door’.

The case paradigms of Table 1 include three local cases – illative (‘to’), inessive (‘at, in’) and elative (‘from’). However, the topic of this paper is a grammatical category that could be considered the fourth local case of South Saami and Lule Saami. Unlike the situation in the best known Uralic case systems of Hungarian or those of the Finnic branch, the Saami languages do not have parallel series of local cases that can be labeled as internal, external and vicinal cases (see, e.g., Kittilä & Ylikoski 2011). On the contrary, the case-like category to be discussed in the following sections is conceptually on a par with the established local cases, especially if viewed from the Hjelmslevian (1937) point of view where the category called *prosecutive* is a part of a symmetrical four-way system that can be described by the combinations of features [\pm from] and [\pm to]; see also Blake (2001: 38–39) who favors the term *perlative*, apparently unknown in Uralistics.² As for the type of cases known as *prolatives* by many Uralists, Haspelmath (2009: 515) refers to traditions that use labels like *prosecutive* (as also used in Permic and Samoyedic linguistics), *perlative*, *traversal*, *translative*, *vialis* and *mediative* for approximately the same purpose.

To use the traditional terminology of Saami, Finnic and Mordvin linguistics, *prolative* forms (cases, adverbs, adpositions) have positive values for both features [\pm from] and [\pm to]. A neat example of the theoretical symmetry of the system is provided by the forms for the Lule Saami place name *Váhtjer* (~ *Jiellvárre*, Swedish *Gällivare*) in Table 2.

	[+to]	[-to]
[+from]	prolative (Path) <i>Váhtjerik</i> ‘via <i>Váhtjer</i> ’	elative (Source) <i>Váhtjeris</i> ‘from <i>Váhtjer</i> ’
[-from]	illative (Direction) <i>Váhtjerij</i> ‘to <i>Váhtjer</i> ’	inessive (Location) <i>Váhtjerin</i> ‘in <i>Váhtjer</i> ’

Table 2. The semantic relations between the so-called prolative forms and the three local cases of Lule Saami.

A less formal way of defining prolatives such as *Váhtjerik* is to call them expressions of path or route. In other words, they usually do not refer to the source (‘from’) nor the goal (‘to’) of motion, but to the path from the source of a motion to its goal. However, unlike the local case forms *Váhtjeris*, *Váhtjerin* and *Váhtjerij*, the prolative *Váhtjerik* has not been regarded as a case form proper, as it is only one of about a half dozen attested Lule Saami words containing the marker *-(i)k* with a spatial prolative meaning. In fact, the form *Váhtjerik* has been mentioned only by Wiklund (1901; 1915: 37) and occasional scholars citing him.³

² The terminology and notational devices vary. For example, when defining and describing mutual relations of various spatial relations in terms of the features called [\pm from] and [\pm to] here, Hjelmslev (1937) speaks of distancing (*éloignement*) and approaching (*rapprochement*), whereas Riemsdijk and Huijbregts (2007: 343) speak of *inchoative* and *telic*.

³ Wiklund’s original spelling *Váhtjērik* is relatively close to the modern orthography of Lule Saami (*Váhtjer* : *Váhtjeris* : *Váhtjerin* : *Váhtjerij*; hence *Váhtjerik*), but for the purposes of the present paper, the huge variation of earlier scholarly transcriptions has been reduced to minimum by transforming nearly all South, Lule as well as

Nevertheless, the suffix *-k* and its cognates have gained attention to the extent that it is precisely this morpheme that is known as “the prolicative” in descriptions of Lule Saami and elsewhere in Saami linguistics. To make the issue more complicated, the term is also used for certain temporal adverbs such as Lule Saami *giessek* ‘in summer’ (← *giesse* ‘summer’) or South Saami *giesege* (← *giesie*) id. that actually seem to outnumber the spatial noun-based *-k* proliatives in most Saami languages. In this paper, the term *prolicative* is used mostly as a semantic label to comprise basically all kinds of ‘through, along, via’ morphemes as described above; cf. Blake (2001: 38–39, 203) who uses the term *perlative* as a designation for analogous morphological cases “expressing ‘through’, ‘across’ or ‘along’”, but does not refrain from characterizing the dative in Pitta-Pitta as a case with “the perlative function” (‘through; across’) (ibid. 127).

This paper focuses on another kind of construction that deserves the label “prolicative” in at least as great a degree as the *-k* forms, as they are almost without exception restricted to expressions of paths and routes. Although the locality of Váhtjer, for example, does not seem to constitute such a path in itself, paths are manifested in referents such as doors, resulting in expressions like South Saami *okseraejkiem* or Lule Saami *uksarájge*, both meaning ‘through the door’. More obviously than the *-k* element of *Váhtjerik*, formants such as *-raejkiem* and *-rájge* are apparently rather productive means of creating new prolicative expressions in the written language data available. Furthermore, as will be seen further below, the morphosyntax of such formations suggests that *-raejkiem* and *-rájge* are case-like suffixes that can be best understood by comparing them with less controversial local cases and other spatial grams⁴ within South Saami and Lule Saami.

The structure of the paper is as follows: Section 2 provides a brief introduction to the case systems of the westernmost Saami languages and to the position of the so-called proliatives within Saami linguistics. Section 3 is the main body of the paper that provides a description of the “new” proliatives in South Saami (*-raejkiem*, *-raejkien*) and Lule Saami (*-rájge*), beginning with the history of their research (3.1), next scrutinizing the morphosyntactic properties of the constructions in question (3.2), then turning to their semantics – including deviating usages of Lule Saami *-rájge* in functions more typical of directional cases – (3.3), and further to the plural equivalents of the prolicative singular formations (3.4). In conclusion, Section 4 draws the threads together and provides a general discussion of the topic by relating the present observations to the established views of the Saami case declension. In addition to discussing the position of the “old” and “new” proliatives within South Saami and Lule Saami noun inflection, it is shown that the languages in question, backed up by supplementary observations on other Saami languages, also offer new insights to the more typological studies on the development of case markers in general as well as to our synchronic understanding of prolicative cases in particular.

Most examples come from the multi-genre corpora of South Saami and Lule Saami (approximately 450,000 and 1,000,000 words, respectively) originally published within about the past three decades and made available by SIKOR corpus at UiT The Arctic University of Norway. Although much of the data comes from a comparatively large corpus with respect to the size of the language communities, this study is predominantly qualitative. Furthermore, although the territories of South Saami and Lule Saami are wide and at present rather

Ume Saami data to their present orthographies, thus yielding word forms such as South Saami *straejmiereejki* (30) instead of the original *strä`jmiere`jki`i* (Lagercrantz 1926: 133). In the absence of an established orthography, the data from Pite Saami is presented in the original script.

⁴ Following Svorou (1994), I use the term (*spatial*) *gram* as a cover-all for different types of grammatical elements, such as case suffixes, adpositions and adverbs – including the grammaticalized *-raejkiem* and *-rájge* formations regardless of the ultimate morphosyntactic interpretation.

fragmented, questions of language-internal geographical variation fall outside the scope of the current investigation.

Before commencing with the analysis, there is a potentially important reservation to be made: word forms ending in *-raejkiem/-raejkien* and *-rájge* are not very frequent. For example, in the corpora of 450,000 and 1,000,000 words, the forms in question constitute less than 0.01% of the total of word forms in the corpora: the total of 31 in South Saami (19 *-raejkiem*, 12 *-raejkien*) and 86 in Lule Saami (*-rájge*), and even these numbers include ordinary compound nouns that are not relevant for the purposes of the present study (e.g., in the South Saami postpositional phrase *haevtieraejkien nille* [grave.hole.GEN onto] ‘on(to) the grave hole’). While the frequency of a given phenomenon cannot be used as a decisive criterion for approving or denying category membership of morphological cases, for example, it must be recognized that the formations to be discussed play a statistically marginal role in both languages.

2. Saami case systems and the so-called prolatives

Among the nine contemporary Saami languages, the eight-case declensions of South Saami and Lule Saami (as well as those of the closely related Ume Saami and Pite Saami in between) are structurally quite similar. They have all maintained the Proto-Saami distinctions between the genitive and the accusative on one hand and between the inessive and the elative on the other, whereas the partitive and abessive have fallen out of use – or at least out of inflection. The latter, in turn, have maintained their status a part of case paradigms in languages such as Aanaar (Inari) Saami and Skolt Saami located to the east of North Saami, a language with only six morphological cases.⁵

Sammallahti (1998: 203–204) presents a reconstruction of the Pre- and Proto-Saami declension with potentially as many as thirteen cases. Two of them, “?Lative” in **-n/k/s* (for which see, e.g., Ylikoski 2011) and “?Prolative” in **-ko* (> **-gō*) are precariously presented with question marks. Although Sammallahti’s Proto-Saami reconstructions include prolative forms for ‘hut’, ‘cap’ and ‘island’, the semantics of the proposed case is not described, and the term *prolative* otherwise occurs only in etymologies for words like South Saami *giesege*, Lule Saami *giessek* mentioned above. Such words include temporal adverbs for ‘in fall’, ‘in winter’, ‘in spring’, ‘at night’, ‘during the daytime’, but also deictic adverbs such as North Saami *gokko* ‘at which place; by which way’, *dakko* ‘around there; that way’ (= South Saami *gogkoe*, *dajkoe*, Lule Saami *gāggu(s)*, *daggu*), or the South Saami adverb *gāavtoeh* ‘in the center’. The above-mentioned Lule Saami *Váhtjerik* ‘via Váhtjer’ has certainly been connected to the very same prolative in **-ko* (e.g., Beke 1911: 475), but from the perspective of inflectional case morphology, it appears questionable to what extent such prolatives play a productive role in Saami morphology, and it actually appears questionable to what extent they ever did, as Sammallahti’s question marks also suggest. I will return to the possible remnants of truly prolative “path” semantics of **-ko* in Section 4.

Although the languages in question do not possess suffixes that could be regarded as obvious prolative cases, the overall system of spatial interrogatives and deictics, as well as adpositions and formally identical adverbs, and other adverbs such as those referring to cardinal or relative directions include many semantically uniform sets whose members come in fours instead of threes. Table 3 depicts a part of such series in South Saami. Some of the series quite clearly show that many of the adpositional series stem from case-marked relational nouns of Proto-Uralic or otherwise ancient origin, but from a synchronic perspective these sets are more or less opaque and partly suppletive.

⁵ For the purposes of this paper, I disregard the issue of the South Saami and Lule Saami successors of the Proto-Saami abessive case that has been gradually losing ground in Saami languages (cf., e.g., Bergsland 1946: 186–187; Spiik 1989: 34ff., 100; Sammallahti 1998: 63, 70).

spatial meaning	illative ‘to’	inessive ‘at’	elative ‘from’	prolative ‘via’
(neutral case marker)	<i>-n, -(s)se</i> , e.g., <i>Oslove-se</i> ‘to Oslo’	<i>-sn(i)e</i> , e.g., <i>Oslove-sne</i> ‘in Oslo’	<i>-st(i)e</i> , e.g., <i>Oslove-ste</i> ‘from Oslo’	–
interrogatives	<i>gosse?</i> ‘(to) where?’	<i>gusnie?</i> ‘where?’	<i>gustie?</i> ‘from where?’	<i>gogkoe?</i> ‘(by) which way?’
deictic; e.g., ‘there’	<i>dahkoe</i>	<i>debpene</i>	<i>debpede</i>	<i>dajkoe</i>
cardinal direction; e.g., ‘north’	<i>noerhtese</i>	<i>noerhtene</i>	<i>noerhtede</i>	<i>noerhtege</i>
relative direction; e.g., ‘down’	<i>våålese</i>	<i>vuelnie</i>	<i>vuelhtie</i>	<i>vuelege</i>
‘before, front’	<i>uvte</i>	<i>åvtesne</i>	<i>åvteste</i>	<i>åvtem</i>
‘behind, back’	<i>duakan</i>	<i>duekesne</i>	<i>duekeste</i>	<i>duekiem</i>
‘between’	<i>giske</i>	<i>gaskesne</i>	<i>gaskeste</i>	<i>gaskem</i>
‘under, below’	<i>nualan</i>	<i>nuelesne</i>	<i>nueleste</i>	<i>nueliem</i>
‘on; upper surface’	<i>nille</i>	<i>nelnie</i>	<i>nelhtie</i>	<i>bijjelen, rastah</i>
‘inside’	<i>sijse</i>	<i>sisnie</i>	<i>sistie</i>	<i>tjïrrh</i>
‘near, vicinity’	<i>gåajkoe</i>	<i>lunnie</i>	<i>luvhtie</i>	–

Table 3. Illative-inessive-elative-prolative systems of certain spatial expressions (cases, adverbs, adpositions) in South Saami (data mostly adapted from Magga & Magga 2012).

As regards the contents of Table 3, analogous data could be provided for all Saami languages, the major difference being that in the languages to the northeast of Lule Saami, the “inessive” and “elative” categories have merged to one (labeled “locative”). It is notable that the eastern merger has not affected the case suffixes only, but has changed the entire system for the “inessive” and “elative” cases while leaving the prolative category intact, as if to underline the symbiosis of local cases and other functionally equivalent categories.

The contents of the prolative column are quite heterogeneous, however. Not only is a prolative case marker missing, but some prolative adverbs (e.g., *gogkoe*, *dajkoe*, *noerhtege*, *vuelege*) go back to the element **-ko* discussed above, whereas some other prolatives end in *-m*, and some are etymologically different from the rest of the series (*bijjelen* and *rastah* for ‘over’ and *tjïrrh* for ‘through (inside of)’) or are altogether missing. However, the postpositions ending in *-m* are formally identical to or at least reminiscent of the accusative case forms of relational nouns. However, as regards ordinary nouns, the accusative case as in *Osloven* [Oslo.ACC] is normally the case of the direct object only, whereas to convey prolative semantics, postpositions such as *baaktoe* must be used (e.g., *Osloven baaktoe* [Oslo.GEN via] ‘via Oslo’). On the other hand, prolative functions of accusative-marked nouns are not unknown either, as shown by Examples (1–2) from South Saami and (3) from Lule Saami:

(1) South Saami

Daate barre dam aktem geajnoem jåhta.
3SG only DEF.ACC one.ACC road.ACC travel.3SG
‘S/he is only traveling along that one road.’ (SIKOR)

(2) South Saami

Daelie jis mijjen almetjh aaj geajnoebealine årroeminie,
now again 1PL.GEN human.PL also road.side.PL.LOC live.PROG
njieljienska[a]vhte gåetine gusnie ij riehpeneraejkiem
four.cornered house.PL.INE where NEG.3SG smokehole.raejkiem

tjuetsieh jallh åbroeh. (or: smokehole.opening.ACC)⁶
 snow.CNG or rain.CNG
 ‘Nowadays, we, too, live along roads, in four-cornered houses where it does not snow or rain in through the smokehole.’ (SIKOR)

- (3) Lule Saami
Nagertjalmij idedis skåvllåbálggáv vádtsiv.
 sleepy.eye.PL.COM morning.ELA school.path.ACC walk.PST.1SG
 ‘In the morning I walked along the path to school very tired.’ (SIKOR)

The main topic of the present investigation are prolatively-used compound-like formations such as *riehpeneraejkiem* (2) that looks like the accusative form of *riehpene+raejkie* [smokehole+opening] just like in (1) where we see the accusative of *geajnoe* ‘road’ and in (3) the accusative of *skåvllåbálges* ‘school path’. Furthermore, in addition to the prolativ accusatives of the above examples and the Lule Saami accusative plural *gäjnojt* in (4) below, there are certain less expected instances of genitive-like forms in more or less similar functions. Put concretely, these formations are virtually always what seem to be genitive forms of compounds whose head is the word for ‘hole’ or ‘opening’, namely South Saami *raejkie* and Lule Saami *rájgge*:⁷

- (4) Lule Saami
Álmmuk vádtsáj dassta dan goahtáj, gen vuorro
 people leave.by.foot.PST.3SG from.there it.GEN house.ILL who.GEN turn
lij tjåhkalvisguossijt biebbmat, vuorrasa bálgesrájge ja
 be.PST.3SG meeting.guest.PL.ACC feed.INF old.PL path.rájge and
nuora julisti ietjasa gäjnojt.
 young.PL roam.PRS.3PL REFL.GEN.3PL way.PL.ACC
 ‘People walked away from there to the house whose turn it was to feed the guests of the revival meeting; the elderly went along the path, and young people roamed their own ways.’ (SIKOR)

- (5) South Saami
Dagke ædtjem dåalvodh riehpeneraejkien jallh aaj
 whether shall.1SG chase.INF smokehole.raejkien or also

⁶ For the purposes of the present paper, the elements *-raejkiem*, *-raejkien* and *-rájge*, as well as their plural counterparts will be glossed as such; i.e., as [X-*raejkiem*] instead of predetermined [X-opening.ACC] or [X-PROL] and so forth.

