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Skolt Saami: A typological profile

The article presents a typological overview of Skolt Saami based on the examination of the features in the *World Atlas of Language Structures* (WALS) database. The relevant properties of Skolt Saami are discussed and the language is assigned a value for each feature. The features cover phonology, different domains of grammar – morphology, nominal categories, nominal syntax, verbal categories, word order, simple clauses and complex sentences – as well as some aspects of the lexicon. The typological profile of Skolt Saami that emerges from the examination of the features is then compared with the languages in the database to see what the typological distance is between Skolt Saami and these other languages.

1. Introduction

This paper aims to present the reader with a typological overview of the Skolt Saami language. The typological profile is based on the features in the *World atlas of language structures* (WALS) database (Haspelmath & al. eds. 2005, 2008), which contains information on 142 typological features from different (mostly grammatical) domains and includes 2560 languages in total.¹ The number of features coded in the database varies from language to language, some languages having information for almost all features and some for only a few. Skolt Saami itself is not represented in the database. This paper examines the properties of Skolt Saami with respect to each feature in WALS and discusses which type (feature value) the language represents in the typology of the feature. A typological profile of Skolt Saami emerges from the discussion. Skolt Saami is also compared to other languages in the database, especially to its closest relatives and geographical neighbours. At many points, the discussion touches upon the nature of the WALS features, and is therefore interesting from a general linguistic viewpoint as well.²

1 A new edition of WALS was released in 2011 after the first submission of this paper. The new edition contains two more maps, but these and other new features or changes have not been taken into account in this paper, which is based on the 2005/2008 editions of WALS.

2 The idea behind going through all the features in the WALS database from the point of view of Skolt Saami was originally conceived of as a first step to get acquainted with and learn about the structural characteristics of the language. Once this information had been gathered, it became clear that it would be worth sharing with other scholars of Skolt Saami and with the typological community in the form of a journal article. I wish to thank Ante Aikio, Eino Koponen, and Jussi Ylikoski for their valuable comments on the paper and replies to my questions, as well as Tiina Sanila-Aikio for her views as a Skolt Saami speaker. Special thanks to Östen Dahl for his help with the typological distance measure in Section 3. Thanks are also due to the Institute for the Languages of Finland (Kotus) for the permission to use the Skolt Saami materials in their archives.

Skolt Saami is spoken by some 300 people out of an ethnic group of 600, most of whom live in the municipality of Inari in northeastern Finland. The traditional territory of Skolt Saami was on the other side of the present Finno-Russian border, but most of the speakers evacuated to Finland at the time of World War II, when their traditional lands became part of the Soviet Union. Culturally Skolt Saami speakers have had close ties to the Russian orthodox tradition ever since the time of their Christianization in the 15th–16th Centuries. Finnish influence has been more prominent since the first half of the 20th Century, but the orthodox religion has been preserved. Almost all of the 300 mother tongue speakers were born before 1970, the members of later generations having Finnish as their first language (with few exceptions).

The Saami languages constitute a branch of the Uralic language family. Within the Saami branch, Skolt Saami belongs to the eastern group together with Inari Saami, Kildin Saami, Akkala Saami, and Ter Saami. Inari Saami is spoken in Inari in Finland, whereas the latter three are located on the Kola Peninsula, to the east of the traditional Skolt Saami territories.

In the long and well-established tradition of Saami linguistics, a number of works on Skolt Saami have appeared and information on the language is also included in many studies dealing with Saami languages more generally. Text collections include Itkonen (1931), Lagercrantz (1961), and Koponen et al. (2010). Itkonen (1958) has published a detailed scientific dictionary, and Sammallahti & Moshnikoff (1991) and Moshnikoff & Sammallahti (1988) have published smaller dictionaries aimed at more practical use. There is a grammar sketch (Korhonen, Moshnikoff & Sammallahti 1973) and a school grammar (Moshnikoff, Moshnikoff & Koponen 2009) both focusing on phonology and especially morphology, but containing little information on syntax. A more comprehensive descriptive grammar has been written by Feist (2010). Detailed phonological analysis can be found in Korhonen (1971, 1975). Furthermore, some 80 hours of materials (narrative, interviews, dialogue, *leu'dd* songs), recorded mostly in the 1960s and 1970s, as well as in 2007–2009, are available at the archives of the Institute for the Languages of Finland (Kotus); preliminary transcriptions are available for approximately 36 hours of these recordings.³ The language can be considered to be highly endangered, and despite the recent appearance of a descriptive grammar, a lot of work remains to be done to document and describe the language. This paper is a step towards that direction.

The main sources used in the research behind this paper have been the published grammar sketches, dictionaries, and text collections mentioned above.⁴ Some analyses are also based on examination of the transcriptions of the recordings available in

3 Further linguistic analysis of the materials has not been made to date, but I am currently leading a project funded by the Finnish Cultural foundation that aims to produce an annotated corpus of the transcribed recordings (including translations into Finnish and English).

4 Unfortunately, Feist's (2010) grammar became available to me only after the submission of this paper and it has been possible to take into account the analyses proposed therein only to a very limited extent.

the Kotus archives.⁵ Reference to these is made with the code “Kotus” followed by the archival number of the recording (signum).

Section 2 discusses the WALS features in Skolt Saami, Section 3 compares the Skolt Saami values with other languages in the database, close to Skolt Saami in areal or genealogical terms, and Section 4 concludes the paper. Needless to say, this is not a comprehensive or authoritative treatment of the grammar of Skolt Saami, but rather a collection of typologically relevant information that I hope can give typologists some valuable information on the language and help scholars working on the language to identify points where more research is needed. At the same time, I hope that I have managed to contribute some new information to the field of Saami linguistics as well.

2. The WALS features in Skolt Saami

This section discusses the WALS features in Skolt Saami. The features belong to the different thematic sections of WALS as follows: A. Phonology 1–19, B. Morphology 20–29, C. Nominal categories 30–56 (Gender and number 30–36, Articles and pronouns 37–48, Case 49–52, Numerals 53–56), D. Nominal syntax 57–64, E. Verbal categories 65–80 (Tense and aspect 65–69, Modality 70–78, Suppletion 79–80), F. Word order 81–97, G. Simple clauses 98–121 (Core argument marking 98–105, Valence and voice 106–111, Negation and questions 112–116, Predication 117–121), H. Complex sentences 122–128, I. Lexicon 129–138, J. Sign languages 139–140, K. Other 141–142.

The discussion of each feature begins with its number and name (= chapter heading in WALS) in italics. The title is followed by the number and the name of the value assigned to Skolt Saami, which in turn are followed by the number of languages showing this value and the total number of languages coded for the feature in the WALS database. The name of the feature and the name of the value assigned to Skolt Saami appear in exactly the same form as in the chapter headings and feature value boxes in the chapter texts of the printed atlas. The WALS features and values assigned to Skolt Saami are briefly explained, if not self-explanatory from their names (but for the other values of each feature, the reader is referred to WALS).⁶ The value assignment and possible problems posed by the analysis of the feature in Skolt Saami are then discussed. In view of the comparison between Skolt Saami and related or neighbouring languages in Section 3, it is also relevant to pay attention to the value assignments given in WALS for these languages. The value assignments for the related or neighbouring languages are not examined systematically, but some observations are made in the footnotes in this section, where relevant to the discussion in Section 3.

5 The production of the annotated corpus on the basis of these recordings is work in progress and it has not been possible to make use of its results in writing this paper.

6 Easy access to the information is available through the online edition at <<http://wals.info/>>.

A. Phonology

1. **Consonant Inventories.** 4. Moderately large. 116/562. According to Korhonen et al. (1973: 18–20) and Moshnikoff et al. (2009: 12–15), Skolt Saami has 29 consonants. In (1), the consonant phonemes are given in Skolt Saami orthography followed by their IPA values between slashes.⁷

(1) Skolt Saami consonant phonemes

<i>p</i> /p/	<i>t</i> /t/	<i>ķ</i> /c/	<i>k</i> /k/
<i>b</i> /b/	<i>d</i> /d/	<i>ǧ</i> /ʒ/	<i>g</i> /g/
	<i>c</i> /ts/	<i>č</i> /tʃ/	
	<i>ʒ</i> /dʒ/	<i>ǰ</i> /dʒ/	
<i>f</i> /f/			<i>h</i> /x/
<i>v</i> /v/	<i>đ</i> /ð/	<i>j</i> /j/	<i>g</i> /ɣ/
	<i>s</i> /s/	<i>š</i> /ʃ/	
	<i>z</i> /z/	<i>ž</i> /ʒ/	
	<i>r</i> /r/		
	<i>l</i> /l/	<i>llj</i> /ʎ/	
<i>m</i> /m/	<i>n</i> /n/	<i>nj</i> /ɲ/	<i>ŋ</i> /ŋ/

The feature value “moderately large” is defined as an inventory of 26–33 consonants in the WALS chapter. And the number of consonants in Skolt Saami falls within this range.⁸ Most of the consonants occur both short and long. Furthermore, the quality of consonants may be affected by palatalization (marked in the orthography with ´), and minimal pairs are found distinguished solely by palatalization, but palatalization is a suprasegmental property affecting several segments at the same time. Palatalized and non-palatalized variants are therefore not analysed as different phonemes.⁹

2. **Vowel Quality Inventories.** 3. Large vowel inventory (7–14). 183/563. There are nine distinct vowel qualities (Korhonen et al. 1973: 11–13; Moshnikoff et al. 2009: 10–12), which falls within the range of the value “large vowel inventory” (between 7 and 14 vowel qualities). In (2), the vowel qualities are given in Skolt Saami orthography followed by their IPA values between slashes.

7 Ante Aikio (p.c.) points out that there is also a marginal distinction between a non-velarized /l/ and a velarized /ʎ/. This phonemic opposition only occurs word-finally, and, due to its marginality, it is not recognized in the orthography. Minimal pairs are hard to find, but the following word forms show the contrast: /jeæk:ał/ (GEN.SG of *jee’el* ‘lichen’) vs. /vædz:ał/ (3SG.PRES of *vä’zzled* ‘to walk away’), cf. Itkonen (1958: 53a, 706a). A referee points out that the distinction may also be considered to be a matter of allophony.

8 Feist (2010: 50) distinguishes as many as 31 consonant phonemes, but this would still fall within the range of “moderately large”.

9 In the WALS chapter, Finnish is analysed as having a “moderately small” consonant inventory (15–18 consonants). However, if only indigenous consonants are counted and consonants occurring only in recent loans, absent from the repertoire of many speakers, are disregarded, the size of the Finnish inventory is as small as 13, thus falling into the “small” category (6–14 consonants), Feature value 1.

(2) Skolt Saami vowel qualities

<i>i</i> /i/		<i>u</i> /u/
<i>e</i> /e/	<i>õ</i> /ɤ/	<i>o</i> /o/
	<i>â</i> /æ/	<i>â</i> /ɑ/
<i>ä</i> /æ/	<i>a</i> /ɑ/	

As with consonants, vowel qualities are also affected by palatalization, but this is a suprasegmental feature. In addition to the nine vowels listed, there is also a large number of diphthongs; Korhonen (1975: 18) lists 10 distinctive ones. The WALS chapter counts diphthongs as combinations of monophthongs, not as distinct vowel qualities. Furthermore, the nine monophthongs as well as the diphthongs may occur both short and long, but this does not add to the inventory of vowel qualities, either.