⁷ Sandra Nystø Ráhka (p.c.) has remarked that the Lule Saami noun *rájgge* also has an inherent meaning of path, and especially when in the accusative (*rájgev*) it could be also analyzed in the meaning ‘pathway, passage’. However, in the authentic written language data on which the present study is based, the meanings of the plain, uncompounded nouns *rájgge* and *raejkie* are both quite like those of English *hole*, ranging from ‘a hollow place in the ground’ (i) to ‘perforation made by piercing’ (ii):

- (i) Lule Saami
Muohttagij rájgev bálj.
 snow.ILL hole.ACC dig.PST.3SG
 ‘S/he dug a hole in the snow.’ (SIKOR)
- (ii) South Saami
Hei Malena, åådtjeme Leah raejkieh bieljine?
 hey M. get.PST.PTCP be.2SG hole.PL ear.PL.INE
 ‘Have you got holes in your ears, Malena?’ (SIKOR)

båassjoeraejkien.rear.entrance.of.a.Saami.tent.*raejkien*

‘Well, let me chase them through the smokehole or through the rear entrance.’ (Bull & Bergsland 1974: 87)

However, although the South Saami sentences of (2) and (5) do refer to true openings in the smokeholes and in the innermost parts of traditional Saami dwellings, Lule Saami *bálgesrájge* of (4) – or its South Saami equivalents *baalkaraejkiem* (Example 28 below) and *baalkaraejkien* – do not refer to any kind of holes in paths. In light of these and other features of the formations in question, they must rather be analyzed as instances of case-like morphemes *-rájge*, *-raejkiem/-raejkien* that are deliberately used in order to give NPs (headed by lexical nouns such as those meaning ‘path’) unambiguously prolativ meanings. Moreover, the use of what look like genitive forms – *-rájge* instead of accusative *-rájgev*, *-raejkien* instead of *-raejkiem* – is not compatible with the normal case semantics of these languages: Unlike the accusatives, the genitives generally do not have prolativ functions in South Saami or Lule Saami (see especially Bergsland 1946: 136–138; Bartens 1972: 50, 53; 1978: 18). The following sections will scrutinize the nature of these morphemes.

3. South Saami *-raejkiem/-raejkien*, Lule Saami *-rájge*

Before taking a look at the history of research concerning the formations in question, the following three Saami translations of a Bible verse raise many research questions in a condensed form:

- (6) Aanaar Saami
- | | | | |
|-------------------|---------------|-----------------|---------------|
| a. <i>Moonnáđ</i> | <i>poskis</i> | <i>poortist</i> | <i>siisâ.</i> |
| go.IMP.2PL | narrow | gate.LOC | to.inside |
- Lule Saami
- | | | |
|-------------------|----------------|--------------------|
| b. <i>Tjágnit</i> | <i>gártjes</i> | <i>uksarájge!</i> |
| enter.IMP.2PL | narrow | door. <i>rájge</i> |
- South Saami
- | | | | | |
|---------------------|------------|------------------|--------------|----------------|
| c. <i>Tjaangede</i> | <i>dan</i> | <i>gaertjies</i> | <i>oksen</i> | <i>tjirrh.</i> |
| enter.IMP.2PL | DEF.GEN | narrow | door.GEN | through |
- ‘Enter through the narrow gate.’ (EMM & SIKOR: Matthew 7:13)

According to the traditional linguistic terminology and all descriptions of the Saami languages, Aanaar Saami *poskis poortist* ‘through the narrow gate’ (6a) is an unambiguous NP with its head in an adverbial local case form, namely the locative which largely corresponds to the South and Lule Saami inessive and elative cases. The South Saami *dan gaertjies oxsen tjirrh* (6c) in turn is a postpositional phrase headed by the adposition *tjirrh* ‘through’. However, the Lule Saami words *gártjes uksarájge* (6b) do not constitute a prima facie NP nor a prima facie PP either. Even though one can think of *uksarájge* as referring to a door opening (nominative *uksarájgge*) instead of just a door, it is preceded by an adjective that in this sentence could indeed act as a modifier of a noun for ‘opening’ too, but similar modifiers are also possible with formations such as *bálgesrájge* ‘along the path’ (4) above. Furthermore, it can be repeated that the genitive case does not generally have a prolativ function in Lule Saami (see also Section 3.3 below).

This said, the formations in question hardly fit the pre-existing concepts of morphological case on the one hand, or that of adposition on the other. It will be argued below that *uksarájge*

(6b), not unlike South Saami *okseraejkiem* and *okseraejkien* (47) for that matter, are manifestations of case-like categories semantically reminiscent of a number of so-called prolative or prosecutive cases in other Uralic languages.⁸

3.1. History of research

Possibly because of their unprecedented position among more prototypical representatives of case suffixes and adpositions, the research history on *-raejkiem/-raejkien* and *-rájge* consists of brief, scattered and contradictory remarks only, and this holds true for their counterparts in other Saami languages as well. The formations in question have been mainly described in dictionaries rather than in grammatical descriptions; in other words, as part of the lexicon instead of the grammatical structure.

The Lule Saami element appears to have first been mentioned by Halász (1885 s.v. *rajěkie*, *rājěkie*) in his dictionary of Lule and Pite Saami where no attention is paid to possible case forms of the noun for ‘hole’ (‘lyuk, nyilás; loch, öffnung’). Halász’ examples consist only of compounds without translations: “*uksa-r.*; *veaga-r.* Arv. [=Árviesjávrrie/Arvidsjaur Ume Saami]; *palhkies-r.* id.; *johko-r.* folyó mente | der weg, welchen ein fluss fließt”. In the modern Lule Saami orthography the initial parts would be *uksa* ‘door’, *væddja* ‘road’, *bálges* ‘path’ and *jáhkå* ‘river’, but while it seems that the compounds are implicitly presented as nouns in their nominative forms, the semantics of the words like (??)*bálgesrájgge* (“path hole”) remains obscure, although *jáhkårájgge* ‘river bed’ is more understandable (see below).

Halász (1885) was soon followed by Wiklund (1890: 101) who under the noun *rájge* ‘hole’ calls the genitive *rájge* (alternatively *rájg*) a postposition, and his only example does indeed present what looks like a postpositional phrase with the complement in the genitive case, as usual with Lule Saami adpositions:

- (7) Lule Saami
Maná mijá luotta rájge!
 go.IMP.2SG 1PL.GEN track.GEN *rájge*
 ‘Go along our track!’ (Wiklund 1890: 101)

However, Wiklund seems to have mistaken and later understood the issue better, as in the vocabulary of his Lule Saami textbook (1901; 1915: 232) he presents a similar, but crucially different example:

- (8) Lule Saami
Mijá luoddarájge manáj.
 1PL.GEN track.*rájge* go.PST.3SG
 ‘S/he went along our track.’ (Wiklund 1915: 232; the original hyphenated *luödda-raikē*)

The element *-rájge* has never been mentioned in grammatical descriptions of Lule Saami (most notably Spiik 1989). However, in the major dictionary by Grundström (1946–1954 s.v.

⁸ The prolative use of the Aanaar Saami locative (6a) has parallels in other Saami languages northeast of Lule Saami, but the corresponding use of the western elative – one of the two cognates of the eastern locative – is marginal and has escaped the notice of earlier scholars (cf. Bartens 1972: 123). Not unlike the locative in the east, the Lule Saami elative expresses both real and fictive motion through openings such as gates and windows (cf. Note 14):

- (iii) Lule Saami
De gullájma juts[a]v, valla ittjij juhtsa vinndegis boade.
 DPT hear.PST.1PL noise.ACC but NEG.PST.3SG noise window.ELA come.CNG
 ‘We heard the noise, but it didn’t come from the window.’ (SIKOR)

rai'kē) the entry for the noun *rájgge* ‘hole, opening’ includes the secondary function of the form *-rájge(e)*, characterized as “genitive singular as the latter part in compounds” meaning ‘through, along, by’.⁹ Grundström’s examples include that of Wiklund’s (8) in the fragmented form *mijá luoddarájge*, as well as the isolated compounds *jáhkárájge* (← *jáhkå* ‘river’), *miehttserájge* (← *miehttse* ‘woods’; also mentioned by Wiklund 1915: 232), *bálgesrájge* (← *bálges* ‘path’), *rájggerájge* (← *rájgge* ‘hole’), *uksarájge* (← *uksa* ‘door’) and *rahterájge* (← *rahte* ‘road’) – all based on nominative singular forms; i.e., à la *luoddarájge* instead of *luotta rájge* (7). The exact nature of the “compounds” (Swedish *sammansättningar*, German *Zusammensetzungen*) or their word-class membership remains unspecified, however.

Similar forms occur later in Korhonen (2007) and Kintel’s (2012) dictionaries, but apparently the only grammar-oriented descriptions of Lule Saami *-rájge* are presented in Bartens’ (1972: 50, 53; 1978: 15, 18–20) studies on the syntax of cases and other spatial expressions in Aanaar, North and Lule Saami. Presenting three example sentences, she describes them as expressions of path, and points out that the *-rájge* forms are the only instance of the Lule Saami genitive being used in a prolative meaning (*-rájgev* with the accusative marker will be discussed in Section 3.3 below). Bartens also interprets these formations as compounds, instead of suffixed forms. As for unambiguous, transparent *-rájgge* (pro genitive *-rájge*) compounds in the nominative, one of the most important compounds with respect to grammaticalization of the prolative *-rájge* seems to be *jáhkárájgge* ‘river bed’ that occurs also in later dictionaries and will be returned to immediately below (see also Section 3.3 further below).

As regards the westernmost Saami languages, the first example was likewise presented by Halász (1891 s.v. *raiķie*) who in his dictionary of South (and Ume) Saami mentions one compound, obviously analogous to Lule Saami *jáhkárájgge* ‘river bed’: “*jeänuo-r. (...)* folyam medre | flussbe[t]t”; i.e. a designation to a river bed (cf. modern South Saami *jeanoe* ‘large river’). However, the prolative formations in oblique case forms were not described before Lagercrantz (1923: 17) who states in his South Saami grammar that the genitive formations in *-raejkien*, and also the genitive plural *-reejki* (for which see Section 3.4), in sentences like (9) are instances of a genitive that expresses the direction (!) of motion (“gibt die Richtung einer Bewegung an”):

(9) South Saami

Gogkoe edtjem tjaangedh, oksen baaktoe vij
which.way shall.1SG enter.INF door.GEN through or
båassjoeraejkien?

rear.entrance.of.a.Saami.tent.*raejkien*

‘Which way shall I go: through the door or through the rear entrance?’ (Lagercrantz 1923: 17)

On the other hand, in his subsequent dictionary of the language, Lagercrantz (1926: 133) states that these genitives are used as postpositions and have the meaning ‘through, along’, but in spite of being called a postposition, his only example is written in a single undivided word (*strä`imiere`ik`i*; <*straejmierreejki*> of Example 30 below). However, the following grammarians have remained very taciturn when presenting examples such as (10–11):

(10) South Saami

Dah vöölkin vuejien dam loedteraejkiem.
3PL leave.PST.3PL ride.CVB DEF.ACC track.of.a.herd.of.reindeer.in.snow.*raejkiem*

⁹ In Grundström’s translation, ‘genom, efter, längs efter, ut i / durch, nach, längs, entlang, hinaus in, hinaus auf (acc.)’.

‘They left, riding along the track of the reindeer herd.’ (Bergsland 1994: 66)

(11) South Saami

Tjaetsie-ledtie vöölki haelehten johkeraejkien.

water.fowl leave.PST.3SG fly.CVB river.raejkien

‘The water fowl flew off along the river.’ (Bergsland 1994: 66)

Sentences (10–11) presented by Bergsland (1994: 66) are modified from his original examples (Bergsland 1946: 137) and further reproduced by Magga and Magga (2012: 222), but none of the three major descriptions is explicit enough to state whether the formations are to be considered case forms of the noun *raejkie*, or compounds of some kind, or maybe postpositions such as Lagercrantz (1926) does. The orthographical choices reveal little either: for pedagogical purposes and due to general variation of South Saami orthography in this respect many authors write *-raejkien* with a preceding hyphen despite the analysis presented.¹⁰ As with Lule Saami *-rájge*, occasional examples of isolated *-raejkiem/-raejkien* forms also occur in the recent practical dictionaries of South Saami (Bergsland & Magga 1993; Magga 2009). However, a more explicit yet conceptually obscure analysis has been presented in Hasselbrink’s scholarly dictionary which first describes the noun *raejkie* ‘hole, opening’ by stating that its oblique cases can be used as “adverb-building postpositions” (*adverbbildende Postpositionen*) that do not govern any cases (of complements) but rather make up compounds with the stem; in other words, *-raejkiem/-raejkien* are characterized as “suffixal postpositions” meaning ‘through, along’ (Hasselbrink 1981–1985: 1051–1052).

As regards other Saami languages with corresponding formations, the research history is quite similar. Space does not allow a full account here, but it can be noted that Nielsen (1912: 4–5; 1926: 291, 297, 315; 1932–1962 s.v. *rai* ‘ge, -rai) and Bartens (1972: 50, 53; 1978: 14–15, 18–20) have considered such formations to be compound nouns, but the most recent dictionaries label corresponding North Saami formations as adverbs (e.g., Sammallahti & Nickel 2006 s.v. *-ráigge, -rái*). Hence, it remains unclear whether forms such as *johkaráigge* ‘along the river’ ought to be understood as “compound adverbs”; such a category has not been in use otherwise in Saami linguistics. Finally, Ylikoski (2009: 198–199) has briefly pointed out that many features of North Saami *-rái(gge)* point to the theoretical possibility of regarding the element as a kind of case suffix. This element is further described in Ylikoski (2014) from a decidedly North Saami perspective. Although intentionally left outside the main scope of the present study, the North Saami prolatives show both similarities and differences in comparison with South and Lule Saami with richer case morphologies, and the two studies can thus be seen as complementing each other.

The material origin of these formations is quite obvious: The pan-Saami noun for ‘hole, opening’ and the genitive and accusative cases all go back to Proto-Saami (**rājkē*, **-n*, **-m*). Nevertheless, it is truly difficult to decide whether a formation like *riehpeneraejkiem* (2, 5) is to be analyzed 1) as consisting of a compound noun *riehpene+raejkie* [smokehole+opening] in the accusative case with a prolativ meaning or rather 2) as the noun *riehpene* ‘smokehole’ followed by a gram *-raejkiem* possibly best understood as a more or less indivisible whole – a kind of case suffix, a kind of postposition or possibly something in-between – meaning ‘through’. It is obvious that on many occasions the latter alternative is the only sensible one. While doors have openings too (cf. *uksarájge* in 6b), the North Saami noun *ráigi* is also given a dictionary translation ‘long valley’ (Nielsen 1932–1962 s.v.), and the Lule Saami noun *jáhkárájge* has been defined as ‘river bed; coulee’ continually since Halász (1885) up to Kintel (2012). This of course makes formations like North Saami *johkaráigge*, Lule Saami

¹⁰ For the purposes of the present paper, all such hyphens have been omitted, so as to produce uniform glosses without illicit hyphenation.

(SaaL) *jåhkârájge* and South Saami (SaaS) *johkeraejkien* (11) ‘along the river (bed)’ somewhat transparent, whereas entities like paths (4) and tracks (7–8, 10) hardly have openings as a prerequisite for using the prolatives in question.

It is only understandable that many lexicographers have translated the morpheme with German, Norwegian and Swedish prepositions equivalent to ‘through, along, via, by’. However, such formations – be they parts of “compounds”, “adverbs”, or “postpositions” or “suffixal postpositions” – have been mostly described in dictionaries focusing on the lexical meanings of words, or otherwise apart from other spatial grams such as unambiguous local case markers, unambiguous adpositions or other prolativ adverbs and particles (as seen in Table 3), and as a consequence they have not been described from morphological or syntactic perspectives, and even their semantics has been defined through translational equivalents only, but not as part of a larger whole of spatial expressions. The following sections focus on the morphological, syntactic and semantic features of the morphemes *-raejkiem/-raejkien* and *-rájge* in South Saami and Lule Saami respectively. Put concretely, I will discuss the position of the formations such as Lule Saami *uksarájge* (6b) in relation to what are traditionally considered unambiguous case forms such as the Aanaar Saami locative *poortist* (6a) or unambiguous postpositional phrases like South Saami *oksen tjirrh* (6c) in Saami linguistics and elsewhere.

I will return to the research history of these phenomena in more detail in Section 4 that also presents some additional observations on other Saami languages such as Ume Saami and Pite Saami spoken in the areas between South Saami and Lule Saami territories.

3.2. Morphosyntax

To my knowledge, the internal morphosyntax of *-raejkiem/-raejkien* and *-rájge* constructions has never received explicit attention among scholars, although this approach seems to provide one of the most natural perspectives in attempting to understand these admittedly aberrant formations better. Most of the examples in the previous literature consist of individual word forms detached from authentic or potential contexts in which they occur in natural language. Admittedly, most occurrences consist of individual word forms such as *riehpeneraejkiem* ‘through the smokehole’ (2) or those seen in (4), (5) and (9), but even the truncated dictionary entries have occasional cues that can tell more. One of those is the genitive modifier *mijá* ‘our’ in *mijá luoddarájge* ‘along our track’ in (8) mentioned by Wiklund. While such a genitive is an entirely normal modifier for a nominal complement of an adposition, this is not generally the case for the modifiers of compounds, if one were to analyze formations such as *riehpeneraejkiem* as (endocentric) nouns, and SaaL *bálgesrájge* (4) or SaaS *loedteraejkiem* (10), for example, as some kind of extensions of such.

In practice, the only morphological remark made about the internal structure of the constructions in question is the recognition of the genitive/accusative (*-raejkiem/-raejkien*) variation in South Saami. The possible semantic differences between the two variants will be discussed in more detail in Section 3.3, but it is enough to note that the accusative (*-raejkiem*) has been characterized as having a more definite meaning than the genitive. This in turn is much in line with a fact that has not gained attention despite constructions such as *dam loedteraejkiem* (10) presented by Bergsland (1946: 137; 1994: 166), and Magga and Magga (2012: 222): To begin with, although *dam* and other forms of *dih̄te* ‘it; he, she’ is traditionally labeled as a demonstrative and personal pronoun, it is here often glossed as DEF, as the element has been grammaticalized to the extent that in many contexts it can be characterized as a definite article (cf. Magga & Magga 2012: 223). Therefore, it ought not to come as a surprise that many of the *-raejkiem* forms are preceded by a definiteness marker that agrees in the accusative case just like when preceding ordinary nouns such as *garse* ‘rapids’ in (12) and *sjeltiem* ‘village’ in (13):

(12) South Saami

Guktie dihte gujht galki dam johkeraejkiem jih bijjelen dam
 so.that 3SG still must.PST.3SG DEF.ACC river.raejkiem and over DEF.ACC
garsem.

rapids.ACC

‘However, he had to get across the river and over the rapids somehow.’ (Bull 2000: 132)

(13) South Saami

Dan spaajhte dam jaevrieraejkiem dennie fãskoes lopmesne jáhta,
 so fast DEF.ACC lake.raejkiem DEF.INE light snow.INE move.3SG
guktie eah mahte maam gænnah vuejnieh aarebi goh dam
 so.that NEG.3PL almost what.ACC even see.CNG before when DEF.ACC
jijjtjehke sjeltiem mahte vaesieminie jih dah ráantjoe[h]
 selfsame village.ACC almost pass.PROG and DEF.PL reindeer.bull.PL
aelkieh sãajmanidh.

begin.3PL slow.down.INF

‘It is possible to move over the lake in the powder snow so fast that they can see hardly anything before they almost pass the very village, and the draught reindeer begin to slow down.’ (SIKOR)

It would be quite unintuitive to consider *-raejkiem* a postposition (Lagercrantz 1923, 1926) or “suffixal postposition” (Hasselbrink 1981–1985) that takes its modifiers in the nominative (*johke*, *jaevrie*) but the modifier of the modifier in the accusative. Of course, the function of *dam* in (12–13) is not to refer to the definiteness of an imaginary “river hole” or a “lake hole”, but to that of the river and the lake. The following examples illustrate other possible modifiers of *-raejkiem/-raejkien* and *-rájge*:

(14) South Saami

Goh bussesne tjahkesjim, skeamtjoejim jih tjoerim bussen
 when bus.INE sit.PST.1SG get.ill.PST.1SG and must.PST.1SG bus.GEN
klaaseraejkien voeksedidh.

window.raejkien vomit.INF

‘As I was sitting on the bus, I felt sick and had to vomit out the window.’ (SIKOR)

(15) Lule Saami

Viehká tjarggis bálgesrájge, vielggis ábbåsa tjadá.
 run.3SG hard path.rájge white deep.untouched.snow.GEN through(.inside)
 ‘S/he runs along a hard path, through the deep untrodden snow.’ (SIKOR)

(16) Lule Saami

Tjaskes goade birra, gávnna áhtjes láhttov ja
 nip.3SG house.GEN around find.3SG father.GEN.3SG ski.track.ACC and
vuoddjá vaden dan ádá láhttorájge.
 drive.off.3SG again that.GEN new ski.track.rájge

‘S/he nips around the house, finds his/her father’s tracks and sets off along the new track again.’ (SIKOR)

(17) South Saami

Muvhtene johketje dagkeren golletjeraejkien maahta veadtaskidh
 now.and.then river.DIM that.kind.of.GEN gorge.DIM.raejkien can.3SG spring.INF
våålese durrien sijse. (Lagercrantz 1923:17)
 downward mountain.valley.GEN into
 ‘Sometimes the brook may spring along that kind of small gorge down into the
 mountain valley.’

The South Saami phrase *bussen klaaseraejkien* (14) is structurally and semantically analogous to Lule Saami *mijá luoddarájge* discussed above: they do not refer to “our track holes” nor to “a window hole of the bus”, but to “our track” and “a window of the bus” instead, whereas the “holes” in the genitive are actually non-lexical spatial grams for ‘through, along’ in both languages.

In (15–17), the formation in question have other kinds of modifiers: the Lule Saami adjectives *tjarggis* ‘hard’ and *ådå* ‘new’ as well as South Saami *dagkere* ‘that kind of’. They, too, must be interpreted as modifiers of the lexical nouns for ‘path’, ‘ski track’ and ‘small gorge, small ravine’ instead of non-existent holes or openings there; the same goes for *gártjes uksarájge* ‘through the narrow door’ seen in (6b). Although (17) is taken from one of the first grammatical descriptions of South Saami, the fact that these kinds of prolatives take adjectival modifiers has not been discussed in any earlier studies. Moreover, it can be noted that the Lule Saami phrase *dan ådå láhttorájge* includes a demonstrative pronoun in the genitive case, comparable to the genitive form of the South Saami deictic or demonstrative adjective *dagkere* ‘that kind of’. The use of the genitive in this kind of position is fully in line with the morphosyntax of the unambiguous local cases of the language (see Table 4 below).

The NP-ness of the prolicative constructions is further illustrated by the following example:

- (18) Lule Saami
Valla kårja sinna luojteduvviv vuolus rájggerájge mij
 but basket.GEN in let.down.PASS.PST.1SG downward opening.rájge REL
stáda muvran lij ja nåv de suv giedaj sissta
 town.GEN wall.INE be.PST.3SG and thus DPT 3SG.GEN hand.PL.GEN from.inside
bessiv.
 get.loose.PST.1SG
 ‘But I was let down in a basket through an opening in the city wall, and so escaped his
 hands.’ (SIKOR: 2 Corinthians 11:33)

Firstly, this is a prima facie example of a grammaticalization that has proceeded so far that the originally lexical element can be attached to the very morpheme in which it has its material origin: To be sure, *rájggerájge* does not mean ‘of a hole of a hole’ or even ‘of a hole passage’ but ‘through an opening’. From a purely morphological perspective, it would be equally possible to create reduplicative compounds such as “*stádastáda*” [town(.GEN).town(.GEN)] or “*muvrramuvran*” [wall.wall.INE] or even “*rájggerájggerájge*”, but only *rájggerájge* makes sense here because it is not a reduplicative compound noun but instead the noun *rájgge* ‘hole, opening’ followed by the prolicative gram *-rájge* ‘through’. Secondly, as regards syntax, this occurrence comes with a postmodifying relative clause typical of nouns such as the lexical noun *rájgge* ‘opening (that was in the city wall)’ here.¹¹

¹¹ Although analogous modifiers of compound heads in true, more lexical compounds are not entirely impossible in Saami languages, phrases such as Lule Saami *stuorra jáhkågáttén* ‘by the bank of the big river’ instead of ‘by the big bank of the river’ (iv) are nevertheless marginal exceptions to the general rule according to which the default meaning of *smávva sierggaduho* means ‘small clusters of downy willow’ instead of ‘clusters of small

As a conclusion it is possible to present Table 4 that illustrates the internal morphosyntax of the Lule Saami prolative phrases in relation to that of the unambiguous cases.

NOM	<i>dat</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhtto</i>	<i>mav</i>	<i>gávnaĵ</i>
	that	father.GEN.3SG	new	ski.track	REL.ACC	find.PST.3SG
	‘that/the new ski track of his/her father s/he found’					
GEN	<i>dan</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhtto</i>	<i>mav</i>	<i>gávnaĵ</i>
ACC	<i>dav</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhttov</i>	<i>mav</i>	<i>gávnaĵ</i>
ILL	<i>dan</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhttuj</i>	<i>mav</i>	<i>gávnaĵ</i>
INE	<i>dan</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhtton</i>	<i>mav</i>	<i>gávnaĵ</i>
ELA	<i>dat/dan</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhttos</i>	<i>mav</i>	<i>gávnaĵ</i>
PROL	<i>dan</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhttoráĵge</i>	<i>mav</i>	<i>gávnaĵ</i>
COM	<i>dajna</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhttujn</i>	<i>mav</i>	<i>gávnaĵ</i>
ESS	<i>dan</i>	<i>áhtjes</i>	<i>áđđ</i>	<i>láhtton</i>	<i>mav</i>	<i>gávnaĵ</i>

Table 4. Example paradigm of a Lule Saami noun in singular case forms including the case-like prolative, accompanied by with demonstrative, genitive and adjectival modifiers and relative clauses. The relevant local case suffixes and the prolative marker are in boldface.¹²

When put in an appropriate context, the prolatives look very much like case forms. The above examples strongly suggest that the prolatives in question behave very much like unambiguous case forms within an NP. However, I am not aware of any possessive suffixes attached to these formations, but in any case possessive suffixes are very infrequent in both South Saami and Lule Saami, and mostly confined to kinship terms and other inalienable nouns that hardly match with nouns denoting paths. (See, e.g., Spiik 1989: 53–55; Magga & Magga 2012: 49; of the many example sentences of this paper, the only possessive suffixes can be seen in Lule Saami *áhtjes* ‘his/her father’s’ (16) and *gierugam* ‘my beloved’ (36).) The plural equivalents of the formations seen thus far will be discussed separately in Section 3.4.

3.3. Semantics

As the formations in question originate in the compound nouns for holes and openings, it is understandable that many instances of the actual use refer to motion through openings such as smokeholes (2) and door-like openings (5) of traditional Saami dwellings, or through more timeless openings such as doors (6b). The prolative (‘through, along, via, by’) meaning in contrast to expressions of goals, stative locations and sources is evident in all of the examples seen above. Bartens (1978) is apparently the only scholar to have characterized the formations in *-raejkiem/-raejkien* and *-ráĵge* explicitly as “prolatives”, along with other prolative grams akin to those of the right-hand column of Table 3 in Section 2. This is also implicitly reflected in Bergsland’s (1994: 166) short remark of the fact that *-raejkiem/-raejkien* are used as answers to the question *gogkoe* ‘which way?’. See also Example (9), here repeated for convenience.¹³

(9) South Saami

downy willow’, although the structural distinction is not that significant in this very context (see also Bartens 1978: 106–107):

(iv) Lule Saami

Ja gávnnuĵi állu smávva sierggaduĵpo stuorra jáhkágátten.
and exist.3PL much small downy.willow.cluster.PL big river.bank.INE

‘And there are small many clusters of downy willow by the bank of the big river.’ (Pirak 1993: 214)

¹² Although prescriptive grammarians accept only so-called partitive (identical to nominative) demonstratives as modifiers of relative nouns, the genitive forms are also in use (cf. Spiik 1989: 58).

¹³ Cf. also the Pite Saami example (38) in Section 4.1 below.

Gogkoe edtjem tjaangedh, oksen baaktoe vij
 which.way shall.1SG enter.INF door.GEN by or
båassjoeraejkien?

rear.entrance.of.a.Saami.tent.raejkien

‘Which way shall I go: by the door or through the rear entrance?’ (Lagercrantz 1923: 17)

The above example also includes the nearest semantic equivalent of *-raejkien*, namely the postposition *baaktoe*. Unlike the prolative adpositions of Table 3, *baaktoe* and its Lule Saami counterpart *baktu* are neutral with respect to relative directions. In other words, they do not tell whether the path goes behind, in front of, under, or over (e.g., *bijjelen* of Example 12) or through the inside of (SaaS *tjirrh*, SaaL *tjadá*) the noun referent. On the other hand, *-raejkiem/-raejkien* and *-rájge* differ from more and less specialized prolative adpositions also in that they are used in spatial functions only, whereas *baaktoe* and *baktu* phrases, for example, can express instrument-like abstract routes such as in SaaS *e-påasten baaktoe* [e-mail.GEN by] ‘by e-mail’ and SaaL *stáhtabudsjehta baktu* [state.budget.GEN by] ‘through the state budget’.