3. Consonant-Vowel Ratio. 3. Average. 234/563. This feature measures the relationship between the consonant and vowel quality inventories and it can be directly calculated from Features 1 and 2 by dividing the number of consonants by the number of vowel qualities (C/VQ). Skolt Saami has 29 consonants and 9 vowel qualities, which yields a ratio of 3.22. This falls within the range of the “average” value (between 2.75 and 4.5). Note that if we take the number of consonants to be 30, cf. Feature 1 above, the ratio is still within the range of the “average” value.

4. Voicing in Plosives and Fricatives. 4. Voicing contrast in both plosives and fricatives. 158/566. As seen above, the consonant inventory contains both voiceless and voiced plosives and fricatives. The sources characterize the voiced plosives as semi-voiced when they occur in word-internal or word-final position (Korhonen et al. 1973: 19; Moshnikoff et al. 2009: 13).¹⁰

5. Voicing and Gaps in Plosive Systems. 2. /p t k b d g/. 256/566. Skolt Saami has all six consonants and does not have any of the gaps observed in this chapter.¹¹

6. Uvular Consonants. 1. No uvulars. 468/566. See inventory above.

7. Glottalized Consonants. 1. No glottalized consonants. 412/566. See inventory above.

8. Lateral Consonants. 2. /l/, no obstruent laterals. 388/566. See inventory above.

9. The Velar Nasal (*ŋ*). 2. Velar nasal, but not initially. 88/468. The velar nasal occurs in medial and final position, but not initially (Korhonen et al. 1973: 20, passim; Moshnikoff et al. 2009: 13, passim).

10. Vowel Nasalization. 2. Contrastive nasal vowels absent. 179/243. See vowel inventory above.

11. Front Rounded Vowels. 1. None. 524/561. See vowel inventory above.

10 The WALS chapter assigns the same value to Finnish, but in reality a voicing contrast is only present in recent loans, cf. Feature 1, and, in fact, many speakers do not make the distinction in their speech. If recent loans are disregarded and the indigenous phonological system of Finnish is taken into account, there is no voicing contrast in Finnish, and Value 1 should be assigned to Finnish.

11 If Finnish is analysed according to the indigenous system (cf. Note 10), it should fall into the category “other”, Feature value 1.

12. Syllable Structure. 3. Complex syllable structure. 150/485. In the *WALS* chapter, there are three levels of syllable complexity: simple, moderate and complex. The simple type is maximally CV, and the moderately complex type maximally CCVC with the limitation that the second consonant in the onset may only be a liquid or a glide; anything beyond that falls into the complex type. According to Korhonen (1975: 26–29), Skolt Saami may have maximally two consonants in the coda and three in the onset, and thus clearly falls into the complex type. Note that most complex onsets occur in relatively recent loan words.¹²

13. Tone. 1. No tones. 306/526. Skolt Saami has no tones.

14. Fixed Stress Locations. 2. Initial: stress is on the first syllable. 92/500. See Korhonen et al. (1973: 23–24).

15. Weight-Sensitive Stress. 8. Fixed stress (no weight-sensitivity). 281/500. Stress is on the first syllable regardless of syllable weight, see Korhonen et al. (1973: 23–24).

16. Weight Factors in Weight-Sensitive Stress Systems. 4. Long vowel + coda: long vowels *or* closed syllables [are heavy for stress]. 35/500. Chapters 14 and 15 focused on primary stress, but this chapter takes into account secondary stresses as well. According to Korhonen et al. (1973: 23–24), primary stress is on the first syllable, weak secondary stress is on the last syllable, and in words longer than two syllables the medial syllables have a stronger secondary stress. However, when a two-syllable word has an “overshort” (non-syllabic) vowel following the second syllable, the second syllable has a stronger secondary stress, and furthermore, certain case endings also affect the secondary stress on the preceding syllable. On this basis, Skolt Saami could be assigned Value 1, “No weight, or weight factor unknown”. This analysis may, however, seem odd in that it recognizes no unstressed syllables at all. This is due to the analysis of overshort (and unstressed) vowels as non-syllabic and thus excluded from the syllable count. Elsewhere, Korhonen (1975: 12–13) takes a different view on stress in non-first syllables: short vowels in syllables with secondary stress are realized short and short vowels in unstressed syllables are realized overshort, being often completely dropped in fast speech; as to long vowels, they always bear secondary stress. Unstressed syllables are always open syllables with overshort vowels. Syllables with secondary stress and short vowels may be open or closed. In other words, short vowels in open syllables may be stressed or unstressed, but both vowel length and syllable closedness suffice alone to make the syllable stressed. Following this analysis, Skolt Saami can be assigned Value 4 for this feature.

17. Rhythm Types. 4. Undetermined: no clear foot type. 37/323. This feature value means that there are secondary stresses but they form no clear foot type. In earlier stages of the language, there was a system in which secondary stress fell regularly on the 3rd, 5th, etc. syllable (cf. Korhonen 1975: 15; Sammallahti 1998: 39), and thus a trochaic foot type. The present-day system (cf. Feature 16 above) does not seem to exhibit a clear foot type.

¹² In Finnish, codas may have more than one consonant which places Finnish syllable structure in the complex category as well, Feature value 3.

18. Absence of Common Consonants. 1. All present. 502/566. This chapter is about languages lacking bilabials, nasals or fricatives. The Skolt Saami consonant inventory features representatives of all these categories (see above).

19. Presence of Uncommon Consonants. 5. ‘Th’-sounds. 40/566. Skolt Saami has the voiced dental fricative /ð/ but none of the other uncommon consonant types referred to in the chapter (see Korhonen et al. 1973: 18, 20).

The features in the phonology section of WALS do not address the length of sounds, but in a typological overview like the present one, it is worth emphasizing that length contrasts are an important part of the vocalic and consonantal systems of Skolt Saami. It has even been claimed that a three-way quantity contrast can be found in the language, see McRobbie-Utasi (1999) for discussion.

B. Morphology

20. Fusion of Selected Inflectional Formatives. 6. Ablaut/concatenative. 5/162. This chapter focuses on fusion in the expression of central case and tense categories, which, according to the definitions given by Bickel & Nichols (2005a: 87), are accusative case and past tense in the case of Skolt Saami. The singular accusative is generally marked with a stem change (the same form is used for genitive singular and nominative plural as well) and no ending whereas the plural accusative has the ending *-d* following the plural marker *-i* (see Korhonen et al. 1973: 32, 35ff; Moshnikoff et al. 2009: 32–34, 167ff). To take an example, the following are the nominative and accusative forms of *jokk* ‘river’ (3).

(3) *jokk* ‘river’

NOM.SG	<i>jokk</i>	ACC.SG	<i>joogg</i>
NOM.PL	<i>joogg</i>	ACC.PL	<i>jooggid</i>

Past tense is marked by polyexponential suffixes and stem-internal changes (see paradigms in Korhonen et al. 1973: 67, 70ff; Moshnikoff et al. 2009: 88–91, 354ff). The following paradigms of the verb *kuullâd* ‘hear’ – two numbers and three persons and the indefinite person – serve to illustrate this (4).

(4) *kuullâd* ‘to hear’

	PRESENT	PAST
1SG	<i>kuulam</i>	<i>ku’llem</i>
2SG	<i>kuulak</i>	<i>ku’lliĳ</i>
3SG	<i>kooll</i>	<i>kuuli</i>
1PL	<i>kuullâp</i>	<i>kuulim</i>
2PL	<i>kuullve’ted</i>	<i>kuulid</i>
3PL	<i>ko’lle</i>	<i>ku’lle</i>
INDEF	<i>kuulât</i>	<i>ku’lleš</i>

The basic distinction in the chapter is between isolating, concatenative and non-linear expression, and non-linear is further divided into tonal and ablaut. What is important

for the analysis of Skolt Saami case and tense morphology is how to draw the line between concatenative and nonlinear. The authors of the chapter are quite minimalistic in their explanations of this distinction. They say: “Once the phonological alternations are properly analyzed, strings of concatenative formatives can be segmented into clear-cut morphemes. Nonlinear formatives are not amenable to this because they are realized not in linear sequence but by direct modification of their host.” (Bickel & Nichols 2005a: 86.) On the basis of this definition, Skolt Saami is to be assigned Value 6 for this feature.¹³

21. Exponence of Selected Inflectional Formatives. This chapter contains two maps.

21. Case exponence. 1. Monoexponential case. 69/160. Attention is paid to the accusative as in Chapter 20. The accusative singular is marked by stem variation and has no suffix to be paid attention to here. In the plural, the accusative ending is *-d* and there is no cumulation with any other category – number is expressed by *-i-* (see Korhonen et al. 1973: 32, 35ff; Moshnikoff et al. 2009: 32–34, 167ff). The following paradigm of *võrr* ‘blood’ shows this clearly (5).

(5) *võrr* ‘blood’

	SINGULAR	PLURAL
NOM	<i>võrr</i>	<i>võõr</i>
GEN	<i>võõr</i>	<i>võõri</i>
ACC	<i>võõr</i>	<i>võõrid</i>
ILL	<i>võ'rre</i>	<i>võõrid</i>
LOC	<i>võõrâst</i>	<i>võõrin</i>
COM	<i>võõrin</i>	<i>võõrivui'm</i>
ESS	<i>võrrân</i>	
PART	<i>võrrâd</i>	
ABE	<i>võõrtää</i>	<i>võõritää</i>

Note that the plural illative is identical in form with the plural accusative. Looking at the relevant suffixes only, Skolt Saami appears to have monoexponential case.

21A. Exponence of TAM (tense-aspect-mood) Inflection. 2. TAM + agreement. 19/160. Attention is paid to the past tense as in Chapter 20. Past tense markers are polyexponential with agreement, see Korhonen et al. (1973: 67, 70ff) and Moshnikoff et al. (2009: 88–91, 354ff), and cf. the paradigm in (4) above.

22. Inflectional Synthesis of the Verb. 2. 2–3 categories per word. 24/145. This chapter pays attention to the number of categories appearing on the maximally

13 It is notable that in the authors’ analysis ablaut is only found in Afro-Asiatic and Nilo-Saharan languages (only 5 cases in total). However, according to the definition they give, e.g., English past tense marking in *sing–sang* should be analysed as non-linear (ablaut). It seems only regular past tense in *-ed* is taken into account in the analysis of English. To analyse English *sing–sang* (or the Skolt Saami formatives for that matter) as exclusively concatenative, one would need to resort to diachronic analysis, not just synchronic phonological alternations.

inflected verb, inflectional category being understood as “any grammatical category whose presence or shape is (at least in part) a regular response to the grammatical environment” (Bickel & Nichols 2005b: 94). Finite verbs carry maximally two verbal inflectional categories: tense/mood and person-number (see Korhonen et al. 1973: 67ff; Moshnikoff et al. 2009: 83ff). It could be argued that three inflectional categories occur on a verbal base when a present participle is used as a noun and inflected for number and case (see Moshnikoff et al. 2009: 126–127, 346–353), but these forms may not be considered to be verbs and are thus irrelevant here. The synthesis of the verb may of course be increased by various derivational categories, and furthermore, various discourse clitics may also be added on verbs, but they may occur on other parts of speech as well and are therefore not to be considered as verbal inflectional categories.