Most occurrences of the prolatives in question do not refer to motion through concrete openings, but rather to more or less natural paths of motion from a source to a goal, such as *tjåhkalvisás bálgesrájge goahtáj* [meeting.ELA path.rájge house.ILL] ‘along the path from the revival meeting to the house’; cf. Example 4), although it is rarely relevant to express all these reference points in the same sentence. However, as purposeful motion usually involves both a starting point and an end point, most prolative forms are based on nouns with “one-dimensional” referents, in other words nouns which are conceptualized as one-dimensional paths with two end points (path from A and B), along which someone or something is moving. In addition to the South Saami *loedteraejkiem* ‘along the track of the reindeer herd’ (10), *johkeraejkien* ‘along the river’ (11) and *golletjeraejkien* ‘along the small gorge’ (17), and Lule Saami *luoddarájge* ‘along the track’ (8), *bálgesrájge* ‘along the path’ (4) and *láhttorájge* ‘along the ski track’ (16) seen above, the following examples refer to roads (19–20), tracks (21) and fjords (22):

(19) South Saami

Gellielaaketje bijligujmie áarjede bætieh geajnoeraejkiem
 diverse car.PL.COM from.south come.3PL road.raejkiem
gaarkesen.

go.after.each.other.CVB

‘They come along the road with all kinds of cars are from the south, one after another.’ (SIKOR)

(20) South Saami

Doen gjjren goh lim gáatan vuejeminie universiteeteste dellie
 that.GEN spring.GEN when be.PST.1SG home.ILL drive.PROG university.ELA then
jaahkealtoe jih voenjelealtoe geajnoeraejkiem dåastoehitim.

fetus.doe and doe.of.third.year road.raejkiem encounter.PST.1SG

‘That spring, as I was driving home from the university, I encountered two reindeer does (a pregnant one and one of three years) along the road.’ (Kappfjell 2013: 59)

Not all such prolatives refer to concrete motion between the A and B ends of a one-dimensional axis however. In (19), *geajnoeraejkiem* does express a route from south to north, and the one in (20) refers to another, a road back home from the university, but it does

not express true motion along this path but a kind of fictive motion where the two reindeer are encountered when positioned “along the road” in the sense of ‘in the course of driving along the road (from A to B)’. Sentences like this can be taken as further evidence of the grammaticalized function of *-raejkiem*; cf., e.g., *A bird sat along the ledge* as an example of a similar gram that is used to refer to “a point located on a bounded linear extent” (Talmy 2000b: 215).

Example (21) in turn can be considered a more prototypical instance of fictive motion along what Talmy (2000a: 138) calls coextension paths. As the static snow under a track left by grazing reindeer freezes and becomes *gebrie*, hard crusty snow that supports animals, it constitutes a natural path for reindeer and humans, but while *gebrie* comes into being, the only motion is that of a language user’s that fictively moves across the space:

(21) South Saami

Gosse *sjædtieraekiem* *dellie* *gebrie* *sjædta*
to.where track.of.grazing.raejkiem then hard.crusty.snow become.3SG
dejtie *gierehtse-råantjojde*. (Bull & Bergsland 1974: 28)
it.PL.ILL toboggan-reindeer.bull.PL.ACC

‘The place where the snow along the tracks of grazing becomes hard and crusty for the draught reindeer.’

Lule Saami *vuodnarájge* ‘along the fjord’ in turn refers to the metaphorical path of losing the monetary output of the local community to the big world:

(22) Lule Saami

Rudá *vuodnarájge* *davás* *manni*, *dåssju* *virgálattjaj* *værrorudá*
money.PL fjord.rájge seaward go.3PL only employee.PL.GEN tax.money.PL
báhtsi.
remain.3PL

‘The money is lost along the fjord up to the ocean, only the taxpayers’ taxes remain.’
(SIKOR)

However, although expressions like the ones seen above most often refer to motion *along* a linear extent, the expression *dam johkeraekiem* of (12) – seen above and repeated here – occurs in a story where it is obvious from the context that the intended motion of a herdboy is not to go ‘along the river’ but to get ‘across the river’ instead:

(12) South Saami

Guktie *dihte* *gujht* *galki* *dam* *johkeraekiem* *jih* *bijjelen* *dam*
so.that 3SG still must.PST.3SG DEF.ACC river.raejkiem and over DEF.ACC
garsem.
rapids.ACC

‘However, he had to get across the river and over the rapids somehow.’ (Bull 2000: 132)

Among objects that can be characterized as two-dimensional instead of one-dimensional paths, roads and rivers, by far the most common are doors and windows, although in the prolative expressions the focus is on the openings instead of two-dimensional surfaces typical of such artifacts. However, while the very purpose of a door is to be a channel of motion, concrete motion ‘through the window’ as in (14) is not among the main functions of windows. Rather, windows prototypically function as paths of light and vision that are

cross-linguistically coded much like motion and can also subsumed under the notion of fictive motion (cf. Talmy 2000a: 115–116; Slobin 2008). Consequently, some of the most common types of *-raejkiem/-raejkien* and *-rájge* are expressions such as SaaS *klaaseraejkiem vuartasjidh* [window.rájge look.INF] ‘look through the window’ and SaaL *vinndekrájge gæhttjat* ‘id.’.¹⁴

Other examples of “two-dimensional” paths include referents such as the lake in *dam jaevrieraejkiem* (...) *jáhta* ‘moves over the lake’ (13) where the prolicative refers to the frozen and snowy surface of the lake. A similar example is provided by *jiengeraejkiem* ‘over the ice’ of (23), and here, too, it is important to note that the prolicative construction does not express an exact pathway from A to B, but rather a surface which is neither the stative location of an event nor the sole source or the goal of dynamic motion.

(23) South Saami

Dah jis guhth eah buektehth juelkiej nelnie tjáadtjodh,
 3PL in.turn which.PL NEG.3PL manage.CNG foot.PL.GEN on stand.INF
dah jis amma onne tjielhketjigujmie jiengeraejkiem, veaksehke
 3PL in.turn certainly little toboggan.DIM.PL.COM ice.raejkiem strong
gïetigujmie, klaahkaj vieken bestehten jïjtjemsh
 arm.PL.COM ski.pole.PL.GEN by.means.of thrust.CVB REFL.ACC.3PL
juhtiehtieh.
 drive.forward.3PL

‘Those, in turn, who can’t stand on their feet, they surely ride their little toboggans over the ice, thrusting themselves forward with strong arms and ski poles.’ (SIKOR)

The prolicative formations of South Saami and Lule Saami are very similar irrespective of whether they are viewed from a morphological, syntactic or semantic perspective or generally as case-like categories among the unambiguous local cases of the respective languages. The only remarkable semantic difference between the *-raejkiem/-raejkien* forms and the *-rájge* form is that apparently only the latter is also used in the following way:

(24) Lule Saami

Ja ijájt de miehttserájge maná, ja mån iv diede
 and night.PL.ACC DPT woods.rájge go.2SG and 1SG NEG.1SG know.CNG
majt dâppe barga!
 what.PL.ACC there work.2SG

‘And at night you go to the woods, and I don’t know what you’re doing there!’ (SIKOR)

(25) Lule Saami

De lij juo nejdda almatijda masst[a]m ja
 DPT be.PST.3SG already daughter human.PL.ILL assimilate.PST.PTCP and
håjggådij dállarájge dajt njálga biebmojt.
 thrust.PST.3SG fire.rájge that.PL.ACC delicious food.PL.ACC

‘But the daughter [of a *stállo*, evil giant] had assimilated to people already, and she thrust the delicious [*stállo*] food into the fire.’ (SIKOR << Qvigstad 1929: 530)¹⁵

(26) Lule Saami

¹⁴ Cf. also Example (iii) in Note 8.

¹⁵ Cf. Qvigstad’s (1929: 531) Norwegian translation *Da var datteren alt blitt folkevant, og hun kastet den gode maten i varmen.*

Ja hæssta diedon balláj, ja nav manáj Vuodnarájge
 and horse of.course get.scared.PST.3SG and thus go.PST.3SG Norway.rájge
guotsa.
 run.CVB

‘And the horse got scared, of course, and galloped to the Norwegian side of the border.’
 (SIKOR)

In contrast to the one- and two-dimensional paths discussed thus far, entities like woods (24), fire (25) and Norway (26) could perhaps be characterized as “three-dimensional” objects that are not prototypical paths *per se*. The translations of the examples show the only logical interpretations of the *-rájge* forms that must be understood as expressing directions instead of paths here. Although such formations are not attested in South Saami, similar phenomena can be found in North Saami and among the occasional *-rääigi* formations of Aanaar Saami. The phenomenon has been noted by Bartens (1978: 19) who characterizes such formations as “illatival”. Indeed, all *-rájge* forms of (24–26) could be replaced with the default directional case, illative, forms *mæhttsáj* ‘to the woods’, *dálláj* ‘into the fire’ and *Vuodnaj* ‘to Norway’ without apparent changes in propositional meaning. As a matter of fact, *miehtserájge* of (24) is a translation from a North Saami sentence with the illative *vuovdái*.¹⁶ On the other hand, the difference between the directional and prolative meanings of *-rájge* is captured in the sentence pair (22) and (26): the toponym *Vuodna* of *Vuodnarájge* ‘to Norway; across the Norwegian border’ originates in the name for long, conceptually “one-dimensional” marine pathways such as the one referred to by *vuodnarájge* ‘along the fjord’.

However, it can be observed that the directional *-rájge* forms are used specifically in contexts where the sentences have a relatively strong force-dynamic meaning in the sense of Talmy (2000: 409ff.) and especially Fekete et al. (2013) who discuss the force dynamics of prolative (quasi-)adpositional phrases in Finnish. Unlike the Finnish constructions, however, the *-rájge* forms of (24–26) do not express motion through the woods, fire or Norway, but those landmarks refer to directions of inherently force-dynamic events such as thrusting food violently into the fire (25) or bolting and galloping to another side of a state border (26). On the other hand, the force-dynamic semantics of the *-rájge* directionals appears to be even more recognizable in contexts with neutral motion verbs such as ‘go’ (24), as it seems to be the very *-rájge* alone that conveys the abruptness of and latent resistance towards the event described.

As a matter of fact, Bergsland (1946: 137) also states in his early grammar that South Saami formations in *-raejkiem* and *-raejkien* both answer the question *gáabph* ‘in which direction’, but neither his examples nor my own data clearly support this claim (but see Example 31). As mentioned above, in a later grammar Bergsland (1994: 166) instead describes these forms as answers to the question *gogkoe* ‘which way?’, and this view is repeated by his successors (Magga & Magga 2012: 222). However, all of the aforementioned sources also pay attention to the existence of both *-raejkiem* and *-raejkien* formations, and describe their mutual differences unanimously as a question of definiteness: Most recently, the element with the accusative marker *-m* has been plainly said to express a more definite path than the one with the genitive *-n* (Bergsland 1994: 166; Magga 2009 s.v. *langs*; Magga

¹⁶ Cf. the North Saami original in its entirety:

(v) North Saami
Ijaid fas manat vuovdái, ja de in dieđe maid doppe
 night.PL.GA DPT go.2SG woods.ILL and DPT NEG.1SG know.CNG what.PL.GA there
barggat.
 work.2SG
 ‘And at night you go to the woods, and I don’t know what you’re doing there!’ (Vars 2002: 13)

& Magga 2012: 222), but in light of my own data it is easier to understand Bergsland's early hesitation in trying to characterize *-raejkien* as expressing “a looser (or more indefinite) contact” and being “less ‘extensive’” than *-raejkiem* despite the fact that “the difference can be difficult to grasp”. Frankly, the only tentative indication of the claimed definite vs. indefinite distinction in all available South Saami data is the occasional co-occurrence of the definite demonstrative determiner *dam* with *-raejkiem* (10, 12–13), but such determiners are not fully absent for the genitival *-raejkien* either:

(27) South Saami

Dellie limen tjoekeminie dan jaevrieraejkien.
 then be.pst.1DU ski.PROG it.GEN lake.raejkien

‘At that time we were skiing over the lake.’ (Bergsland & Hasselbrink 1957: 41)

The *-raejkiem* form is about twice as frequent as *-raejkien*, but I fail to see that the latter type (such as *dan jaevrieraejkien* ‘over the lake’ above or *bussen klaaseraejkien voeksedidh* ‘vomit out the bus window’ in Example 14) were considerably less definite than the former. On the contrary, there are also *-raejkiem* forms that can hardly be understood to be definite, such the following beginning line of a story:

(28) South Saami

Saemie dalva tjoejken baalkaraejkiem, gávla gäehtjh raavkh.
 Saami arrive.3SG ski.CVB path.raejkiem hear.3SG look.IMP.2SG ghost.PL

‘A Saami is approaching on skis along a path, and lo, he hears a ghost.’¹⁷ (Bergsland 1992: 327)

Finally, it can be mentioned that among nearly one hundred occurrences of genitive-like *-rájge* prolatives of Lule Saami, I have encountered only one authentic *-rájgev* (cf. the accusative marker *-v*):

(29) Lule Saami

De hæhkkat bådij hubllo háleda uksarájgev sisi.
 DPT suddenly come.PST.3SG bumblebee want.CVB door.rájgev to.inside

‘Suddenly, a bumblebee came and wanted to enter through the door.’ (SIKOR)

Among the many *-rájge* forms listed in Lule Saami dictionaries, I am aware of only one *-rájgev*, but it is not very informative either. It was mentioned in Section 3.1 that in his recent dictionary, Kintel (2012) presents the noun *jåhkårájgge* with the meaning ‘river bed; coulee’ (Norwegian ‘elvefar’). Among his one- and two-word examples we find multiple mentions of *bådij jáhkårájge* ‘came along the river bed’ (‘den kom langsetter elvefaret’), but also the same form *jåhkårájge* as a synonym to the postpositional phrase *jågá milta* [rive.GEN along] ‘along the river’ (‘langs elva’). What is more, there is a single mention of *vádtset jáhkårájgev* ‘to walk along the river bed’ (‘gå etter elvefaret’).

Not much can be said about a possible semantic difference between *jåhkårájge* and *jåhkårájgev* – all examples have been translated with definite nouns. Likewise, it is difficult to see how the meaning of *uksarájgev* (29) would differ from *uksarájge* of (6b). Interestingly, however, although *-rájgev* formations like these have not been mentioned elsewhere, it is precisely these kind of accusatival prolatives that are more in line with the case semantics of Lule Saami in general, whereas the genitive-like *-rájge* forms are actually an exception from

¹⁷ Cf. Bergsland's (1992: 327) Norwegian translation *En same kommer på ski etter en løype, han hører gjenferd*.

the otherwise non-prolative semantics of the genitive case (Bartens 1972: 53). Conversely, the dominance of *-rájge* suggests that the function of the element is that of an independent grammatical morpheme whose meaning is clearly different from the sum of its etymological parts.

3.4. Prolative plurals

The general description of the use of formations in *-raejkiem/-raejkien* and *-rájge* can be concluded with short remarks on occasional plural equivalents of the prolative forms that usually have singular form and singular meaning. As regards prolative plurals, modern language data provide a picture that is somewhat different from that of earlier descriptions. The corresponding North Saami *-ráigge* aside (Bartens 1978: 18–19; Ylikoski 2014), apparently the only mentions of plural prolative forms are presented by Lagercrantz (1923: 17; 1926: 133):

(30) South Saami

Skoehteste vinhtsem straejmireejki bæjjese.
punt.3SG boat.ACC stream.reejki upward

‘He propels the boat with a pole upward along the stream.’ (Lagercrantz 1923: 17; 1926: 133)

(31) South Saami

Manne gállagim b̄ajhtoeh giějereejki.
1SG get.lost.PST.1SG wrong track.reejki

‘I strayed along a wrong path.’ (Lagercrantz 1923: 17)

The above English translations are based on Lagercrantz’s German translations, and it is remarkable that the meaning of *(-)reejki* – the plural genitive of *(-)raejkie* – is presented as singular. Moreover, *b̄ajhtoeh giějereejki* of (31) might be better understood as having a directional instead of purely prolative interpretation.¹⁸ These kinds of formations cannot be found in the works of later scholars, and they also seem to be absent in present-day written South Saami. However, my own data include the following sentences with *-raejkieh* – the plural nominative of *(-)raejkie* – that have not been discussed in earlier descriptions of the language:

(32) South Saami

Siejhme almetjh leah dan guhkiem gaataraejkieh vaadtsehtjamme
ordinary human.PL be.3PL so long street.raejkieh stroll.PST.PTCP
gylmeme jeatjah st̄avroeh kriebpesjamme.
freeze.PST.PTCP other rule.PL demand.PST.PTCP

‘Ordinary people have long been strolling along streets, freezing and demanding a new government.’ (SIKOR)

(33) South Saami

Geajnoeraejkieh, baalkaraejkieh b̄aetieh vaalmerden, jih gosse
road.raejkieh path.raejkieh come.3PL go.after.each.other.CVB and when
dan staellien baaktoe b̄aetieh dellie t̄j̄øødtjehtieh, jih gaajhkene lehkesne
DEF.GEN stable.GEN by come.3PL then stand.3PL and everywhere
govloe laavloeminie jih skovhtjeminie.