23. Locus of Marking in the Clause. 2. P is dependent-marked. 63/235. The WALs chapter pays attention to the marking of direct objects (P). In Skolt Saami, there is case marking on objects but no object agreement on verbs; more specifically, object case marking is realized as follows: in the singular the accusative form has no overt case suffix and is distinguished from nominatives only through internal modification, whereas in the plural an overt case suffix is found (see Korhonen et al. 1973: 30ff, 67ff; Moshnikoff et al. 2009: 28ff, 83ff). Looking at the locus of marking in the clause more generally, we may note that arguments and adjuncts are generally dependent marked by case or adpositions, and furthermore, head marking is present in the form of subject agreement on the verb.

24. Locus of Marking in Possessive Noun Phrases. 3. Possessor is double marked. 22/235. Both head and dependent marking occur, possessive suffixes on the possessee and genitive case on the possessor, but they are not simultaneously present (see Korhonen et al. 1973: 62–63; Moshnikoff et al. 2009: 56–65).¹⁴ The analysis of the Skolt Saami system as double marking is not straightforward, since head and dependent marking are in complementary distribution. The typology does not have the type “possessor is either head- or dependent-marked”, to which Skolt Saami could be classified without problems.

25. Locus of Marking: Whole-language Typology. 5. Inconsistent marking or other type. 120/235. This feature is derived from Features 23 and 24. Skolt Saami shows differences in the locus of marking in the clause (dependent) and in possessive NPs (head or dependent) and is therefore classified as inconsistent or other. This chapter contains a submap: *25A. Zero marking of A and P arguments. 2. Other (non-zero marking). 219/235.* Both are overtly marked, P with case and A with agreement (and case).

26. Prefixing versus Suffixing in Inflectional Morphology. 2. Predominantly suffixing. 382/894. Inflection is exclusively suffixing (see Korhonen et al. 1973: 30ff, 67ff; Moshnikoff et al. 2009: passim).

¹⁴ The sources contain no explicit statement about their cooccurrence possibilities, but they are not found occurring together in the examples given in the sources or in the texts examined, and their non-cooccurrence is confirmed by Tiina Sanila-Aikio and Eino Koponen, p.c., who note that an instance of double marking might occasionally occur due to Finnish influence, but is not a feature of Skolt Saami.

27. **Reduplication.** 3. No productive reduplication. 56/367. No indication of reduplication found in the sources.

28. **Case Syncretism.** 3. Inflectional case marking is syncretic for core and non-core cases. 22/197. In the singular, genitive and accusative are identical (and the nominative plural is also identical with these), and in the plural, accusative and illative are identical, see Korhonen et al. (1973: 30ff) and Moshnikoff et al. (2009: 28ff), cf. also the paradigm given in (5) above. In personal pronouns in the plural, nominative and genitive are syncretic (see Korhonen et al. 1973: 61; Moshnikoff & al. 2009: 61–63).

29. **Syncretism in Verbal Person/Number Marking.** 3. Subject person/number is never syncretic. 80/197. See Korhonen et al. (1973: 67ff) and Moshnikoff & al. (2009: 83ff), see also the paradigm in (4) above.

C. Nominal Categories

30. **Number of Genders.** 1. None. 144/256. See Korhonen et al. (1973: 30ff) and Moshnikoff & al. (2009: 28ff).

31. **Sex-based and Non-sex-based Gender Systems:** 1. No gender system. 144/256. See Korhonen et al. (1973: 30ff) and Moshnikoff & al. (2009: 28ff).

32. **Systems of Gender Assignment.** 1. No gender system. 144/256. See Korhonen et al. (1973: 30ff and Moshnikoff & al. (2009: 28ff).

33. **Coding of Nominal Plurality.** 6. Morphological plural with no method primary. 34/957. Both suffixation and stem changes are used in coding nominal plurality. The nominative plural does not have the plural suffix and it is usually distinguished from the nominative singular by changes in the stem (in words that are not subject to consonant gradation or other changes in the stem, the nominative singular and plural are identical in form). In other cases than the nominative the plural ending *i* occurs and stem changes are also common, cf. also the paradigms in (3) and (5) above. See Korhonen et al. (1973: 30ff) and Moshnikoff & al. (2009: 28ff)

34. **Occurrence of Nominal Plurality.** 6. Plural in all nouns, always obligatory. 133/290. This feature pays attention to whether the marking of nominal plurality is obligatory or optional with different types of nouns – human/animate vs. inanimate. In Skolt Saami, plural is marked when plural meaning is intended irrespective of whether the noun is animate or inanimate. See Korhonen et al. (1973: 30ff) and Moshnikoff & al. (2009: 28ff). It should, however, be noted that with numerals, the singular form is used if the numeral is singular in form: *kuõi't põ'rtte* (two.SG.GEN house.SG.ILL) ‘into two houses’,¹⁵ but this does not change the analysis with respect to the WALs feature.

35. **Plurality in Independent Personal Pronouns.** 4. Person-number stem. 114/260. The chapter looks at independent subject pronouns, which means the nomi-

15 The numeral may also be in the plural, and then the noun is also plural in form: *kuõi'tid põõrtid* (two.PL.ILL house.PL.ILL) ≈ ‘into two (sets of) houses’. It may be further noted that in addition to the number agreement, the noun also agrees in case with the numeral except in the following combinations. With the numerals 2–6 in the nominative, the noun occurs in the genitive (or alternatively the partitive), and with 7 and above in the nominative or accusative, it occurs in the partitive (or alternatively in the genitive after a nominative numeral). See Sammallahti & Moshnikoff (1991: 165).

native forms of plural personal pronouns in the case of Skolt Saami. The form of the stem expresses person and number and no plural affixation occurs on these stems, see Korhonen et al. (1973: 61) and Moshnikoff et al. (2009: 59ff).

36. The Associative Plural. 2. Special bound associative plural marker. 48/237. Associative plurals are markers used with nouns typically referring to humans to denote ‘X and other people associated with X’. Itkonen (1958: 78b) reports the marker *-i’zze* derived from the noun *kä’z̥z̥* ‘companion’ expressing what seems to be a prototypically associative plural meaning, and it is also found in this function in the texts examined, e.g. *Tiinai’zze* ‘Tiina and her company’ (Kotus 17461_1ez: 39:45).

37. Definite Articles. 5. Neither definite nor indefinite article. 188/566. See Korhonen et al. (1973: passim) and Moshnikoff et al. (2009: passim).

38. Indefinite Articles. 5. Neither indefinite nor definite article. 188/473. See Korhonen et al. (1973: passim) and Moshnikoff et al. (2009: passim).

39. Inclusive/Exclusive Distinction in Independent Pronouns. 3. No inclusive/exclusive opposition. 120/200. See Korhonen et al. (1973: 61) and Moshnikoff et al. (2009: 56).

40. Inclusive/Exclusive Distinction in Verbal Inflection. 3. No inclusive/exclusive opposition. 79/200. See Korhonen et al. (1973: 67ff) and Moshnikoff et al. (2009: 83ff).

41. Distance Contrasts in Demonstratives. 4. Four-way contrast. 8/234. Four demonstratives: *tät* ‘this’, *tut* ‘that’, *tõt* ‘it’ and *tiet-aa* ‘this here’ (Korhonen et al. 1973: 64; Moshnikoff et al. 2009: 57, 66–69). These four demonstratives seem to form a system with a four-way distance contrast, but it should be further investigated to what extent the four-way distinction is really one of distance and to what extent other factors are involved. The WALS chapter focuses on adnominal demonstratives; most of the examples given by Moshnikoff et al. (2009: 66–69) are ones where the demonstratives are used pronominally rather than adnominally, but adnominal examples of all four demonstratives are found in the texts examined (e.g., Kotus 17461).¹⁶

42. Pronominal and Adnominal Demonstratives. 3. Different inflectional features. 21/201. This chapter pays attention to the relationship between pronominal and adnominal demonstratives, distinguishing three different types according to whether they are identical, differ in their stems or in their inflection. In Skolt Saami, demonstratives have the so-called weak inflection when adnominal, i.e. in the singular illative, locative and abessive they are identical to the genitive in form and in the plural comitative and abessive they are identical to the genitive; pronominal demonstratives distinguish these cases normally (Moshnikoff et al. 2009: 67). Note that some other pronominals and comparative forms of adjectives also have the weak paradigm when adnominal.

43. Third Person Pronouns and Demonstratives. 1. Unrelated. 100/225. Third person pronouns and demonstratives are formally unrelated. Their nominative forms

¹⁶ Finnish should be analysed as having a three-way contrast (*tämä* ‘near speaker’, *se* ‘near hearer’, *tu* ‘away from both’) rather than a two-way contrast, changing the value assignment from 2 to 3.

are as follows: *son* 3SG, *suäna* 3DU, *sij* 3PL vs. *tät* ‘this’, *tut* ‘that’, *tõt* ‘it’ and *tiet-aa* ‘this here’ (see Moshnikoff et al. 2009: 56–57; Korhonen et al. 1973: 61, 64).

44. Gender Distinctions in Independent Personal Pronouns. 6. No gender distinctions. 254/378. See Moshnikoff et al. (2009: 56, 59–65) and Korhonen et al. (1973: 61).

45. Politeness Distinctions in Pronouns. 1. Second person pronouns encode no politeness distinctions. 136/207. The sources do not report politeness distinctions in connection with pronouns (see Moshnikoff et al. 2009: 56, 59–65; Korhonen et al. 1973: 61; Sammallahti 1998: 117).¹⁷

46. Indefinite Pronouns. 1. Interrogative-based indefinites. 194/326. The indefinites are formed by adding a suffix to the interrogatives, e.g., *mii* ‘what?’, *mii-ne* ‘something’ (see Moshnikoff et al. 2009: 57).

47. Intensifiers and Reflexive Pronouns. 1. Intensifiers and reflexive pronouns are formally identical. 94/168. In (Itkonen 1958: 64), the reflexive pronoun *jiðčč* is given both a reflexive and an intensifying translation into German, “sich” and “selbst”, respectively. It is further noted (ibid.) that in stories *jiðčč* is often used to refer to the devil or to a giant. This is a clear indication of an intensifying use, ‘the devil himself’.

48. Person Marking on Adpositions. 3. Person marking for pronouns only. 83/378. Most adpositions require genitive case on the accompanying nominal (Moshnikoff et al. 2009: 31, 142–150; Korhonen et al. 1973: 31–34). As possessive affixes may appear instead of genitive modifiers (see Feature 24 above) it could be the case that genitive-governing adpositions have the alternative of taking a possessive suffix instead of being modified by a genitive pronoun. This is not reported in the existing grammatical descriptions, but some adpositions found in Moshnikoff & Sammallahti (1991) do allow it, e.g., *lu’nn* ‘at, near’ with the following paradigm of the three persons in singular and plural: *loonnan*, *loonnad*, *luu’nnes*, *luu’nnen*, *luu’nned*, *luu’nnez*, and *mie’lde* ‘with, accompanying’ with the following paradigm of the three persons in singular and plural *meäldan*, *meäldad*, *mie’ldes*, *mie’lden*, *mie’lde*, *mie’ldez* (pp. 64, 72). As possessive suffixes do not cooccur with genitive modifiers, person marking on adpositions is only possible for pronominal complements of adpositions.