¹⁸ Cf. Lagercrantz’ (1923: 17) German translation *Ich irrte mich und folgte einer unrichtigen Spur.*

be.heard.3SG sing.PROG and make.a.noise.PROG
 ‘They come along roads and paths, following one another, and as they come to the stable they stand by, and singing and praising can be heard everywhere.’ (SIKOR)

(34) South Saami

Men gææhtedh Maajja, jis vuajnih bovtside, aellieh goh
 but watch.IMP.2SG M. if see.2SG reindeer.PL.ACC NEG.IMP.2SG DPT
fæærh dæj bovtsi minngesne dielhtieraejkieh goh.
 fare.CNG it.PL.GEN reindeer.PL.GEN after glacier.raejkieh DPT
 ‘But watch out, Maajja, if you see the reindeer, don’t follow the reindeer along glaciers.’ (Bull & Bergsland 1974: 42)

In fact, the dictionary by Bergsland and Magga (1993) includes an entry for *dielhtie-raejkieh* with the Norwegian translation ‘bortetter isbreen’, i.e., singular meaning ‘further along the glacier’, but as far as can be judged from the contexts, the above *-raejkieh* formations all refer to plural referents – streets, roads, paths and glaciers – that function as multiple paths of strolling, coming and faring. In other words, the element *-raejkieh* does not refer to a plurality of holes or openings (*raejkie*), but to that of the lexical heads of these formations. Despite their novelty in the description of the language, they are – not unlike Lule Saami *-rájgev* (29) pro *-rájge* – actually more in line with the normal case semantics of South Saami: The plural equivalents of the accusative, not only as the case of the object but also as the case of prolativ adverbial modifiers such as *geajnoem* of Example (1), are not plural genitives but (indefinite) plural nominatives and (definite) plural accusatives instead (see, e.g., Bergsland 1946: 132; Magga & Magga 2012: 222). I am not aware of the South Saami plural accusatives *raejkide* or *reejkide* being used in prolativ functions. However, the only attested occurrence of a plural prolativ in Lule Saami does have an accusative ending instead of the genitive (**-rájgij*) that would otherwise be the most probable counterpart of the genitiv *-rájge*:

(35) Lule Saami

Gierugam le gasella lágásj, nuorra ruoppsisgátte muoduk.
 beloved.1SG be.3SG gazelle.GEN like young deer.GEN alike
Ge, suv goahteguoran; guovllá rájggerájge, sálvvorájgijt guovllá.
 lo 3SG.ACC courtyard.INE peek.3SG hole.rájge crack.rájgijt peek.3SG
 ‘My beloved is like a gazelle or a young deer. Look! There he stands behind our wall, gazing through the windows, peering through the lattice.’ (SIKOR: Song of Songs 2:9)

Hapax legomena such as *sálvvorájgijt* here – which in itself is analogous to the accusative plural *gäjnojt* in (4) and has a parallel in North Saami (see Example 39 below) – must certainly be interpreted with a grain of salt, but the above plural formations as a whole add to our understanding of the nature and position of the South Saami *-raejkiem/-raejkien* and Lule Saami *-rájge(v)* prolatives within the grammatical structure of these languages. The following section pulls the above observations together and provides a general discussion of the topic by relating the prolativ formations to the established views of the case declensions of South Saami and Lule Saami.

4. Discussion and further remarks

4.1. “New” and “old” prolativ suffixes in western Saami

Although the main focus of the present study is on the prolativative *-raejkiem/-raejkien* and *-rájge* formations as used in written South Saami and Lule Saami, respectively, it is also instructive to take a look at the analogous phenomena in the neighboring Saami languages:¹⁹

(36) Ume Saami

(...), *heärggie lij vanjggame spájttá viegarájgiev*, (...)
 reindeer.bull be.PST.3SG run.fast.PST.PTCP fast road.*rájgiev* (“accusative”)
 ‘The reindeer bull had run quickly along the road.’ (Schlachter 1958: 242)

(37) Ume Saami

mijjan luaddarájgien
 1SG.GEN track.*rájgien* (“genitive”)
 ‘along our track’ (Moosberg 1918)

(38) Pite Saami

kuggos kalhkaw vanǰhkāǰet, ukša-rāikē vai skarrū-rāikē?
 which.way shall.1SG run.INF door-*rāikē* or rear.entrance.of.a.tent-*rāikē* (“gen.”)
 ‘Which way shall I run, through the door or through the rear entrance?’ (Halász 1893: 139)

(39) North Saami

Jogat golgagohte báktenannáma sálvoráiggiid,
 river.PL flow.INCH.PST.3PL continental.bedrock.GA crack.*ráiggiid*
báktešlájaid (dipma ja garra) rájáid ráigge, synklinálaid ja
 rock.type.PL.GA soft and hard border.PL.GA *ráigge* syncline.PL.GA and
muđui ovddeš áiggiid gobádagaid ráigge.
 otherwise earlier time.PL.GA depression.PL.GA *ráigge*
 ‘The river began to flow along fissures in the continental crust, along borders of rock types (soft and hard), along synclines and other ancient depressions.’ (Isaksen 1998: 30)

The above examples illustrate that Ume Saami – with possibly less than ten native speakers north of the South Saami territory – is analogous to South Saami in showing what seems to be free variation of the accusative and genitive forms of the morpheme for ‘hole’. With its genitive modifier, the disconnected phrase (37) from a lexical archive is fully analogous to those of Lule Saami discussed in Section 3.1.

As for the likewise seriously threatened Pite Saami, geographically and structurally transitional between Ume Saami in the south and its closest sister language Lule Saami in the north, *-rāikē* (38) goes back to the genitive. In other words, the Ume Saami and Pite Saami formations are syntactically and semantically quite like those of South Saami and Lule Saami, respectively. However, apparently the only occasion that these constructions have gained at least some attention is Bartens’ (1978: 19) short mention and three other examples in her monograph on the interplay of synthetic and analytic expressions of spatial relations throughout the Saami area.

Finally, although (39) is not a most prototypical example of North Saami (*-ráigge* (the so-called allegro form of the singular genitive-accusative *ráiggi* of *ráigi* ‘hole’), it illustrates the fact that in spite of the compound morphology manifested in formations like *sálvoráigge* ‘through/along the crack’ or the plural (*báktenannáma*) *sálvoráiggiid* ‘along fissures (in the continental crust)’ analogous to the Lule Saami plural accusative *sálvvorájgiit* seen above

¹⁹ Hyphens in (36–38) derive from the original sources.

(35), the morpheme is also used as a postposition that governs the genitive-accusative case, e.g., *rájáid* ‘(along) borders’ and *gobádagaid* ‘(along) depressions’.

The relative uniformity and the wide distribution of the “hole” prolatives suggests that the phenomenon in question has been a part of the grammars of western Saami languages, even in the vicinity of their noun inflection, for quite some time.²⁰ Nevertheless, the only grammatical morpheme labeled as “the prolative” in Saami linguistics has an entirely different form and a rather different grammatical status, too. Some examples and suggestions on the origin of the “prolatives” such as Lule Saami *giessek* ‘in summer’ (← *giesse* ‘summer’) or South Saami *giesege* (← *giesie*) id. have already been presented in Section 1 that also included a short mention of the Lule Saami word form *Váhtjerik* ‘via *Váhtjer*’. Now consider the following examples of the *-k* prolative that supposedly goes back to the (Pre-)Proto-Saami case suffix **-ko* (Sammallahti 1998: 203):

(40) Lule Saami

Ulnutja soap[p]tsun aktan ja ulnutja rahtjin
 human.PL get.on.PST.3PL together and human.PL strive.PST.3PL
bienajda, duoladagu gå galggin Tjierrigis várrek
 prayer.meeting.PL.ILL for.example when must.PST.3PL Tjierrik.ELA via.mountain
Uhtsvuodnaj: Mij váttisjma Tjierrigis várráj.
 Utsvuodna.ILL 1PL walk.PST.1PL Tjierrik.ELA mountain.ILL
 ‘People got on together, and they strove for the prayer meetings, for example when they were to go from Tjierrik to Utsvuodna across the mountains: We walked from Tjierrik up to the mountain.’ (SIKOR)

(41) Lule Saami

Sån iesj tjuojggá rájdujn hásstatjieká mañen ja
 3SG REFL ski.3SG reindeer.caravan.COM horse.sled.GEN behind and
ällo manáj jávrrek ábbåsa tjadá.
 herd go.PST.3SG via.lake deep.untouched.snow.GEN through(.inside)
 ‘He himself is skiing with the reindeer caravan behind the horse sled, and the herd went across the lake through deep untrodden snow.’²¹ (SIKOR)

(42) Lule Saami

Lögdeån li tjuovvo rájá (3.kártaduoddetjála): Lögdeälvena
 Lögdeå.INE be.3PL following border.PL 3. map.appendix Lögdeälven.GEN
njálmes Nordmalingsfjärdena njálmmáj ädnok Klösforsenij,
 outlet.ELA Nordmalingsfjärden.GEN outlet.ILL along.large.river Klösforsen.ILL
dan manñela rahtev Yttre Lemesjöaj, vijdábut rahtev Flärkej (...)
 that.GEN after road.ACC Yttre.Lemesjö.ILL further road.ACC Flärke.ILL
 ‘Lögdeå has the following boundaries (Map Appendix 3): From the outlet of Lögdeälven to the outlet of Nordmalingsfjärden, along the river to Klösforsen, after that along the road to Yttre Lemesjö, then further along the road to Flärke, ...’ (SIKOR)

²⁰ When speaking of “western Saami languages”, I am not taking a stance on whether or not the Saami branch must be strictly divided to two – Western Saami and Eastern Saami with capital letters – along the phonologically significant, but lexically less decisive border between North Saami and Aanaar Saami. For a comprehensive discussion of these issues, see Rydving (2013).

²¹ While *jávrrek* ‘along the lake’ (41) and *tjarggis bálgesrájge* ‘along a hard path’ (15) refer to natural paths of motion, both sentences contain the postpositional phrase *ábbåsa tjadá* ‘through deep untrodden snow’ that describes more of an obstacle for the agents in motion.

As regards the use of noun-based *-k* prolatives in truly prolativizing functions, the above sentences are probably the first full sentence examples ever presented for any of the Saami languages; the apparently later development of temporal adverbs such as the above-mentioned *giessek* and *giesege* ‘in summer’ need not concern us here. In addition to *Váhtjerik* ‘via Váhtjer (village)’, *várrek* ‘along the mountain’ and *jávrræk* ‘along the lake’, Wiklund (1915: 37) also mentions the formations *gáddek* ‘along the shore’ and *Huhtánik* ‘via Huhtán (village)’ as examples of the Lule Saami prolativizing case, formed with the *-(i)k* ending attached to the nominative stem. In Wiklund’s (ibid. 36) words, the prolativizing as well as the abessive case (‘without’) are morphological cases on a par with the eight cases presented in his own paradigms as well as mine (Tables 1 and 4), but he admits that these two cases are not that common in use, and this has been the reason for leaving them outside the morphological paradigms (but see ibid. 26–27). His examples also include adverbs such as *nuorttak* ‘along the north side’ (← *nuortta* ‘north’), an obvious cognate of South Saami *noerhtege* id. seen in Table 3. Wiklund specifies that the use of the prolativizing is restricted to few nouns with locational referents, and that the case is used in singular only. Unfortunately, he does not present a longer list of the possible forms that his examples are intended to exemplify. None of the later descriptions of Lule Saami grammar (Spiik 1989: 90–91) or lexicon seem to provide more information than the existence of the form *nuorrek* ‘by sea’ that certainly fits the pattern although I have not seen it in use outside of most recent dictionaries (Korhonen 2007 s.v.; Kintel 2012).

In addition to the descriptions of Lule Saami, the *-k* prolatives have also gained attention in Lehtiranta’s (1992: 113–114) grammar of Pite (Árjepluovve) Saami. Quite like Wiklund, Lehtiranta describes the Pite Saami abessive as a marginal, only partly productive case, and ends his subsection on the case morphology to additional observations on the “prolativizing-temporal adverbial derivational affix *-k*”. He emphasizes that the suffix deserves to be mentioned because of having been preserved in Pite Saami better than in the neighboring languages, and his noun-based examples of prolatives consist of the Lule Saami-like *jaav’riek* ‘along the lake’, *kaat’tiek* ‘along the shore’ and *vaarriek* ‘along the mountain’ supplemented by *sievvak* ‘by sea’ and *vuopmiek* ‘through the woodland’ with no attested counterparts in Lule Saami despite the cognate nouns *sjevva* ‘sea(water)’ and *vuobme* ‘forest, woods’. For Lehtiranta’s original sources and earlier remarks on the Lule and Pite Saami *-k* prolatives, see, e.g., Halász (1896: xvi), Beke (1911) and Lagercrantz (1926: 95); Halász (1892: 267) also presents a clause-like word pair *varrēk mannā* [via.mountain go.3SG].²²

In spite of the uncertain status of the **-ko* prolativizing in Proto-Saami (Section 2 and Sammallahti 1998: 203), the suffix has for long been considered to have a cognate in the prolativizing cases of the two Mordvin languages, Erzya and Moksha (*-ga/-ka/-va*; see, e.g., Wiklund 1928: 344; GMYa 1962: 80, 147–151). Indeed, it is even possible to present a set of alleged cognate forms with more or less identical meanings in Mordvin and Lule (and Pite) Saami (Table 5). Example (43) illustrates that the usage of the Erzya prolativizing *erkeva* is functionally similar to that of Lule Saami *jávrræk* ‘along, over the lake’ (41), or South Saami *jaevrieraejkiem* id. (13) for that matter.

	Lule Saami	Erzya
ILL <i>*-sen</i>	<i>jávrrá-j</i>	<i>erke-s</i> (эрькес)
INE <i>*-sna</i>	<i>jávre-n</i>	<i>erke-se</i> (эрькесэ)
ELA <i>*-sta</i>	<i>jávre-s</i>	<i>erke-ste</i> (эрькестэ)
PROL <i>*-kV</i>	<i>(jávrrē-k)</i>	<i>erke-va</i> (эрькева)

²² As a matter of fact, even Bergsland and Hasselbrink (1957: 23) once described South Saami words like *biejjege* ‘during the daytime’ and *gogkoe* ‘which way’ as instances of the prolativizing case which they characterized as one of the “less common and partly irregular cases”.

Table 5. The Lule Saami local cases (including the *-k* prolative) and their Erzya counterparts exemplified with the words for ‘lake’.

(43) Erzya

Менелесь — *валдо-сэнъ*. *Эзганзо*, *вейке-омбоце мельга*, *састо*, *састо*
Meñel’eś — *valdo-señ*. *Ezganzo*, *vejke-omboce mel’ga*, *sasto*, *sasto*
 sky.DEF bright-blue along.3SG one-another after slowly slowly
уить ашо пельнетъ, теке сатьме ванькс эрькева локсейтъ.
ujit’ ašo pel’ñet’, t’eke set’me vañks eřkeva loksejt’.
 float.3PL white cloud.DIM.PL like pacific clean lake.PROL swan.PL
 ‘The sky is bright blue. Along the sky, little white clouds are floating slowly, slowly one after another, like swans along a serene, pristine lake.’ (Klyuchagin 2012)

However, although the *-k* prolatives in Lule and Pite Saami appear to be very old, phonologically and morphologically unproblematic – or even quite neat in declensional paradigms à la *Váhtjerij* : *Váhtjerin* : *Váhtjeris* : *Váhtjerik* (Table 2) – and semantically functional (as seen in the interplay with the elative and illative in 40), there seem to be no obvious reasons to consider them as unquestionable case forms. In short, the noun-based *-k* prolatives of the present-day written Lule Saami are almost entirely limited to two lexemes, *jávrræk* and *várrek*, that are the most common such prolatives in a corpus of nearly million word forms (SIKOR) and elsewhere. In the written Lule Saami texts available, the only other *-k* prolative I am aware of is *ädnok* (← *ädnō* ‘large river’) of (42). What is more, I am not aware of any instances of *-k* prolatives with noun-like internal syntax, i.e. adnominal modifiers comparable to those seen with a host of *-raejkiem/-raejkien* and *-rájge* forms in the preceding sections. On the contrary, even in the text originally containing the *ädnok* sentence (42), the most common alternative in similar prolative contexts is the accusative noun that is able to have demonstrative modifiers (cf. Table 4):

(44) Lule Saami

(...) *viđábut dav änov dan sadjáj gånna* (...)
 further that.ACC large.river.ACC that.GEN place.ILL where
 ‘...further along the river to the place where...’ (SIKOR)

The above examples may depict the last remnants of a case marker that has possibly been used in more wide-spread prolative functions as part of the nominal inflection. However, as the origins and earlier functions of the element *-k* remain largely unknown, and most of the denominal *-k* (or *-k > -t* such as in North Saami *geasset* ‘in summer’) forms in Saami languages are temporal adverbs, it is somewhat paradoxical that the suffix is nevertheless labeled as “the prolative” of the Saami languages. On the basis of the written sources available, it is tempting to say that the noun-based *-k* prolatives of Lule and Pite Saami are more or less lexicalized adverbs, no matter what their status might have been in earlier language states. In the Lule Saami corpus of approximately 1,000,000 words the element *-k* appears quite unproductive, and the existing formations lack case-like morphosyntax (e.g., adnominal modifiers and plural forms). As for their semantics, it is difficult to make sound generalizations on the basis of three known *-k* prolatives in authentic sentence contexts: *ädnok* (42) refers to a one-dimensional path along a river, whereas *várrek* (40) and *jávrræk* (41) appear to have more like a ‘via’ meaning in the sense of referring to paths that pass over a mountain or a lake.

However, the above observations are definitely not to say that more *-k* prolatives do not exist in other registers and potentially larger corpora of written material. As kindly remarked by Sandra Nystø Ráhka (p.c.), a native speaker of Lule Saami, not only prolative forms such

as *várrek* ‘along the mountain’ (40) or *nuorrek* ‘by sea’ mentioned in dictionaries, but also forms like *miehttsek* (← *miehttse* ‘forest; wilderness’) can be used in the colloquial language, and they need not be considered as peculiar as the written language data might suggest. On the other hand, in the absence of clearly case-like properties such forms are still perhaps better compared to semi-productive denominal adverbs such as the “reciprocal” or “combinatory” adverbs in *-lakkok* (e.g., *giehta* ‘hand; arm’ → *giehtalakkok* ‘hand in hand’, *sijddo* ‘side’ → *sijddulakkok* ‘side by side’ and *vuorro* ‘turn’ → *vuorrulakkok* ‘by turns’).

4.2. *-raejkiem/-raejkien* and *-rájge* in relation to South Saami and Lule Saami noun inflection

After a digression on the *-k* prolativ and its possible position within the noun inflection of Lule Saami and Pite Saami, as well as the glance at the comparable local cases in Mordvin, it is instructive to turn back to the *-raejkiem/-raejkien* and *-rájge* forms in order to see to what extent they can or cannot be regarded as part of noun inflection, adverb derivation, compounding or other morphological processes. Unlike the *-k* prolatives, the *-raejkiem/-raejkien* and *-rájge* formations do have morphosyntactic features typical of South and Lule Saami nouns in all cases (Table 4). Though not that frequent in the corpora, these formations can be attested for dozens of nouns, and new formations can apparently be created when semantically feasible. However, the details of their productivity fall outside the present descriptive, non-experimental study. As was mentioned in the introduction to this paper, formations in *-raejkiem/-raejkien* and *-rájge* are not common – being found less than once in 10,000 words in both South and Lule Saami. As for morphological productivity, however, the token frequency of a bound morpheme is less important than its type frequency, but given the rather low frequency of individual tokens, the type frequencies of *-raejkiem/-raejkien* and *-rájge* cannot be high either.

In the electronic corpora of 450,000 South Saami tokens and 1,000,000 Lule Saami tokens (SIKOR), there are nine types of South Saami *-raejkiem* forms, four ending in *-raejkien*, and for Lule Saami 15 different *-rájge* prolatives, and one instance of *-rájgev* (*uksarájgev*). The most comprehensive dictionaries list more such formations, although almost always without sentence contexts that could help us understand their true nature. As the more experimental questions of productivity are deliberately left for future studies, I present a summary of my findings from all the relevant sources in Table 6.

Data sources	South Saami: <i>-raejkiem</i> , <i>-raejkien</i> ; plural <i>-raejkieh</i>	Lule Saami: <i>-rájge</i> , <i>-rájgev</i> ; plural <i>-rájgijt</i>
SIKOR corpus	<i>baalka</i> ‘path’, <i>gaata</i> (<i>gaate</i>) ‘street’, <i>geajnoe</i> ‘road’, <i>jaevrie</i> ‘lake’, <i>jienge</i> ‘ice’, <i>johke</i> ‘river’, <i>klaase</i> ‘window’, <i>njuvvie</i> ‘place with a swift current in a river’, <i>okse</i> ‘door’, <i>riehpene</i> ‘smokehole’, <i>slåahroe</i> (<i>slåahra</i>) ‘tracks of a free-ranging reindeer herd’	<i>áhpe</i> ‘open sea; wide, open bog’, <i>bálges</i> ‘path’, <i>dállå</i> ‘fire’, <i>láhtto</i> ‘ski track’, <i>lijdda</i> ‘gate’, <i>miehttse</i> ‘woods’, <i>nållosjalmme</i> ‘eye of a needle’, <i>njålmmme</i> ‘mouth’, <i>rahte</i> ‘road’, <i>rájgge</i> ‘hole, opening’, <i>sálvvo</i> ‘crack (esp. between planks or beams)’, <i>uksa</i> ‘door’, <i>uvsasj</i> ‘door (diminutive)’, <i>vinndek</i> ‘window’, <i>Vuodna</i> ‘Norway’, <i>vuodna</i> ‘fjord’
Dictionaries also	<i>baelkies</i> (= <i>baalka</i>) ‘path’, <i>beetsuve</i> ‘pine forest’, <i>biegke</i> ‘wind’, <i>byjje</i> ‘valley slope’, <i>båassjoe</i> ‘rear entrance of a Saami tent’, <i>dielhtie</i> ‘glacier’, <i>durrie</i> ‘mountain valley’, <i>dårretje</i> ‘ravine; diminutive of <i>durrie</i> ’, <i>garhpe</i> ‘gully’, <i>gieje</i> ‘track’, <i>golletje</i> ‘gorge (diminutive)’, <i>klodtje</i> ‘opening, (peep)hole’, <i>laatege</i> (<i>laath-</i>) ‘ski track’, <i>loedte</i> ‘tracks of a	<i>jåhkå</i> ‘river’, <i>luodda</i> ‘track’, <i>tjåttå</i> ‘throat’, <i>våddja/væddja</i> ‘way, road’ (Grundström 1946–1954, Korhonen 2007, Kintel 2012)

Elsewhere also	reindeer herd in snow', <i>läemie</i> 'grassy valley, depression', <i>njaelmie</i> 'mouth', <i>rihrie</i> 'winter way', <i>rosse</i> 'ridge', <i>sjaedtie</i> 'tracks of grazing reindeer', <i>soelmehth</i> 'passage', <i>straejmie</i> 'stream', <i>vaeljje</i> 'glade', <i>valte</i> 'opening, glade', <i>voemesje</i> 'forest valley' (Lagercrantz 1923, 1926; Hasselbrink 1981–1985, Bergsland & Magga 1994)	<i>riehpen</i> 'smokehole'
----------------	--	----------------------------

Table 6. Noun stems of South Saami and Lule Saami prolative formations in various sources of this study.

As the question of productivity also includes aspects like the number of neologisms or diachronic productivity (see Haspelmath & Sims 2010: 114ff.), it can be noted that by far the most frequent prolative formations in both languages are based on fairly recent Scandinavian loanwords SaaS *klaase* (← Scand. *glass*) and SaaL *vinndek* (← *vindu*); cf. also SaaL *væddja/väddja* (← Norwegian *veg/vei*, Swedish *väg*). Furthermore, the existence of the diminutive-based prolatives like SaaL *uvsasjräjge* and SaaS *golletjeraejkien* (17) look like one-time formations. As for semantics, it was seen in Section 3.2 that the use of *-raejkiem/-raejkien* and *-räjge* is limited to contexts with spatial meanings – but including various subtypes of fictive motion. Abstract “prolative” postpositional phrases such as *e-påasten baaktoe* [e-mail.GEN by] ‘by e-mail’ and *stáhtabudsjehta baktu* [state.budget.GEN by] ‘through the state budget’ cannot be turned to *-raejkiem/-raejkien* and *-räjge* forms, however.

On the other hand, the prolative functions of the latter comprise not only concrete holes *per se*, or motion or visual path *through* two-dimensional referents such as windows as well as motion *along* one-dimensional paths, but the South Saami formations can also refer to prolative motion *across* one-dimensional referents (*johkeraejkiem* ‘across the river’ in 12). Furthermore, the semantics of the Lule Saami *-räjge* prolative occasionally extends to expressions like *Vuodnaräjge* ‘to Norway; across the Norwegian border’ (26). (However, it seems impossible to have forms such as **Váhtjerräjge* in the meaning of ‘via Váhtjer’ of *Váhtjeric* discussed above.) Therefore, there are also semantic grounds to regard the *-raejkiem/-raejkien* and *-räjge* forms as relatively grammaticalized spatial grams in these languages, be they case forms, postpositions or something else. Within larger systems of spatial expressions in the respective languages, it is difficult to assign these formations any other readily available positions than that of the empty slot in the upper right hand corner of Table 3 for South Saami, or that tentatively occupied by the Lule Saami adverb *jávrræk* in Table 5.

What, then, if anything, prevents us from regarding *-raejkiem/-raejkien* and *-räjge* as prolative case markers? Their low frequency or the apparent lack of possessive suffixes cannot be among the most convincing arguments in rejecting such an alternative, as frequency is only a relative metric, and possessive suffixes seem to be virtually absent among the use of cases such as the essive in both South Saami and Lule Saami. The position of the singular-cum-plural essive within the case paradigms also shows that even though *-raejkiem/-raejkien* and *-räjge* do have occasional plural variants (Section 3.4), the case system can do without such forms. On the other hand, the formal correspondences between singular and plural case forms are so heterogeneous that the somewhat unexpected plurals *-raejkieh* and *-räjgijt* conform to the already asymmetric pattern quite well. Finally, the unsettled issue on the claimed semantic difference between South Saami *-raejkiem* and *-raejkien* could for the time being be ignored by considering the two variants as

allomorphs whose conditioning needs further study. With all these biased reservations, the morphemes in question could in principle be described as part of the revised case paradigms seen in Table 7.

	South Saami		Lule Saami	
	Singular	Plural	Singular	Plural
Nominative	<i>okse</i>	<i>oksh</i>	<i>uksa</i>	<i>uvsá</i>
Genitive	<i>oksen</i>	<i>oksi</i>	<i>uvsá</i>	<i>uvsájt</i>
Accusative	<i>oksem</i>	<i>okside</i>	<i>uvsav</i>	<i>uvsájt</i>
Illative	<i>oksesé</i>	<i>okside</i>	<i>uksájt</i>	<i>uvsájda</i>
Inessive	<i>oksesne</i>	<i>oksine</i>	<i>uvsan</i>	<i>uvsájn</i>
Elativ	<i>okseste</i>	<i>oksijste</i>	<i>uvsas</i>	<i>uvsájs</i>
Prolative	<i>okseraejkiem ~ okseraejkien</i>	<i>(okseraejkieh)</i>	<i>uksarájge(v)</i>	<i>(uksarájgijt)</i>
Comitative	<i>oksine</i>	<i>oksigujmie</i>	<i>uvsájn</i>	<i>uvsájt</i>
Essive		<i>oksine</i>		<i>uksan</i>

Table 7. The South Saami and Lule Saami case systems including prolative formations exemplified with the words for ‘door’ (revision of Table 1).

Further limitations are needed though. It is difficult to imagine adjectives in the prolative form, but this could be explained by semantic reasons. What might be more important is the fact that the prolative case is also absent in the pronominal inflection – although it can be added that the essive case forms of personal and demonstrative pronouns are likewise virtually absent or at best occasionally mentioned in the grammatical descriptions, and apparently entirely absent in the modern corpora of hundreds of thousands words (cf., e.g., Spiik 1989: 52ff.; Magga & Magga 2012: 50ff.).