49. Number of Cases. 7. 8–9 case categories. 23/261. Nine cases: nominative, genitive, accusative, illative, locative, comitative, abessive, essive, and partitive (see Moshnikoff et al. 2009: 28; Korhonen et al. 1973: 30–34). The instrumental would be the 10th case but it is not productive, cf. (Ylikoski 2009: 86).

50. Asymmetrical Case-Marking. 2. Symmetrical case marking. 79/261. Case marking is symmetrical when all (functionally defined) nominal subclasses show the same distinctions and asymmetrical when there are differences between the case distinctions available in different subclasses. In Skolt Saami, the case distinctions available in different subclasses are identical (see Moshnikoff et al. 2009: 23–82; Korhonen

¹⁷ According to Tiina Sanila-Aikio, p.c., although pronouns do not code politeness distinctions, isolated examples imitating the Finnish usage of the second person plural as a polite pronoun may occasionally be found in translated texts.

et al. 1973: 30–66). Note, however, that in Korhonen et al. (1973: 57–58), the case paradigms of comparative and superlative adjectives do not have abessive forms, but they do have them in Moshnikoff et al. (2009: 52–55). The pronominal paradigms given in Korhonen et al. (1973: 61, 64–65) also lack some cases (abessive, partitive, essive), but all these case forms are found in Moshnikoff et al. (2009: 59–77), except for the reflexive pronoun which lacks the abessive and the partitive in the given paradigm. There is no explicit statement about the lack of the abessive and the partitive in the reflexive pronoun, but according to Eino Koponen (p.c.), the forms are missing due to their semantic improbability rather than being morphologically impossible. Furthermore, even if its paradigm lacked these case distinctions, the reflexive pronoun could hardly be seen as constituting a nominal subclass alone. Note also that the weak inflection of demonstratives and comparative adjectives when adnominal (see Feature 42 above) is an effect of the syntactic position of these elements, not a morphological restriction of this lexical subclass of nominals, and is therefore not relevant in this context.

51. Position of Case Affixes. 1. Case suffixes. 431/934. See Moshnikoff et al. (2009: 23–82) and Korhonen et al. (1973: 30ff).

52. Comitatives and Instrumentals. 1. Identity. 76/322. Skolt Saami treats comitatives and instrumentals alike, i.e. both are expressed with comitative case (see Moshnikoff et al. 2009: 37–38, 144, 150; Korhonen et al. 1973: 33, 34). An instrumental case that can express instruments with some nouns but not accompaniment is also mentioned in Korhonen et al. (1973: 34), but it may be disregarded as it is not productive (see Ylikoski 2009: 86). There is also the postposition *mie'ldd* 'with', which expresses accompaniment without expressing instrument. However, the comitative meaning expressed with this postposition is not pure accompaniment, but involves a meaning of movement (see Moshnikoff et al. 2009: 144, 150), and is thus irrelevant in the present context.

53. Ordinal Numerals. 7. First, second, three-th: 'First' and a small set of consecutive higher ordinal numerals are suppletive. 61/321. In Skolt Saami, 'first' and 'second' are suppletive and the ordinals from 'third' upwards are derived from cardinals: *ðhtt* 'one', *vuõss~vuõssmõs* 'first'; *kue'htt* 'two', *nu'bb* 'second'; *koumm* 'three', *kuälmad* 'third'; *nellj* 'four', *neelljad* 'fourth'; etc. (see Moshnikoff et al. 2009: 78–82; Korhonen et al. 1973: 59–61).

54. Distributive Numerals. 1. No distributive numerals. 62/250. No indication of the presence of distributive numerals in the sources (Moshnikoff et al. 2009; Korhonen et al. 1973; Sammallahti 1998; Itkonen 1958) or in the texts examined so far. Note however that in WALs the closely related Kildin Saami is analysed as having distributive numerals and North Saami has them as well (Jussi Ylikoski, p.c.). The matter is worth looking at in more detail.

55. Numeral Classifiers. 1. Numeral classifiers are absent. 260/400. See Moshnikoff et al. (2009: 78–82) and Korhonen et al. (1973: 59–61).

56. Conjunctions and Universal Quantifiers. 1. Formally different. 40/116. There is no formal similarity between these classes, see the following items found in

Sammallahti & Moshnikoff (1991) that count as conjunctions or universal quantifiers according to the definition used in the WALS chapter (the original Finnish translations found in the dictionaries are given after the equal sign): CONJUNCTIONS: *da* ‘and=ja/sekä’, *di* ‘and=ja/sekä’, *de* ‘and=ja’, *ja~jä* ‘and=ja’, *še* ‘also=myös/-kin’, *-i* ‘also=-kin’, *jopa* ‘even=jopa’, *nu’bb* ‘another=toinen’, *jee’res* ‘another=toinen’, *e’pet-â’pet-â’pet* ‘again=taas’, *vä’st* ‘again=taas’, *däs* ‘again=taas’, *tå’lk* ‘only=vain’, *pâi* ‘only=vain’; UNIVERSAL QUANTIFIERS: *juõ’kk* ‘every=joka’, *juõ’k’k-kaž* ‘every=jokainen’, *kii-a* ‘each=kukin’, *kå’t-a* ‘each=kukin’, *puk* ‘all=kaikki’, *täättas* ‘any’, *hå’t* ‘any’.

57. Position of Pronominal Possessive Affixes. 2. Possessive suffixes. 330/795. See Moshnikoff et al. (2009: 58) and Korhonen et al. (1973: 62–63).

D. Nominal Syntax

58. Obligatory Possessive Inflection. 2. No obligatorily possessed nouns. 201/244. There is no subclass of nouns in which the use of possessive suffixes would be obligatory (see Moshnikoff et al. 2009: 23–82; Korhonen et al. 1973: 30–66).

59. Possessive Classification. 1. No possessive classification. 125/243. See Moshnikoff et al. (2009: 30–32, 58) and Korhonen et al. (1973: 31, 62–63).

60. Genitives, Adjectives, and Relative Clauses. 6. Highly differentiated. 77/138. Alienable possessors are expressed by the genitive case, modifying adjectives have a special attributive form (usually distinct from the nominative singular [=predicative] form), and relative clauses are finite clauses introduced by a relative pronoun (see Moshnikoff et al. 2009: 30–32, 42–48, 57, 75, 126–128, 164–165; Korhonen et al. 1973: 31, 56–57, 64–65, 69). All three functions thus have their own dedicated constructions. Note, however, that participial modifiers are often functionally equivalent to relative clauses and can be identified as relative clauses in a functional sense, and on this analysis a type of relative clause comes closer to adjectives, but there is still a difference in that the attributive form of participles is identical to the nominative singular, whereas most adjectives have an attributive form distinct from the nominative singular.

61. Adjectives without Nouns. 2. Adjective may occur without noun, and without marking. 73/124. See Moshnikoff et al. (2009: 48). Note that in difference to attributive adjectives, substantivized adjectives inflect for case and do not bear the attributive marker.

62. Action Nominal Constructions. 4. Double-Possessive: All major arguments treated as possessors. 7/168. This chapter is about the marking of arguments in action nominal constructions such as *John’s running* and *the enemy’s destruction of the city*. In Skolt Saami, The verb form used is the action nominalization form (see Moshnikoff et al. 2009: 121–123; Korhonen et al. 1973: 68). There is no statement on the marking of the arguments in the sources. One example is found where the A argument is in the genitive (Moshnikoff & al. 2009: 121). According to Jussi Ylikoski (p.c., cf. also Ylikoski 2009: 75), Skolt Saami puts both agents and patients in the genitive in action nominal constructions.

63. Noun Phrase Conjunction. 1. AND-languages: ‘and’ and ‘with’ are not identical. 131/234. There is a strategy to express noun phrase conjunction (medial conjunction *da* ‘and’) distinct from the expression of the comitative function (comitative case), see Moshnikoff et al. (2009: 37–38, 151–152) and Korhonen et al. (1973: 33).

64. Nominal and Verbal Conjunction. 1. Nominal and verbal conjunction are largely identical. 161/301. Conjunction *da* ‘and’ is used for both functions in the texts examined.

E. Verbal Categories

65. Perfective/Imperfective Aspect. 2. No grammatical marking of perfective/imperfective distinction. 121/222. See Moshnikoff et al. (2009: 83ff); Korhonen et al. (1973: 67–68).

66. The Past Tense. 1. Past/non-past distinction marked, no remoteness distinction. 94/222. See Moshnikoff et al. (2009: 83–91) and Korhonen et al. (1973: 67–68).

67. The Future Tense. 2. No inflectional marking of future/nonfuture distinction. 112/222. See Moshnikoff et al. (2009: 85–88) and Korhonen et al. (1973: 67–68).

68. The Perfect. 3. Other perfect. 80/222. See Moshnikoff et al. (2009: 92–98) and Korhonen et al. (1973: 94–95). In Skolt Saami the perfect is marked by the verb *lee’d* ‘be’ and the past participle of the lexical verb. The value “other perfect” means that the language has a perfect but it is neither a have-perfect, nor a perfect derived from a word meaning ‘finish’ or ‘already’. Note that on the map, 114/222 languages have no perfect.

69. Position of Tense-Aspect Affixes. 2. Tense-aspect suffixes. 629/1062. See Moshnikoff et al. (2009: 88–90) and Korhonen et al. (1973: 67–68).

70. The Morphological Imperative. 1. The language has morphologically dedicated second singular as well as second plural imperatives. 292/547. See Moshnikoff et al. (2009: 99–100) and Korhonen et al. (1973: 67–68). Note, however, that the 2nd person singular imperative form is homonymous with the connegative form used in present tense indicative negatives, but since there is no plausible semantic connection between these forms, the 2nd singular imperative form is taken to be dedicated to its function, in accordance with the way in which similar cases are analysed in the WALS chapter.