After all the arguments presented in favor of analyzing the morphemes in question as case suffixes, it must be acknowledged that they do not quite look like case suffixes: *-raejkien* and *-rájge* look like the genitive forms for ‘hole’, and *-raejkiem* and *-rájgev* seem to be accusatives. Indeed, in South Saami it is even possible to encounter postpositional phrases where *okseraejkien* complements the postposition *tjirrh* that governs the genitive case, although sentences like (46) are more representative of forms such as *okseraejkien*:

(45) South Saami

Geerve lea buektiehtidh oksem dahpedh juhkoe áeksieh jih
 difficult be.3SG manage.INF door.ACC close.INF because branch.PL and
báeries lasth okseraejkien tjirrh báetieh.
 old leaf.PL door.raejkien (here: door.opening.GEN) through come.3PL
 ‘It is difficult to close the door, as branches and old leaves are coming in through the door.’ (SIKOR)

(46) South Saami

Okseraejkien báata, gualpan snáhkere.
 door.raejkien come.3SG floor.ILL stumble.3SG
 ‘S/he comes through the door and stumbles to the floor.’ (SIKOR)

Although (45) can be considered as pleonastic, it is grammatically possible and thus shows that *okseraejkien* can be understood as a compound noun, too. However, sentences like (46) and the existence of *bálgesrájge* ‘along the path’ (4) and other prolatives without reference to openings of any kind, and at least formations like Lule Saami *rájggerájge* ‘through the hole’ (18) must be considered as something else than a genitive form of a compound noun (‘of a hole of a hole’). This repeated (see Section 3.2), it can be observed that the semantics of the

Saami ‘hole’ morphemes is not semantically different from that seen in the Finnish postposition-cum-noun *läpi* ‘through; hole’, or the development of the English *through* from a noun with more or less similar meaning (OED s.v. *through*), as evidenced by the Gothic counterpart of Lule Saami *rájggerájge* (18), in this context represented by the more exact *nállosjalmmerájge* (46b):

- (46) Gothic
- | | | | | | | | |
|----|----------------|------------|-----------------|--------------|---------------|---------------|-----------------------|
| a. | <i>azitizo</i> | <i>ist</i> | <i>ulbandau</i> | <i>þairh</i> | <i>þairko</i> | <i>neþlos</i> | <i>galeiþan (...)</i> |
| | easy.N.CMPV | be.3SG | camel.DAT | through | hole.ACC | needle.GEN | go.INF |
- Lule Saami
- | | | | | | |
|----|-----------------|-----------|---------------|--------------------------|---------------------|
| b. | <i>Kamellaj</i> | <i>le</i> | <i>álkkep</i> | <i>nállosjalmmerájge</i> | <i>mannat (...)</i> |
| | camel.ILL | be.3SG | easy.CMPV | eye.of.a.needle.rájge | go.INF |
- ‘It is easier for a camel to go through the eye of a needle...’ (Wulfila & SIKOR: Mark 10:25)

4.3. Inflection vs. compounding – an unusual tug-of-war

It appears that the most fundamental difficulties in understanding the grammatical nature of the formations in question ultimately boils down to a matter of morphology rather than of syntax or semantics. More exactly, the problems arise from the unorthodox grammaticalization path along which these new prolatives have developed: Unlike what is considered to be most common cross-linguistically as regards local cases and other adverbial cases, the Saami prolatives do not originate in adpositional phrases, but instead, the agglutination of *-raejkiem/-raejkien* and *-rájge* seems to have taken place originally on the lexical level, as part of everyday compounding of independent nouns referring to holes and openings on the one hand, and to their “hosts” such as doors and windows on the other. Another impetus may have been given by compounds of the type Lule Saami *jáhkárájgge* ‘river bed’ and South Saami *jeanoeraejkie* id. that may have promoted the use of the emerging prolative with reference to other one-dimensional paths such as tracks and roads. On the other hand, the only examples of the nouns *jáhkárájgge* and *jeanoeraejkie* can be found in dictionaries (see Section 3.1), but they are absent from SIKOR corpus and other sources of the present investigation.

It is, of course, true that many adpositions that later became case affixes often ultimately go back to noun and verb forms. However, it is usually taken for granted that their way to affixhood has gone through adpositions and clitics (see, e.g., Blake 2001: 161ff.; Kulikov 2009 and references therein), but there are no convincing signs of such earlier phases in the westernmost Saami languages.²³

However, the grammaticalization process seems to have proceeded without haste, as the prolative forms still look like compounds, although especially Lule Saami *-rájge* clearly dominates over the accusative *-rájgev* that would be more expected due to the secondary prolative functions of the accusative (cf. Examples 3–4).²⁴ What is even more interesting is

²³ The postpositional use of North Saami (*-rájgge* seen in (39) seems to be a fairly recent development not accepted by all speakers (see Ylikoski 2014). Example (7) by Wiklund – born in 1868 – must be excused as a mistake that any teenager could have made while documenting unknown languages in the 1880’s.

²⁴ Perhaps the closest – but not at all puzzling – formal parallel to the compound-like *-rájge* prolatives are Lule Saami compounds usually consisting of stems for cardinal and relative directions followed by the accusative form *bielev* of *bielle* ‘side’. However, while the accusative forms such as *nuortasjbielev* [northern.side.ACC] ‘along the north side’ and *oarjásjbielev* [southern.side.ACC] ‘along the south side’ have prolative meanings, this is fully in line with the functions of the accusative (but not those of the genitive such as *rájge* ‘of a hole’). Furthermore, the compounds are transparent and unambiguous parts of the full paradigms of words like *nuortasjbielle* ‘north side’ (: *nuortasjbielen* [northern.side.INE] ‘at the north side’ : *nuortasjbieles*

that it appears that the continuum between bounded prolatives morphemes and independently compounded ‘hole’ nouns has prevailed for centuries, extending from the westernmost Saami languages to North Saami and to some extent even up to Aanaar Saami (Bartens 1972, 1978; Ylikoski 2014).

To be sure, the Saami prolatives in question are only one example of the difficulties in trying to cling to the textbook definitions of traditional Eurocentric linguistic terms and concepts such as “suffix”, “compound”, “case”, “inflection” and “derivation”. Without attempting to contribute to the most fundamental issues regarding our understanding of such concepts, I still wish to take the opportunity of pointing out that an overwhelming part of morphosyntactic literature is content to operate with synchronic dichotomies such as adpositions vs. cases, word formation vs. inflection, within word formation compounding vs. derivation, and ultimately derivation vs. inflection. What is more, the mainstream theories of language change also operate with such dichotomies, the natural direction of change usually being from the former to the latter (i.e., from adpositions to cases, from compounding to derivation, and from derivation to inflection; see, e.g., Hagège 2010; Dressler et al. 2005; Booij 2000; ten Hacken 2000).

True, the unidirectionality of change has been rightly contested by research on degrammaticalization, for example (e.g., Norde 2009), and Haspelmath (2007: 123) has pointed out that “among typologists the belief that grammatical categories are language-particular and pre-established categories do not exist is now widely shared”. However, I am not aware of ready-made schemes in which the path from compounds would lead directly to inflection, even though this would suit the South Saami and Lule Saami prolatives quite well. On the contrary, it appears that the received view on the intermediary derivational slot preordained to *-raejkiem/-raejkien* and *-rájge* is expressed in statements such as DeLancey’s (2004: 1597): “Occupying the middle ground between lexicalization and pure grammaticalization is the development of derivational morphology”. Nevertheless, the analysis of the “new” Saami prolatives suggests that there are few explicit reasons to label them as adverbs only because their endings do not behave like (heads of compound) nouns, but do not look like prototypical case suffixes either. For the sake of comparison, the few Lule Saami forms in *-k* (Section 4.1) seem to fit the category of denominal adverbs very well. On the other hand, it is fully possible to hypothesize that the grammaticalization path from compounds to case-like formations has included a phase in which the predecessors of modern-day *-raejkiem/-raejkien* and *-rájge* have been less case-like adverbial elements.²⁵

While it would be overly simplistic to reduce the entire question of the exact status of a case-like morpheme to the question of possible adnominal modifiers of semantic heads, the same factor has also been applied for other Uralic languages such as Estonian (Nevis 1988)

[northern.side.ELA] ‘from the north side’ : *nuortasjbelláj* [northern.side.ILL] ‘to the north side’). In South Saami, on the other hand, the analogous formative *-bealam* ‘along the side of’ seems to differ from the corresponding postpositions *bealesne* ‘at the side of’, *bealeste* ‘from the side of’ and *bealese* ‘to the side of’ and behave more like a suffix analogous to *-raejkiem/-raejkien* (Bergsland 1994: 137; compare Table 3 above):

- (vi) South Saami
Nimhtie dellie johkebealam varki gáatan skáda.
 so then river.alongside soon home.ILL hurry.3SG
 ‘And then soon s/he hurries home along the riverside.’ (SIKOR)

²⁵ In fact, it seems that when used in directional (instead of prolatives) meanings, the Lule Saami *-rájge* forms such as (*hájggádj*) *dállárájge* ‘(thrust) into the fire’ in (25) do not, and possibly cannot, have adnominal modifiers the same way the prolatives *-rájge* forms do. On the other hand, it is notable that while the modern language data from South Saami does not contain adjectival modifiers, those can be seen in some of the earliest descriptions of the language; cf. *dagkeren golletjeraejkien* ‘along that kind of small gorge’ (17) and *bâajhtoeh giejereejki* ‘along a wrong path’ (31).

and Hungarian (Kiefer 1987), both famous for dozens of morphological cases. Here it is of particular interest to pay attention to the so-called temporal case of Hungarian: Although the agglutinative suffix *-kor* is formally and etymologically identical to the still existing noun *kor* ‘period, era, age’ of the same language, “temporal case forms” such as *ötör* ‘at 5 o’clock’ and *karácsonykor* ‘at Christmas’ are, to my knowledge, not usually considered as compound nouns but most traditionally as case forms, although they lack many morpho(phono)logical, syntactic and semantic properties typical of less disputable cases of the language. However, when Kiefer (1987) proposes to reduce the inventory of Hungarian cases from 28 to 18, his foremost argument for downgrading *-kor* to an adverbial derivational suffix is the fact that forms such as *éjfélkor* ‘at midnight’ cannot take adnominal modifiers in phrases like **holdfényes éjfélkor* ‘at moonlit midnight’. In the opposite vein, as Pete (1999) argues for opposite views whose details need not concern us here, he remarks that the ungrammaticality of Kiefer’s example is not due to a non-case nature of *-kor*, but to the fact that the phrase **holdfényes éjfél* ‘moonlit midnight’ is ungrammatical even in the nominative. Indeed, the Hungarian temporal can be accompanied by modifiers such as those of the phrases *az első karácsonykor* [DEF first Christmas.TEMP] ‘on the first Christmas’ or *a következő regisztrációkor* [DEF forthcoming registration.TEMP] ‘at the time of next registration’.

Samoyedologists have also highlighted the importance of adnominal modifiers as a criterion of a case. The so-called essive-translative markers of Tundra Nenets (*-ηæ*) and Forest Enets (*-Vš*) have not been considered as unambiguous case suffixes and Tundra Nenets forms such as *organisator?ηæ* ‘as an organizer’ (48) have also been labeled as denominal adverbs, mostly due to the lack of number and possessive forms otherwise a central part of Samoyedic nominal inflection. However, Nikolaeva (2014: 39–40) and Jalava (2014) point out that the essive-translative can have a genitive modifier, and for this reason Jalava regards the essive-translative as a minor case. Referring to similar reasons, Siegl (2013: 166–167) characterizes the Forest Enets essive-translative, along with the prolativ marker *-Vn*, as a minor case on the borderline between inflection and derivation. Both languages use their essive-translatives in NP-like constructions comparable to the Saami prolatives and the Hungarian temporal:

(48) Tundra Nenets

Конференция’	организатор’ηæ	<i>Саамский университетской колледж</i>
<i>Konferentsijah</i>	<i>organisator?ηæ</i>	<i>Saamskij universitetskoj kolledž</i>
conference.GEN	organizer.ESSTR	Sámi University College
<i>ηæвысь.</i>		
<i>ηæwiš.</i>		
be.INDIR.PST.3SG		

‘The organizer of the conference was the Sámi University College.’ (*Naryana vynder* 30.9.2010, p. 10; courtesy of Jalava 2014)

(49) Forest Enets

<i>bunki</i>	aga	bunkiš	<i>kañi</i>	<i>točguđ</i>	<i>kañu</i>
dog.1SG	big	dog.ESSTR	go.3SG	then	die.ASS.3SG

‘My dog became old and then he died.’ (Siegl 2013: 166)

To end the present discussion on the problems of trying to draw exact borders between cases and non-cases in Saami languages, or languages like Hungarian, Tundra Nenets and Forest Enets for that matter, one theoretical yet perhaps not so practical solution could be the concept of so-called transpositional or word-class-changing inflection put forward by Haspelmath (1996; see also Haspelmath & Sims 2010: 257–262) who differentiates between external and

internal word-classes of a word form: in a prototypical example of word-class-changing inflection, a formation such as a participle preserves the “lexeme word-class” (verb) which determines the internal syntax of the phrase or clause headed by the form in question. At the same time, however, the syntactic status of the word form outside its phrase, that is, its external morphology and syntax depends on its new “word-form word-class” (adjective).

In this perspective, it might be possible to consider the above-mentioned formations with noun-like internal syntax but perhaps not enough external case-like features (such as established plural forms or possessive suffixes) as instances of word-class-changing inflection; in other words, as noun that behave as adverbs. On the other hand, however, it has been argued that especially as regards inflected “adverbs”, it is difficult to point out any unambiguous features that would make adverb-like verb forms or noun forms truly “adverbs”: In other words, it would actually be possible to characterize all adverbial case forms as “adverbial noun forms” or “nominal adverbs”, if this is to mean something more inflectional than *denominal* adverbs (cf. Ylikoski 2009: 179–180).

5. Conclusion

As an interim conclusion, it can be said that the South Saami morpheme(s) *-raejkiem/-raejkien* – rather than the accusative *raejkie-m* ‘hole (acc.)’ or the genitive *raejkie-n* ‘of a hole’ – and Lule Saami *-rájge* are case-like, but not unambiguously inflectional case suffixes that have a spatial semantic function that has often been termed “prolative” in Saami linguistics and largely in the research traditions of other Uralic languages such as Erzya and Moksha. In their normal prolative functions, like in the phrases *bussen klaaseraejkien* ‘through the bus window’ (14) and *dan ádá láhttorájge* ‘along the new ski track’ (16), the forms in question are syntactically and semantically distinct from their material origin in compounds headed by nouns for ‘hole, opening’. Interestingly, these phenomena appear so similar in the two languages that it has been possible to present a parallel description of both *-raejkiem/-raejkien* and *-rájge*, and their analyses actually complement each other.

More important than providing a definitive label for these formations is a due description of the phenomena that have remained underdescribed, partly misunderstood and even ignored by earlier scholars of Saami languages. As the traditional grammar categorizes morphemes in terms of prototypical inflection, derivation and compounding, it is understandable that morphemes as atypical as *-raejkiem/-raejkien* and *-rájge* have not automatically fallen into the paradigm tables or other ready-made slots available. However, the above discussion shows that it is also necessary to carve out space for these formations in grammatical descriptions of South Saami and Lule Saami, and likewise in those of Ume Saami (36–37) and Pite Saami (38). Until now, descriptions of *-raejkiem/-raejkien* and *-rájge* have been almost exclusively confined to telegraphic dictionary entries. The so-called prolative in *-k* such as Lule Saami *jávrrék* (41), however, hardly deserves attention as a case proper, as it occurs in only a limited number of forms – in spite of the possibility of a greater history that may extend up to the prolative case forms of the Mordvin languages (Table 5).

It is somewhat unfortunate that in Saami linguistics the term “prolative” is often used to refer to non-prolative, and even non-spatial, denominal adverbs such as South Saami *giesege* ‘in summer’, *biejjege* ‘during the daytime’ and Lule Saami *giessek*, *biejvvek* id. However, it is to be hoped that these two entirely different phenomena will be kept separate in spite of the common label for case-like morphemes that may arise and replace earlier functionally similar morphemes in their original functions. Regardless of the labels assigned to the elements *-k* and *-ge*, and *-raejkiem/-raejkien* and *-rájge* altogether, and regardless of their exact interpretation, it is important to be aware of the existence of this new type of prolative expression in the westernmost Uralic languages described in the preceding sections. Some of

the central questions to be left for future research include the questions about the productivity, semantic differences and distribution of the prolatives in *-k* and *-ge*, and *-raejkiem/-raejkien* and *-rájge*, respectively. Furthermore, the relation of these formations and the prolative functions of the accusative and elative (seen in Examples 1, 3 and 44 as well as in Note 8) call for further research. Finally, it must be emphasized that the present empirical study is based almost solely on the written registers of South Saami and Lule Saami; the present-day spoken languages and their speakers' intuitions are thus also left for future research and alternative research methods.

In addition to the Mordvin languages already discussed above (see also GMYa 1962: 80, 147–151), other Uralic languages with analogous morphological cases – be they *prolatives*, *prosecutives* or *transitives* – include Veps of the Finnic branch (Tikka 1992: 160–178; Grünthal 2003: 162ff.), the Permic languages (Lakó 1951), and the Samoyedic branches (see, e.g., Janhunen 1998: 469; Siegl 2013: 165). However, while it might even be tempting to claim that such ‘through, along’ cases are actually a more characteristic feature of Uralic case systems than the often-hailed distinction between the so-called internal and external local cases (Finnic and Hungarian only), it must be remembered that corresponding cases can also be found throughout the globe. It is to be hoped that the future areal-typological studies focusing on this underdescribed type of local cases can shed more light to our understanding of the prolatives in South Saami and Lule Saami – and vice versa.