71. The Prohibitive. 2. The prohibitive uses the verbal construction of the second singular imperative and a sentential negative strategy not found in (indicative) declaratives. 183/495. The chapter focuses on 2nd person singular negative imperatives and looks at two aspects: whether the negative marker is the same as or different from the negative marker used in declarative negatives and whether the imperative form is the same as or different from the imperative form used in positive imperatives. In Skolt Saami, negation (both declarative/indicative and imperative) is expressed with a construction where the negative element is a negative auxiliary verb and the lexical verb appears in a connegative or a nominal form depending on the TAM category; the negative auxiliary has a dedicated imperative form different from the form used

in indicatives (see Moshnikoff et al. 2009: 99–100, 116–117; Korhonen et al. 1973: 67–68, 95–97). Since the negative auxiliary has a dedicated imperative form, it is clear that the construction belongs either to Type 2 (“The prohibitive uses the verbal construction of the second singular imperative and a sentential negative strategy not found in (indicative) declaratives”) or to Type 4 (“The prohibitive uses a verbal construction other than the second singular imperative and a sentential negative strategy not found in (indicative) declaratives”). However, it is trickier to decide which one of these two types we are dealing with, i.e. whether the imperative constructions used in positive and negative imperatives are the same or different. Should we look at the lexical verb or the auxiliary or both? The morphological form of the lexical verb is the same in positive and negative 2nd person singular imperatives, and if we only look at this form, we could assign the construction to Type 2. However, the connegative form used in present tense indicative negatives is identical in form, and it could also be argued that the negative imperative uses this connegative form, not the imperative form used in positive imperatives. We could then say that imperative marking is on the auxiliary only and compare this with positive imperatives. Although the stem of the negative imperative auxiliary is specific to negative imperatives, the form of the auxiliary is similar to positive 2nd person imperatives in that it is the (vowel) stem form of the verb. It could then be concluded that, in this respect, prohibitives use the same imperative marking as positive imperatives. Under this analysis as well, the construction would be assigned Value 2. The WALS chapter only looks at 2nd person singular negative imperatives and both of the possible analyses discussed so far, based on 2nd person singulars only, would assign Value 2 to Skolt Saami. This is the analysis adopted when strictly following the definition given in the WALS chapter. To gain a better understanding of the marking of negative imperatives in Skolt Saami, we will have to look at the whole person-number paradigm in negative imperatives: in all other persons the lexical verb has connegative forms specific to the imperative. From the point of view of the whole paradigm, the system would clearly be of Type 4.¹⁸

72. Imperative-Hortative Systems. 1. The language has a maximal system, but not a minimal one. 133/375. This WALS chapter pays attention to the extent and homogeneity of imperative-hortative systems. Two imperative-hortative forms are homogenous if they are formed using the same kinds of morphological or syntactic means. A system is minimal if the 2nd person singular imperative is not homogenous with any other person/number in the imperative-hortative system. The system is maximal if the 2nd person singular imperative is homogenous with the other 2nd person forms, with the 3rd person and with at least the inclusive 1st person plural. In Skolt Saami, the imperative paradigm uses dedicated imperative markers which are all suffixal in all persons (see Moshnikoff et al. 2009: 99–100; Korhonen et al. 1973: 67–68). Skolt Saami thus has a maximal system.

¹⁸ Value 1 is assigned to North Saami although it has a suppletive imperative stem for the negative auxiliary just like Skolt Saami and Finnish (cf. Nickel 1994: 61); Value 2 should be assigned to North Saami.

73. **The Optative.** 2. Inflectional optative absent. 271/319. The optative is defined as a verb form dedicated to the expression of the wish of the speaker. The imperative in 3rd person has optative uses, but there is no form in Skolt Saami dedicated to the optative function (see Moshnikoff et al. 2009: 83ff; Korhonen et al. 1973: 67–68).

74. **Situational Possibility.** 2. The language does not express situational possibility with affixes on verbs, but with verbal constructions. 158/234. There are no verbal affixes for this purpose, the potential expressing only epistemic possibility (Moshnikoff et al. 2009: 106–113, 120; Korhonen et al. 1973: 67–69). There are many examples of verbal constructions being used for situational possibility in the texts in Korhonen et al. (1973: 100ff), cf. also the following verbs found in Sammallahti & Moshnikoff's (1991) dictionary (their original Finnish translations are given after the equal sign): *pâ'stted* 'can, be able=kyetä, pystyä' (p. 52, 99), *põõžžted* 'can, be able=osata, pystyä' (p. 99), *vuei'tted* 'can, be able=voida' (p. 149); see also the corresponding entries in Moshnikoff & Sammallahti (1988) and Itkonen (1958).

75. **Epistemic Possibility.** 1. The language can express epistemic possibility with verbal constructions. 65/240. Affixal marking of epistemic possibility is done with the potential (see Moshnikoff et al. 2009: 106–113; Korhonen et al. 1973: 67–69). Verbal constructions are also possible. Examples are found with the verb *täi'dded* 'seem, may' in Itkonen (1958: 567b) and in Korhonen et al. (1973: 105),¹⁹ as well as *sä'tted* 'may, might' in Itkonen (1958: 477a). Other types of marking epistemic possibility, particles, adverbs, are of course also found, e.g. *možât* 'perhaps' (Sammallahti & Moshnikoff 1991: 8).

76. **Overlap between Situational and Epistemic Modal Marking.** 1. The language has markers that can code both situational and epistemic modality, both for possibility and for necessity. 36/207. This chapter is about whether the same markers (not only the same types of markers but the same morphemes) can be used for both situational and epistemic modal marking. In some languages this is not possible, in some languages it is possible only for necessity or possibility and in some languages it is possible for both. In Skolt Saami, the verbal inflectional categories do not offer this possibility: the potential is only used for epistemic possibility and the imperative is only used for situational necessity (Moshnikoff et al. 2009: 106–113; Korhonen et al. 1973: 67–69). As to verbal constructions, most of them are specialized to either situational or epistemic modality. There are two necessity verbs discussed in Moshnikoff et al. (2009: 129–131): *õlggâd* and *fe'rtjed* both meaning 'must, have to' – all examples given are instances of situational necessity. The texts in Korhonen et al. (1973: 100–121) have many examples of situational possibility and necessity with verbal constructions, but no epistemic ones. Overlap is equally hard to find in the examples given in Itkonen's (1958) dictionary. The examples given in the following entries were examined (the numbers refer to pages and the letters to columns in Itkonen

19 Note that a verbal construction expressing epistemic possibility is exemplified in the WALS chapter text using the North Saami cognate of this verb. The example form Korhonen et al. (1973) might not be the best possible one as the meaning may be closer to 'seem' than neutral epistemic possibility 'may'.

1958, the transcription has been changed to standard orthography): verbs with necessity as (one of) their meaning(s): *fe'rttjed* (32a), *ðuggâd-ðlggâd* (33b, 819a); the noun *päkk* 'necessity' (333a); verbs with possibility, permission or ability as (one of) their meaning(s): *mä'tted* (242b), *sä'tted* (477a), *sui'tted* (526a), *täi'dded* (567b), *vää'jjed* (710a), *vuei'tted* (766b), *äppšed* (15b). Examples showing possible overlap between epistemic and situational modality were found for *mä'tted* and *sä'tted*. For the former, the basic meaning is situational possibility, but one example seems to have an epistemic meaning ('they must have laughed, the original Finnish translation 'mahtoivat(kin) nauraa', lit. 'they may have laughed'). For the latter, the relevant examples are instances of epistemic possibility, but the German gloss 'vermögen' points towards possible situational use as well. Furthermore, there is a construction expressing necessity with the potential of the verb 'be' and the infinitive of the lexical verb (Itkonen 1958: 203a–b), and the examples given of this construction show both epistemic and situational uses. These examples point towards the conclusion that the overlap of situational and epistemic modal marking is possible for both possibility and necessity, but is not typical or widespread in Skolt Saami; Koukkari's (2010) first results concerning necessity verbs point towards the same conclusion.²⁰

77. Semantic Distinctions of Evidentiality. 1. No grammatical evidentials. 181/418. There are no dedicated evidential morphemes reported in the sources, and the sections on verbs in Moshnikoff et al. (2009) and Korhonen et al. (1973) contain no information on secondary uses of TAM categories as evidentials. Whether some of the verbs used for coding modality (cf. discussion of Feature 76 above) have grammaticalized evidential uses is not clear from the sources either. These issues need more investigation in Skolt Saami.

78. Coding of Evidentiality. 1. No grammatical evidentials. 181/418. No evidence of grammatical evidentials found in the sources (cf. the discussion of Feature 77 above).

79. Suppletion According to Tense and Aspect. 4. No suppletion in tense or aspect. 123/193. The chapter focuses on strong and unique cases of stem suppletion, which means that there is no shared phonological material between the alternants and the alternation is unique to a lexeme. The only unique paradigms found in Moshnikoff et al. (2009: 402–403) are the verbs *lee'd* 'be' and *piijjâd* 'put, set, lay', but their irregularity is not of the strong suppletive type. According to Korhonen et al. (1973: 93–94), the auxiliary *lee'd* 'be' has some missing forms substituted for by the verb *äärrad* 'be'. However, this only concerns some nominal forms, not tense-aspect inflection, and furthermore, it cannot even be considered suppletion: it is not a case of phonologically unrelated forms living in the same paradigm, but rather of one verb having a defective paradigm and the missing forms being provided by another verb, which has a full paradigm of its own.

20 North Saami also seems to have some overlap between situational and epistemic modality: according to Nickel (1994: 463–466), the verbs *sáhttit* 'can, be possible' and *fertet* 'must, be necessary' may express both situational and epistemic modality, and Value 3 should therefore be assigned.

79A. Suppletion in Imperatives and Hortatives. 5. No suppletion in imperatives or hortatives. 153/193. The imperative form of the negative auxiliary is different from the declarative, but it is not suppletive in the strong sense (see Moshnikoff et al. 2009: 114–116; Korhonen et al. 1973: 96).

80. Verbal Number and Suppletion. 1. No singular(-dual)-plural pairs/triples in the reference material. 159/193. In the WALS chapter, verbal number refers to the quantification of the action rather than the nominal participants. This chapter pays attention to the presence of pairs (or triples) of forms contrasting in verbal number, and to whether the formal relation between them is suppletive, suppletion being here defined as either exceptions to very productive derivational patterns or exceptions to established agreement patterns. No verbal pairs/triples are found in the Skolt Saami reference materials.

F. Word Order

81. Order of Subject, Object, and Verb. 2. Subject-Verb-Object (SVO). 435/1228. See Moshnikoff et al. (2009: 33, 163, *passim*) and Korhonen et al. (1973: *passim*).

82. Order of Subject and Verb. 1. Subject precedes verb (SV). 1060/1344. See Moshnikoff et al. (2009: 33, 163, *passim*) and Korhonen et al. (1973: *passim*).

83. Order of Object and Verb. 2. Object follows verb (VO). 639/1370. See Moshnikoff et al. (2009: 33, 163, *passim*), Korhonen et al. (1973: *passim*).

84. Order of Object, Oblique, and Verb. 1. Verb-object-oblique order (VOX). 189/449. The obliques taken into account in this chapter include phrases expressing location (source and goal), instruments, benefactives and comitatives (recipients and temporal expressions are not included). In the examples in Moshnikoff et al. (2009: *passim*), these obliques are predominantly placed after the object (Korhonen et al. 1973 have only very few relevant examples). In texts (e.g., Kotus 6749, 6750, 12744) orders in which either X or O precedes the verb are common, especially OVX. To establish this or any other order as basic would require text analysis beyond the scope of this paper. At this point, assuming that the most neutral order is reflected in the examples of the school grammar, it may be tentatively concluded that Skolt Saami has verb-object-oblique order. Note also that recipients in ditransitives (which are expressed with the illative case) tend to precede the object even in Moshnikoff et al. (2009).

85. Order of Adposition and Noun Phrase. 1. Postpositions. 520/1074. Both prepositions and postpositions occur, but the latter are clearly dominant: the inventory of postpositions in Moshnikoff et al. (2009: 142–150) is much larger than that of prepositions.

86. Order of Genitive and Noun. 1. Genitive-noun (GenN). 608/1105. See Moshnikoff et al. (2009: 30–32).

87. Order of Adjective and Noun. 1. Modifying adjective precedes noun (AdjN). 340/1213. See Moshnikoff et al. (2009: 42–43).

88. Order of Demonstrative and Noun. 1. Demonstrative word precedes noun (DemN). 496/1085. See Moshnikoff et al. (2009: 66–69).

89. Order of Numeral and Noun. 1. Numeral precedes noun (NumN). 430/1001. See Moshnikoff et al. (2009: 81–82).

90. Order of Relative Clause and Noun. 1. Relative clause follows noun (NRel). 507/705. See Moshnikoff et al. (2009: 164–165). If the non-finite (participial) functional equivalents or relative clauses were taken into account (cf. discussion above, Feature 60), RelN order would also be found.

91. Order of Degree Word and Adjective. 1. Degree word precedes adjective (DegAdj). 205/437. See Moshnikoff et al. (2009: 46–47): the degree word *samai* ‘very’ is placed before the adjective.

92. Position of Polar Question Particles. 3. Question particle in second position in sentence. 45/777. The question particles *-a*, *-go* and *-son* occur after the first constituent (see Moshnikoff et al. 2009: 154–155).

93. Position of Interrogative Phrases in Content Questions. 1. Interrogative phrases obligatorily initial. 241/803. See Moshnikoff et al. (2009: 69–74).

94. Order of Adverbial Subordinator and Clause. 1. Adverbial subordinators which are separate words and which appear at the beginning of the subordinate clause. 367/611. Subordinate clauses are introduced by free-standing initial conjunctions (see Moshnikoff et al. 2009: 153, 164). There are also non-finite adverbial clauses in which the subordinator is a nominalizing suffix on the verb (see Moshnikoff et al. 2009: 123, 124–125; Korhonen et al. 1973: 68–69), but these are not comparable to the finite ones in frequency in the texts examined (cf. also Moshnikoff et al. 2009: 166).

95. Relationship between the Order of Object and Verb and the Order of Adposition and Noun Phrase. 3. Verb-object and postpositional (VO&Postp). 38/1033. See Features 83 and 85 above.

96. Relationship between the Order of Object and Verb and the Order of Relative Clause and Noun. 4. Verb-object and noun-relative clause (VO&NRel). 370/756. See Features 83 and 90 above.

97. Relationship between the Order of Object and Verb and the Order of Adjective and Noun. 3. Verb-object and adjective-noun (VO&AdjN). 100/1170. See Features 83 and 87 above.

G. Simple Clauses

98. Alignment of Case Marking of Full Noun Phrases. 2. Nominative-accusative (standard). 46/190. The core argument (S) of a canonical intransitive predicate is marked by the nominative, and the nominative also marks the more agent-like argument (A) of a canonical transitive predicate. The more patient-like argument (P) of a canonical transitive predicate is marked by the accusative. See Moshnikoff et al. (2009: 28–34) and Korhonen et al. (1973: 31–32).

99. Alignment of Case Marking of Pronouns. 2. Nominative-accusative (standard). 61/172. The case functions are the same as with full noun phrases (see Moshnikoff et al. 2009: 28–34, 59–77; Korhonen et al. 1973: 31–32, 61–66).

100. Alignment of Verbal Person Marking. 2. Accusative alignment. 212/380. The S and A arguments are cross-referenced on the verb with subject agreement, while the

P is not marked on the verb (see Moshnikoff et al. 2009: 83ff; Korhonen et al. 1973: 67ff).

101. Expression of Pronominal Subjects. 6. More than one of the above types with none dominant. 30/674. This chapter pays attention to how pronominal subjects are expressed: by affixes, clitics or by independent pronouns, and in the latter case whether pronouns occur in the same position as nominal subjects and whether they are obligatory or optional. In Skolt Saami, verbs have subject agreement, and subject pronouns occur in the same position as nominal subjects, but there is no explicit statement in the sources about whether the pronouns are optional or obligatory. In the examples given by Moshnikoff et al. (2009) and in the texts in Korhonen et al. (1973), the presence of subject pronouns is much more common than their absence, but both possibilities exist. However, no genuine cases of absence of pronoun were found in these sources for either 3rd person pronominal subjects (in any number) or for dual pronominal subjects (in any person); generic person constructions with 3rd person singular verb forms without pronoun were naturally not considered.²¹ The obligatoriness of dual subject pronouns is understandable since verbal agreement does not distinguish between dual and plural.

102. Verbal Person Marking. 2. Person marking of only the A argument. 73/378. See Moshnikoff et al. (2009: 83ff) and Korhonen et al. (1973: 67ff).

103. Third-Person Zero of Verbal Person Marking. 4. Zero-realization of all third person singular S forms. 45/380. Some illustrative examples of 3rd person verb forms are given in (6).

- (6) a. *poorrâd* ‘to eat’
 påárr 3SG.PRES *på’rre* 3PL.PRES *poori* 3SG.PST *po’rre* 3PL.PST
 b. *laullad* ‘to sing’
 läull 3SG.PRES *läulla* 3PL.PRES *lääulai* 3SG.PST *laullu* 3PL.PST
 (Moshnikoff et al. 2009: 86, 89)

According to Moshnikoff et al. (2009: 86, 89, 101, 107) and Korhonen et al. (1973: 67), 3rd person singular verb forms have no overt person endings; in the present there is no tense ending either and in the past they end in the past suffix *-i* (note, however, that stem-internal changes make the 3rd singular forms distinct from a [theoretical] pure stem). As to the 3rd person plural, both of these sources agree on the status of the endings *e* or *a* used in the present as person suffixes, but the sources differ in their interpretation of the suffixes, *e* or *u*, used in the past: they are interpreted as past suffixes by Moshnikoff et al. (2009: 89) but as personal suffixes by Korhonen et al. (1973: 67). My interpretation of these analyses is that in the present, the 3rd singular form has no suffix and the 3rd plural has a person-number agreement suffix, whereas

21 There was in fact one example with a 3rd person dual pronominal subject without a pronoun (Korhonen et al. 1973: 117), but it can be seen as a case of ellipsis of a subordinate clause subject made explicit in the following main clause.

in the past the 3rd singular form has a tense suffix only and the 3rd plural has a tense-agreement portmanteau suffix.²²

104. Order of Person Markers on the Verb. 1. A and P do not, or do not both, occur on the verb. 187/379. Only A is marked on verb (see Moshnikoff et al. 2009: 86, 89, 101, 107; Korhonen et al. 1973: 67).

105. Ditransitive Constructions: The Verb ‘Give’. 1. Indirect-object construction. 189/378. The theme is coded like the patient (with the accusative) and the recipient is coded differently (with the illative), see Moshnikoff et al. (2009: 32–35) and Korhonen et al. (1973: 31–32). Note however that the accusative and illative are identical in the plural and the difference in coding these roles thus only applies to the singular.

106. Reciprocal Constructions. 2. All reciprocal constructions are formally distinct from reflexive constructions. 99/175. No reciprocal uses are reported for the reflexive pronoun *jiðčč* in the sources, and there is a distinct reciprocal construction: *kuei’mm kuei’mes* ‘each other’ (Itkonen 1958: 170b; Moshnikoff & Sammallahti 1988: 28, 40; Sammallahti & Moshnikoff 1991: 25, 131; Moshnikoff et al. 2009: 56–58; Korhonen et al. 1973: 65–66); *kuei’mm* = ‘companion’ (‘kumppani, Gefährte’, see Itkonen 1958: 170b). A similar reciprocal construction based on *kä’zz* ‘companion’ (‘kumppani, Genosse’) is reported by Itkonen (1958: 78b).

107. Passive Constructions. 1. There is a passive construction. 162/373. The indefinite person (Moshnikoff et al. 2009: 83ff; Korhonen et al. 1973: 67–68) fulfils the passive criteria used in the WALS chapter, see the example in Moshnikoff et al. (2009: 98) where the object is marked with the accusative and no subject is present. Note that according to Moshnikoff et al. (2009: 136), there is no passive as an inflectional voice but passive derivation can be applied to most transitive verbs.

108. Antipassive Constructions. 3. No antipassive. 146/194. No antipassive is found in the sources (Moshnikoff et al. 2009: 83ff; Korhonen et al. 1973: 67ff).

109. Applicative Constructions. 8. No applicative construction. 100/183. No applicative is found in the sources (Moshnikoff et al. 2009: passim; Korhonen et al. 1973: passim).

110. Periphrastic Causative Constructions. 2. Purposive type but no sequential type. 68/118. This feature pays attention to whether languages exhibit periphrastic causative constructions of the sequential or the purposive type, or both. In the sequential type the clause expressing the cause and the clause expressing the effect are juxtaposed in that order. In the purposive type, one clause expresses an event carried out for the purpose of realizing another event, and the sense of purpose or goal is expressed by an overt marker (e.g., subjunctive mood, or dative case marking). Moshnikoff et al. (2009) and Korhonen et al. (1973) discuss only non-periphrastic causatives. Some

22 A possible alternative analysis for the past forms would contrast two suffixes cumulating the marking of person and tense: *-i* in 3rd singular and *-e/-u* in 3rd plural. Under this analysis, one would then assign value “Zero-realization of some third person singular S forms” for Skolt Saami. Diachronically, the 3rd singular past form has not had a person suffix in its history whereas the 3rd plural past form has lost an earlier person suffix that used to occur after the tense suffix (see Korhonen 1981: 271–273, 283–284).

examples of periphrastic causatives using the verb *píjjâd* ‘put’ or *vuäž’žad* ‘get’ are found in the texts examined, the caused event being expressed with an infinitival complement clause, e.g. (7).

- (7) *Ruõšš vaangid pi’jje kue’dded käälvaid*
 Russian prisoner.ACC.PL put.PST.3PL carry.INF thing.ACC.PL
 ‘they made Russian prisoners carry stuff’ (Kotus 12744_1a: 06:18)

These are clearly periphrastic causatives of the purposive type, the infinitive acting as the purposive marker in the relevant sense. No indication of sequential constructions are found in the data sources.

111. **Nonperiphrastic Causative Constructions.** 2. Morphological type but no compound type. 254/310. There is a derivational causative with the ending *-ted*, e.g. *poorrâd* ‘to eat’ → *poorted* ‘to feed’ (Moshnikoff et al. 2009: 135); no compound type construction is found in the sources.

112. **Negative Morphemes.** 3. Negative auxiliary verb. 45/1011. As seen in Example (8), the negative element used in declaratives is the auxiliary verb *ij* which inflects in person and number and the lexical verb is in a nonfinite form – connegative in the present, past participle in the past (Moshnikoff et al. 2009: 114–119; Korhonen et al. 1973: 95–97).

- (8) *viigga-m* take-1SG vs. *jið-m viigg* NEG-1SG take.CNG
vi’kk-e-m take-PST-1SG vs. *jið-m viikkâ-m* NEG-1SG take-PST.PTCP

113. **Symmetric and Asymmetric Standard Negation.** 2. Asymmetric standard negation only: Type Asy. 53/297. Since standard negation (the negation of declarative verbal main clauses) is expressed with an auxiliary taking the finite inflections and the lexical verb being in a non-finite form (see Example 8 above), negatives always show structural differences (other than the mere presence of a negative marker) in comparison to the corresponding affirmative, and standard negation is thus always asymmetric vis-à-vis affirmation.