Abbreviations

1	first person	ESS	essive	PASS	passive
2	second person	ESSTR	essive-translative	PL	plural
3	third person	GA	genitive-accusative	PROG	progressive
ACC	accusative	GEN	genitive	PROL	prolative
ASS	assertive (mood)	ILL	illative	PRS	present
CMPV	comparative	IMP	imperative	PST	past
CNG	connegative	INCH	inchoative	PTCP	participle
COM	comitative	INDIR	indirective (mood)	REFL	reflexive
CVB	converb	INE	inessive	REL	relative
DAT	dative	INF	infinitive	SaaL	Lule Saami
DEF	definite	LOC	locative	SaaS	South Saami
DIM	diminutive	N	neuter	SG	singular
DPT	discourse particle	NEG	negative verb	TEMP	temporal (case)
ELA	elative	NOM	nominative		

Corpus

SIKOR = SIKOR. UiT The Arctic University of Norway and the Norwegian Saami Parliament's Saami text collection. <<http://gtweb.uit.no/korp/>> (version 17.11.2014).

References

- Bartens, Raija 1972: *Inarinlapin, merilapin ja luulajanlapin kaasussyntaksi*. Helsinki: Suomalais-Ugrilainen Seura.
- Bartens, Raija 1978: *Synteettiset ja analyttiset rakenteet lapin paikanilmauksissa*. Helsinki: Suomalais-Ugrilainen Seura.
- Beke, Ödön 1911: Egy homályos lapp ragról. *Nyelvtudományi Közlemények* 40. 473–476.
- Bergsland, Knut 1946: *Røros-lappisk grammatikk. Et forsøk på strukturell språkbeskrivelse*. Oslo: Aschehoug.

- Bergsland, Knut 1992: *Røros-samiske tekster*. Opptegnet og oversatt av Knut Bergsland. Oslo: Norsk Folkemuseum.
- Bergsland, Knut 1994: *Sydsamisk grammatikk*. Karasjok: Davvi Girji.
- Bergsland, Knut & Hasselbrink, Gustav 1957: *Sámien lukkeme-gärjá. Sydsamisk lesebok med grammatikk og ordliste*. Utgitt av naborikenes sydsamer ved Knut Bergsland og Gustav Hasselbrink. Oslo.
- Bergsland, Knut & Magga, Lajla Mattsson 1993: *Áarjelsaemien-daaroen baakoegærja. Sydsamisk-norsk ordbok*. Idut.
- Blake, Barry J. 2001: *Case*. Cambridge: Cambridge University Press.
- Booij, Geert 2000: Inflection and derivation. In Booij, Geert – Christian Lehmann – Joachim Mugdan (eds): *Morphologie. Ein Internationales Handbuch zur Flexion und Wortbildung. Morphology. An International Handbook on Inflection and Word-Formation. Volume 1*. Berlin & New York: Walter de Gruyter. 360–369.
- Bull, Ella Holm 2000: *Áarjel-saemien 6. Govhtede gærja*. Idut.
- Bull, Ella Holm & Bergsland, Knut 1974: *Lohkede saemien. Sørsamisk lesebok*. Oslo: Grunnskolerådet, Kirke- og undervisningsdepartementet.
- DeLancey, Scott 2004: Grammaticalization: from syntax to morphology. In Booij, Geert – Christian Lehmann – Joachim Mugdan – Stavros Skopeteas (eds): *Morphologie. Ein Internationales Handbuch zur Flexion und Wortbildung. Morphology. An International Handbook on Inflection and Word-Formation. Volume 2*. Berlin & New York: Walter de Gruyter. 1590–1599.
- Dressler, Wolfgang U. & Kastovsky, Dieter & Pfeiffer, Oskar E. & Rainer, Franz (eds) 2005: *Morphology and its Demarcations. Selected Papers from the 11th Morphology Meeting, Vienna, February 2004*. Amsterdam: John Benjamins.
- EMM = *Evangelium Matteus miel*. Suomen Piiphiaseura 1995.
- Fekete, Csenge & Huumo, Tuomas & Lehisemets, Kersten 2013: Breaking through: How Force Dynamic Strength Varies in Finnish Adpositional Constructions with the Adposition *läpi* 'through'. *Linguistica Uralica* 44: 1. 30–49.
- GMYa = Коляденков, М. И. & Заводова, Р. А. (eds) 1962: *Грамматика мордовских (мокшанского и эрзянского) языков. Часть I. Фонетика и морфология*. Саранск: Мордовское книжное издательство.
- Grundström, Harald 1946–1954: *Lulelappsk ordbok. Lulelappisches Wörterbuch*. Uppsala: A.-B. Lundequistska Bokhandeln.
- Grünthal, Riho 2003: *Finnic adpositions and cases in change*. Helsinki: Finno-Ugrian Society.
- ten Hacken, Pius 2000: Derivation and compounding. In Booij, Geert – Christian Lehmann – Joachim Mugdan (eds): *Morphologie. Ein Internationales Handbuch zur Flexion und Wortbildung. Morphology. An International Handbook on Inflection and Word-Formation. Volume 1*. Berlin & New York: Walter de Gruyter. 349–360.
- Hagège, Claude 2010: *Adpositions*. Oxford: Oxford University Press.
- Halász, Ignác 1885: *Svéd-lapp nyelv. I. Lule- és Pite-lappmarki nyelvmutatványok és szótár*. Budapest: Magyar Tudományos Akadémia.
- Halász, Ignác 1891: *Svéd-lapp nyelv. IV. Déli-lapp szótár*. Budapest: Magyar Tudományos Akadémia.
- Halász, Ignác 1892: Harmadik lappföldi útam. *Budapesti Szemle* 70. 253–284.
- Halász, Ignác 1893: *Svéd-lapp nyelv. V. Népköltési gyűjtemény a Pite lappmark Arjepluogi egyházkerületéből*. Budapest: Magyar Tudományos Akadémia.
- Halász, Ignác 1896: *Svéd-lapp nyelv. VI. Pite lappmarki szótár és nyelvtan rövid karesuandói lapp szójegyzékkel*. Budapest: Magyar Tudományos Akadémia.

- Haspelmath, Martin 1996: Word-class-changing inflection and morphological theory. In Booij, Geert – Jaap van Marle (eds): *Yearbook of Morphology 1995*. 43–66.
- Haspelmath, Martin 2007: Pre-established categories don't exist: consequences for language description and typology. *Linguistic Typology* 11. 119–132.
- Haspelmath, Martin 2009: Terminology of case. In Malchukov, Andrej – Andrew Spencer (eds): *The Oxford handbook of case*. Oxford: Oxford University Press. 505–517.
- Haspelmath, Martin & Sims, Andrea D. 2010: *Understanding morphology*. London: Hodder Education.
- Hasselbrink, Gustav 1981–1985: *Südlappisches Wörterbuch*. Uppsala: A.-B. Lundequistska bokhandeln.
- Hjelmslev, Louis 1937: *La catégorie des cas: Étude de grammaire générale. II*. Aarhus: Universitetsforlaget.
- Isaksen, Knut 1998: *Duottar. Luonddugeografija*. Idut.
- Jalava, Lotta 2014 (forthcoming, accepted manuscript): The essive-translative in Tundra Nenets. In de Groot, Casper (ed.): *Uralic Essive and the grammatical expression of impermanent state*.
- Janhunen, Juha 1998: Samoyedic. In Abondolo, Daniel (ed.): *The Uralic Languages*. London & New York: Routledge. 457–479.
- Kappfjell, Lena 2013: Tjaebpemes gæssie. *Saemeste saaman* 1/2013. 58–59.
- Kiefer, Ferenc 1987: The cases of Hungarian nouns. *Acta Linguistica Academiae Scientiarum Hungaricae* 37. 93–101.
- Kintel, Anders 2012: *Julevsáme-dárro báhkogirjje*.
<<http://gtweb.uit.no/webdict/ak/smj2nob/index.html>> [30 June 2014].
- Kittilä, Seppo & Ylikoski, Jussi 2011: Remarks on the coding of Goal, Recipient and Vicinal Goal in European Uralic. In Kittilä, Seppo – Katja Västi – Jussi Ylikoski (eds): *Case, Animacy and Semantic Roles*. Amsterdam & Philadelphia: John Benjamins. 27–64.
- Klyuchagin, Petr [Ключагин, Петр] 2012: Никул Эркай. – *Вайгель. Мордовиянь национальной радиось*, 11 September 2012. <<http://www.vaigel.ru/article/23>> [6 May 2014].
- Korhonen, Olavi 2007: *Báhkogirjje. Julevusámes dárrui, dáros julevusábmái*. Jokkmokk: Sámiij áhdadusguovdásj.
- Kulikov, Leonid 2009: Evolution of case systems. In Malchukov, Andrej – Andrew Spencer (eds): *The Oxford handbook of case*. Oxford: Oxford University Press. 439–457.
- Lagercrantz, Eliel 1923: *Sprachlehre des Südlappischen nach der Mundart von Wefsen*. Kristiania: Kristiania Etnografiske Museum.
- Lagercrantz, Eliel 1926: *Wörterbuch des Südlappischen nach der Mundart vom Wefsen*. Oslo: Aschehoug.
- Lakó, György 1951: Emploi du prosécutif et du transitif dans les langues permienues, l'origine de leurs désinences casuelles. *Acta Linguistica Academiae Scientiarum Hungaricae* 1. 75–118, 347–371.
- Lehtiranta, Juhani 1992: *Arjeploginsaamen äänne- ja taivutusopin pääpiirteet*. Helsinki: Suomalais-Ugrilainen Seura.
- Magga, Lajla Mattsson 2009: *Norsk-sydsamisk ordbok. Daaroen-åarjelsaemien baakoegærja*. Idut.
- Magga, Ole Henrik & Magga, Lajla Mattsson 2012: *Sørsamisk grammatikk*. Davvi Girji.
- Moosberg, Nils 1918: Uppteckningar gjorda sommaren 1918 i Umasjö efter Anna Magdalena Persdotter, född i Fjällsjö 1842, sedan 30 år bosatt i Boksjön. ULMA 16776. Institutet för språk och folkminnen, Uppsala.
- Naryana vunder = Няръяна вындер (Красный тундровик)*. [Newspaper. Naryan-Mar, Nenets Autonomous Okrug, Russia.]

- Nevis, Joel A. 1988: On the development of the clitic postposition category in Estonian. *Finnisch-Ugrische Forschungen* 48. 171–197.
- Nielsen, Konrad 1912: *Lappisk som gjenstand for videnskabelig forskning*. Tiltrædelsesforelæsning holdt ved Kristiania universitet 25. mars 1912. Kristiania: Aschehoug.
- Nielsen, Konrad 1926: *Lærebok i lappisk. I. Grammatikk. Lydlære, formlære, orddannelseslære og syntaks samt tillegg*. Oslo: Brøgger.
- Nielsen, Konrad 1932–1962: *Lappisk ordbok. Grunnet på dialektene i Polmak, Karasjok og Kautokeino*. Oslo: Aschehoug.
- Nikolaeva, Irina 2014: *A grammar of Tundra Nenets*. Berlin: Mouton de Gruyter.
- Norde, Muriel 2009: *Degrammaticalization*. Oxford: Oxford University Press.
- OED = *Oxford English Dictionary Online. The definitive record of the English language*. <<http://www.oed.com/>> [31 May 2014.]
- Pete, István 1999: A szó szerkezeti és derivációs elemzése. *Magyar Nyelvőr* 123. 483–495.
- Pirak, Anta 1993: *Jåhtte sáme viessom*. Kristiansund: Th. Blaasvær.
- Qvigstad, J. (ed.) 1929: *Lappiske eventyr og sagn. IV. Lappiske eventyr og sagn fra Lyngen II og fra Nordland*. Oslo: Aschehoug.
- Riemsdijk, Henk van & Huijbregts, Riny 2007: Location and locality. In Karimi, Simin – Vida Samiian – Wendy K. Wilkins (eds): *Phrasal and Clausal Architecture: Syntactic derivation and interpretation. In honor of Joseph E.monds*. 339–364.
- Rydving, Håkan 2013: *Words and Varieties. Lexical Variation in Saami*. Helsinki: Finno-Ugrian Society.
- Sammallahti, Pekka 1998: *The Saami Languages. An Introduction*. Kárášjohka: Davvi Girji.
- Sammallahti, Pekka & Nickel, Klaus Peter 2006: *Sámi-duiskka sátnegirji. Saamisch-deutsches Wörterbuch*. Karasjok: Davvi Girji.
- Schlachter, Wolfgang 1958: *Wörterbuch des Walddlappendialekts von Malå und Texte zur Ethnographie*. Helsinki: Finnisch-Ugrische Gesellschaft.
- Siegl, Florian 2013: *Materials on Forest Enets, an Indigenous Language of Northern Siberia*. Helsinki: Finno-Ugrian Society.
- Slobin, Dan I. 2008: Relations between paths of motion and paths of vision: A crosslinguistic and developmental exploration. In Mueller Gathercole, Virginia C. (ed.): *Routes to Language. Studies in Honor of Melissa Bowerman*. New York & London: Psychology Press. 197–222.
- Spiek, Nils Eric 1989: *Lulesamisk grammatik*. Luleå: Th. Blaasvær.
- Svorou, Soteria 1994: *The Grammar of Space*. Amsterdam: John Benjamins.
- Talmy, Leonard 2000a: *Toward a Cognitive Semantics. Volume I: Concept Structuring Systems*. Cambridge, MA: MIT Press.
- Talmy, Leonard 2000b: *Toward a Cognitive Semantics. Volume II: Typology and Process in Concept Structuring*. Cambridge, MA: MIT Press.
- Tikka, Toivo 1992: *Vepsän suffiksoituneet postpositiot: Kielioillisiin sijoihin liittyvä suffiksoituminen*. Uppsala.
- Vars, Elle Márjá 2002: *Čábbámus iditguovssu. Idut*.
- Wiklund, K. B. 1890: *Lule-lappisches Wörterbuch*. Helsinki: Suomalais-Ugrilainen Seura.
- Wiklund, K. B. 1901: *Lärobok i lapska språket*. Uppsala: Lundequistska bokhandeln
- Wiklund, K. B. 1915: *Lärobok i lapska språket*. Andra, reviderade upplagan. Uppsala: Akademiska bokhandeln.
- Wiklund, K. B. 1928: Das lappische Verbaladverbium und einige andere Kasus der Verbalstammes. In *Festskrift til rektor J. Qvigstad 1853 4. april 1928*. Oslo. 316–353.

- Wulfila = *Die Gotische Bibel. Herausgegeben von Wilhelm Streitberg. Erster Teil: Der gotische Text und seine griechische Vorlage mit Einleitung, Lesarten und Quellennachweisen sowie den kleinern Denkmälern als Anhang.* Heidelberg: Carl Winter.
- Ylikoski, Jussi 2009: *Non-finites in North Saami.* Helsinki: Finno-Ugrian Society.
- Ylikoski, Jussi 2011: A survey of the origins of directional case suffixes in European Uralic. In Kittilä, Seppo – Katja Västi – Jussi Ylikoski (eds): *Case, Animacy and Semantic Roles.* Amsterdam & Philadelphia: John Benjamins. 235–280.
- Ylikoski, Jussi 2014: Davvisámegiela *-ráigge* – substantiiva, advearba, postposišuvdna vai kásus? *Sámi dieđalaš áigečála* 2/2014. 47–70.