114. **Subtypes of Asymmetric Standard Negation.** 1. In finiteness: subtype A/Fin. 40/297. The Skolt Saami standard negation construction (see Example 8 above) is a typical negative auxiliary construction, and negative auxiliary constructions form a subtype of A/Fin asymmetry, defined by the loss or reduction of finiteness of the lexical verb usually accompanied by the addition of a finite element (auxiliary). It is true that in the present tense indicative, the connegative is identical to the 2nd singular imperative. This could lead one to think that there is (also) asymmetry of type A/NonReal, in which negatives show marking denoting non-realized states of affairs in non-negatives. However, this form can be interpreted as being a minimal stem form homonymous with the 2nd singular imperative rather than a true imperative form; the 2nd singular imperative is without ending in all verbs but the verb *lee’d* ‘be’

(see Moshnikoff et al. 2009: 354–403; Korhonen et al. 1973: 69–94). Therefore the connection to the imperative is more apparent than real and asymmetry of type A/NonReal is not found in Skolt Saami.

115. Negative Indefinite Pronouns and Predicate Negation. 1. Negative indefinites cooccur with predicate negation. 170/206. Negative indefinites are formed by adding *ni* in front of interrogative pronouns *kii* ‘who’ and *mii* ‘what’: *[ij] ni kii* ‘[not] anybody’ and *[ij] ni mii* ‘[not] anything’, and they cooccur with verbal negation in clauses (Itkonen 1958: 280a–b; Moshnikoff et al. 2009: 57; Korhonen et al. 1973: 66, 110).

116. Polar Questions: 1. Question particle. 520/842. Polar interrogation is expressed by the 2nd position enclitic *-a* (with slight differences in meaning and distribution also *-go*, *-son*, or *-šât*); in polar interrogatives without focus on a specific constituent, it is the finite verb that is fronted and carries the interrogative clitic, and polar interrogation thus also involves word order change. See Moshnikoff et al. (2009: 154–155). Question particles are the primary means to express polar interrogation, but there are some other means to express this function as well. In texts, a number of examples are found in which a sentence that is declarative in form expresses a polar interrogative (see e.g. Itkonen 1931: 44, 168); according to Eino Koponen (p.c.) intonation distinguishes these from declaratives. There are also a few examples in which polar interrogation is expressed by putting the negative auxiliary after the verb, both inflected for the same person and number (see e.g. Itkonen 1931: 204, 206). These may be analysed as instances of the so-called A-not-A construction type found in a number of the world’s languages, e.g. Mandarin and Kobon, where polar interrogation is expressed by a disjunction of a positive predicate and its negation. (The A-not-A type is treated as a subtype of expression of polar interrogation by particles in Chapters 92 and 116 in WALS.)

117. Predicative possession. 1. Locational possessive. 48/240. Predicative possession is expressed by a construction in which the possessor takes the locative case and the possessee is the grammatical subject of the verb *lee’d* ‘be’ (see Moshnikoff et al. 2009: 35–36; Korhonen et al. 1973: 33).

118. Predicative Adjectives. 2. Predicative adjectives have nonverbal encoding. 132/386. Predicative adjectives use the verb *lee’d* ‘be’ as copula just as nominal predicates do (see Moshnikoff et al. 2009: 42–48).

119. Nominal and Locational Predication. 2. Shared (i.e. identical) encoding of nominal and locational predication. 117/386. Locational predicates use the verb *lee’d* ‘be’ just as nominal predicates do (see Moshnikoff et al. 2009: 29–30, 35–36, 87, 90, 92–93, 96).

120. Zero Copula for Predicate Nominals. 1. Zero-copula is impossible. 211/386. No indication of the possibility of leaving out the copula with predicate nominals is found in Moshnikoff et al. (2009: passim).

121. Comparative Constructions. 1. Locational comparative. 78/167. The standard of comparison is in the partitive, e.g. *uu’ccab vi’lljed* (small.COMP.SG.NOM brother.SG.PART) ‘smaller than the brother’ (Moshnikoff et al. 2009: 41, 49–53; Korhonen

et al. 1973: 34). Since the partitive was originally a locational (more precisely separative) case, this construction is to be analysed as a locational/separative comparative in Stassen's (1985, 2005) typology. However, nowadays the standard may also be in the genitive (Moshnikoff et al. 2009: 41; Korhonen et al. 1973: 34); note that the partitive is a marginal case in contemporary Skolt Saami and its remaining functions are being taken over by the genitive more generally, not only as regards the expression of the standard of comparison. The genitive does not have locative functions in Skolt Saami and this usage cannot therefore be analysed as a locational comparative. It may be noted that Russian can also use the genitive to mark the standard of comparison (see Wade 2000: 199); the genitive has partitive uses in Russian, and a functional connection between partitive and genitive coding of the standard can thus be argued for. Genitive coding of the standard is typologically rare and it is not attested in Stassen's (1985, 2005) typology. Note also that although the available grammatical descriptions do not mention this possibility, a few examples of particle comparatives, with the standard marked by *ko* 'than' are also found in the texts examined, e.g. (9).

- (9) *tõt leäi hää'skab hãmm ko suei'nnhãmm*
 it.NOM be.PST.3SG fun.CMPR job.SG.NOM than hay.job.SG.NOM
 'It was a nicer job than hay work.' (Kotus 19465_1: 45:05)

H. Complex Sentences

122. **Relativization on Subjects.** 1. Relative pronoun. 12/166. Relativization on subjects is done with the relative pronoun strategy (see Moshnikoff et al. 2009: 57, 75, 165). If the non-finite clauses that have similar functions as relative clauses are taken into account, cf. Features 60 and 90 above, the gap strategy exists as well; non-finite relativization on subjects is done with participles (see Moshnikoff et al. 2009: 126–128; this usage is reported only for the present participle).

123. **Relativization on Obliques.** 1. Relative pronoun strategy. 13/112. Obliques are relativized using relative pronouns (see Moshnikoff et al. 2009: 57, 75, 165). As to the non-finite functional equivalents of relative clauses, they can only be used to relativize on subjects and objects and are thus not relevant here (see Moshnikoff et al. 2009: 121–122, 126–128).

124. **'Want' Complement Clauses.** 1. The complement subject is left implicit. 144/283. 'Want' verbs take infinitival complements and the complement subject is left implicit, see the examples with the 'want' verbs *haa'leed* (Itkonen 1958: 35b) and *tãttad* (Itkonen 1958: 576a).

125. **Purpose Clauses.** 2. Balanced/deranked. 30/170. A balanced purposive clause construction may be formed with the conjunction *što* (see Sammallahti & Moshnikoff 1991: 27; Moshnikoff et al. 2009: 166). As to the deranked option, the infinitive can be used in a purposive sense (with motion verbs in the main event), see Moshnikoff et al. (2009: 120), and examples of the construction in which action nominalization is followed by the postposition *diõtt* 'because of, for', cf. Feature 127 below, have also been found with a purposive sense (e.g. in Kotus 3320_2a: 08:10).

126. ‘When’ Clauses. 2. Balanced/deranked. 39/174. Balanced constructions can be formed with the conjunction *ko* (Moshnikoff et al. 2009: 153, 164), and deranked constructions with either the essive of the action form or with the *een*-gerund (Moshnikoff et al. 2009: 123, 124).

127. Reason Clauses. 2. Balanced/deranked. 37/169. Reason clauses are most often balanced and use the conjunction *ko* ‘when, because’ (Moshnikoff et al. 2009: 153, 164). Deranked constructions can be formed with the postposition *diõtt* ‘because of’ and the action nominalization of the verb (e.g., Kotus 3320_2a: 17:18); see also Ylikoski 2009: 75).

128. Utterance Complement Clauses. 1. Balanced. 114/143. These have balanced expression with the conjunction *što* ‘that’ (Moshnikoff et al. 2009: 153, 164). Deranked constructions are not found for utterance complements (see section on nominal verb forms in Moshnikoff et al. 2009: 119–128). This is further confirmed in Moshnikoff et al. (2009: 166) where it is stated that (certain kinds of) non-finite clauses cannot be used to replace finite subordinate clauses (in contrast to Finnish), and two of the examples given in this context as equivalents of Finnish non-finite utterance complement clauses are finite utterance complement clauses with the conjunction *što* ‘that’.

I. Lexicon

129. Hand and Arm: 1. Identity: a single word denotes both ‘hand’ and ‘arm’. 228/617. The word *ķiõtt* denotes both ‘hand’ and ‘arm’ (Itkonen 1958: 123–124), and no separate term for ‘arm’ is found in the dictionaries. It can be noted that the word *ķeä’mmen* ‘palm’ is, in the Nuorttijärvi dialect, translated into German as “Hand (von den Fingerspitzen bis zur Handwurzel)” in Itkonen (1958: 101a), but this meaning is found in this dialect only and there is no information about a separate term for ‘arm’ anyway. In the newer dictionaries ‘palm’ is given as *ķiõttķeä’mmen*.²³

130. Finger and Hand. 2. Differentiation: one word denotes ‘hand’ and another, different word denotes ‘finger’ (or, very rarely, ‘fingers’). 521/593. The word *ķiõtt* denotes ‘hand’ (and ‘arm’) and the word *suõrmm* denotes ‘finger’ (Sammallahti & Moshnikoff 1991: 53, 117).

131. Numeral Bases. 1. Decimal. 125/196. See Moshnikoff et al. (2009: 78–80) and Korhonen et al. (1973: 59–60).

132. Number of Nonderived Basic Colour Categories. 7. 6 categories. 29/119. The primary colour categories are black, white, red, yellow, green and blue. A language may have a separate term for each of these or arrange them in composite categories such as green-or-blue. Derived categories are mixtures of primary terms such as grey (mixture of black and white). This chapter looks at the number of non-derived

23 In Finnish, the word *käsi* means both hand and arm; there is a more specialized term *käsivarsi* for ‘arm’ but none for ‘hand’ (*ķämmen* means ‘palm’). Value 1 should be assigned in WALS for Finnish.

(primary or composite) categories receiving basic colour terms.²⁴ To decide which colour terms are basic and which are not, experimental work would be needed. This is beyond the scope of the present paper, but a preliminary idea may be gained by looking at dictionaries (Moshnikoff & Sammallahti 1988; Sammallahti & Moshnikoff 1991): Skolt Saami has the following terms for non-derived colour categories: *čappád* ‘black’, *viðlggâd* ‘white’, *ruõpssâd* ‘red’, *viskkâd* ‘yellow’, *ruõnâs* ‘green (used of plants)’, *ruânn* ‘green (used of materials, objects)’, and *ââ’lek~ââ’lik* ‘blue’. It is probably safe to say that there is a basic colour term for every primary colour category. For green, there is also a more specialized term used for plants, but the more general term can still be seen as a basic term for this category.

133. Number of Basic Colour Categories. 5. 8 or between 8 and 9 categories. 6/119. In addition to the six primary ones (see Feature 132), the following non-compositional colour terms were found in the dictionaries (Moshnikoff & Sammallahti 1988; Sammallahti & Moshnikoff 1991; Itkonen 1958): *rää’nes* ‘grey’, *ručkkâd~ru’čkkâd* ‘brown’, and *golubai* (Itkonen 1958: 819b) ‘blue-grey’. Terms for pink and light blue are compositional, formed from red and blue by compounding them with *kiõlggâd* ‘light’ (see Itkonen 1958: 117a). The term for orange is also compositional: *ma’linovi ruõpssâd*. No terms were found for purple or turquoise in the dictionaries. Adding the terms for grey and brown to the six primary ones, we have eight basic colour terms. The term for blue-grey is a recent loan from Russian and it is not clear how well integrated if at all it is in the colour lexicon of Skolt Saami. If it were taken as basic, there would be nine terms. It should be noted that the problem of having to rely on dictionaries is worse when trying to determine the total number of basic colour terms than it was with the primary categories in Chapter 132. Needless to say, a thorough study of colour terminology should be conducted with native speakers.

134. Green and Blue. 1. Green and blue. 30/119. Green and blue are distinguished, see above.

135. Red and Yellow. 1. Red and yellow. 97/119. Red and yellow are distinguished, see above.

136. M-T Pronouns. 2. M-T pronouns, paradigmatic. 27/230. This chapter pays attention to the first consonant in 1st and 2nd person singular pronominal elements. M-T pronoun systems have M in 1st and T in 2nd person singular. M is basically defined as [m] and T as any apical obstruent. By paradigmatic is meant that the consonants form a paradigm, both occurring in the same form class(es) of their respective pronouns. Skolt Saami has M in 1st person singular independent pronouns, possessive suffixes and verb suffixes and T in 2nd person singular independent pronouns, possessive suffixes but not in verb affixes (see Moshnikoff et al. 2009: 56, 58–60, 83ff;

²⁴ Surprisingly, the WALS chapter does not give a definition of the notion of basic colour term. Following a traditional definition these are colour terms that are general (apply to diverse classes of objects, meaning not subsumable under the meaning of another term) and salient (readily elicitable, occurs in the idiolects of most speakers, used consistently by individuals and with a high degree of consensus among individuals), cf. Hardin & Maffi (1997: 3–4).

Korhonen et al. 1973: 61–63, 67–68). The 2nd person singular *-k/-k̄*-ending in verbs is historically derived from a *-t* ending (see Korhonen 1981: 271). There is a submap focusing on 1st person singular only: 136a. *M in First Person Singular*. 2. M in first person singular. 53/230.

137. **N-M Pronouns**. 1. No N-M pronouns. 194/230. This feature is similar to the previous one with the difference that attention is paid to the occurrence of N in 1st person singular and M in 2nd person singular. N is basically defined as dental or alveolar [n] or palatal [ɲ] and M as [m] as above. Skolt Saami does not have N-M pronouns (see Moshnikoff et al. 2009: 56, 58–60, 83ff; Korhonen et al. 1973: 61–63, 67–68). There is a submap focusing on 1st person singular only: 137a. *M in Second Person Singular*. 1. No M in second person singular. 152/230.

138. **Tea**. 1. Words derived from Sinitic *cha*. 109/230. The word for ‘tea’ is *čee~čeei* (Sammallahti & Moshnikoff 1991: 128; see also Itkonen 1958: 655b, 956a).²⁵

J. Sign Languages

139. **Irregular Negatives in Sign Languages**. Not applicable to Skolt Saami.

140. **Question Particles in Sign Languages**. Not applicable to Skolt Saami.

K. Other

141. **Writing Systems**. 1. Alphabetic. As seen in the examples given in this paper, a Roman-based alphabet is used in Skolt Saami. Cyrillic was used in some earlier documents in the 19th century.

142. **Paralinguistic Usages of Clicks**. No information on this feature can be found in the sources. Given that all Skolt Saami speakers living in Finland are bilingual in Finnish and Skolt Saami, and that Finnish speakers use clicks for affective meanings, it is highly probable that contemporary Skolt Saami speakers do this while speaking Skolt as well. Earlier influence from Russian may also increase the probability – affective use of clicks is also reported for Russian in the WALs chapter. However, it is beyond the scope of this paper to verify this for Skolt Saami.

3. Typological distance between Skolt Saami and other languages

Typological properties of Skolt Saami have now been discussed on the basis of the WALs features. The Skolt Saami features and the emerging typological profile of the language are the main topic of this paper, but since a value has been assigned to Skolt Saami for each feature, it is now also possible to compare the typological properties of Skolt Saami with the languages in the WALs database, in order to determine which languages are typologically closest to Skolt Saami.

25 As pointed out by Jussi Ylikoski and noted in the Online version of WALs, there is a value assignment error in the WALs database for this feature in North Saami, the correct value being 2, “Words derived from Min Nan Chinese *te*”.

Typological similarity between Skolt Saami and the languages in the WALS database is estimated using a distance measure proposed by Dahl in his (2008a) contribution looking at the typological distance between Finnish and other languages. The analysis is based on Features 1–138. The measure pays attention to the proportion of shared values and shared features. Shared features are those features that are coded for both Skolt Saami and the language in the database that Skolt Saami is being compared to. In the present case, since Skolt Saami is coded for all features, the number of shared features is simply the number of features coded for each language in the database. The number of shared values is the number of features for which each language shows the exact same value as the language that it is being compared to, i.e. Skolt Saami in the present case. The formula for counting typological distances is simple: the number of shared values is divided by the number of shared features, the result of which is then multiplied by 100, and the resulting integer is subtracted from 100. The smaller the resulting number, the smaller the typological distance between the languages.²⁶

Before looking at the results, a few caveats are in order. The 2560 languages in the database only amount to roughly 40% of the world's languages, and the languages that are not in the database are naturally left out of the comparison. Since the number of features coded in the database varies from language to language, the reliability of the comparison varies accordingly; the fewer features a language is coded for, the less certain the typological distance measure is for that language, and the reliability of the results is highest for the languages that are coded for most features (i.e. languages for which the number of shared features is the highest). Furthermore, in order for a value to count as shared, it has to be exactly the same in the languages compared; the measure does not take into account the fact that some values of a feature are closer to each other than others. For example, for Feature 49, "Number of cases", Skolt Saami has the value 7 meaning 8–9 case categories; any value other than seven is counted as not shared, regardless of whether it refers to 6–7 case categories, more than 10, or to no case marking at all. And finally, the WALS features only cover a selection of possible points of typological comparison (fortunately, however, they cover different domains of grammar relatively evenly). Given these restrictions, the numbers have to be considered as giving a rather rough measure of typological similarity.

Table 1 shows the results for the top 25 languages in the WALS database that are typologically closest to Skolt Saami.²⁷ For the sake of the reliability of the results, only languages with 41 or more features in the database are included in the measure, and as a result of this restriction, only 410 of the 2560 languages are included in the comparison. Even within this group reliability varies according to the number of shared features. The actual feature values for these languages have not been reproduced in this article, but they are easily available in the online version of WALS (<<http://wals.info/>>).

26 Note that the distance measure is somewhat simpler here than the one used in Dahl (2008b).

27 I am grateful to Östen Dahl for running the analysis for my Skolt Saami data.

		Shared values	Shared features	Distance
1.	Finnish	109	134	18
2.	Saami (Northern)	33	41	19
3.	Estonian	35	48	27
4.	Tuvan	37	54	31
5.	Dagur	32	49	34
	Tatar	28	43	34
7.	Bashkir	33	51	35
	Russian	86	134	35
9.	Brahui	59	93	36
10.	Armenian (Eastern)	53	85	37
	Bulgarian	44	70	37
	Nenets	59	95	37
	Yakut	33	53	37
14.	Hungarian	81	132	38
	Serbian-Croatian	31	50	38
16.	Buriat	25	41	39
	Kashmiri	41	68	39
	Latvian	68	112	39
	Mari (Meadow)	25	41	39
	Ukrainian	25	41	39
21.	Even	27	45	40
	Hindi	73	123	40
	Marathi	36	60	40
	Telugu	31	52	40
25.	Breton	33	56	41
	English	81	138	41

Table 1. Typological distance from Skolt Saami.

First of all, we may observe that, just as expected, the languages that are typologically closest to Skolt Saami, are also genealogically and areally very close, namely North Saami and Finnish. A second immediate observation is that the typologically closest languages are mainly languages of northern and eastern Europe (Uralic, Indo-European), northern Asia (Mongolic, Turkic), and southern Asia (Dravidian).

In view of more recent contact history, it is interesting to focus on languages that are closest to Skolt Saami in areal or genealogical terms. Table 1 only listed the 25 typologically closest languages based on a comparison of languages with 41 or more shared features. Table 2 shows the closest neighbours of Skolt Saami in the database

regardless of the number of shared features. The following languages are included: all three Saami languages in the database: North Saami, South Saami²⁸ and Kildin Saami; Finnish and Karelian – two Finnic languages that are or have been in close contact with Skolt Saami; Nenets and Komi-Zyrian, because there are speakers of these languages on the Kola Peninsula; Russian since it has been in close contact with Skolt Saami; and the two Scandinavian languages spoken in Saami territories: Norwegian and Swedish.

	Shared values	Shared features	Distance
Saami (Kildin)	3	4	25
Saami (Northern)	33	41	19
Saami (South)	8	13	38
Finnish	109	134	18
Karelian	5	6	16
Komi-Zyrian	30	37	18
Nenets	59	95	37
Russian	86	134	35
Norwegian	29	55	47
Swedish	33	64	48

Table 2. Typological distance from Skolt Saami, relatives and neighbours.

Most of these languages were not present in Table 1. There are two possible reasons for this: either the language has fewer than 41 shared features in the database, or it is not among the 25 languages typologically most similar to Skolt Saami. The former is the case for Kildin Saami, South Saami, Karelian and Komi-Zyrian, and the latter for Norwegian and Swedish. It is clear that the results cannot be taken to be very reliable for Kildin Saami, South Saami and Karelian, coded for so few features. It may further be noted that in the case of South Saami all of the shared features concern phonology, and in the case of Karelian four of the six features concern phonology. In the case of Komi-Zyrian, the number of shared features is close to the 41-feature threshold, but 22 of the 37 features concern either phonology or word order, the other domains being much less evenly covered for this language. We may note that for North Saami, which has only four more shared features, the distribution of the features is much more even across the different domains of grammar.

That the two languages most similar to Skolt Saami are Finnish and North Saami is naturally to be expected, given their genealogical and areal closeness to Skolt Saami. It is notable that there is such a wide margin between these two and the languages fur-

28 In the WALS database, South Saami is referred to as Central-South Saami. With the exception of this language, all language names in this paper are as in the WALS database.

ther down on the list.²⁹ Some modifications were proposed for the Finnish and North Saami values in the WALS database in the footnotes in Section 2. For Finnish, taking these into account would not change the number of shared values (the modified values are: F1: 1, F4: 1, F5: 1, F12: 3, F41: 3, and F129: 1; two of these changes reduce the number of shared values two increase it). In the case of North Saami, taking the three modifications into account would increase the number of shared values by two, bringing the distance between Skolt and North Saami as low as 15 (the modified values are F71: 2, F76: 1, F138: 1). It would be interesting to see what the distance between North Saami and Skolt Saami would be if more shared features were available for North Saami, enabling a more reliable count.

The remaining languages with enough features to allow for a relatively reliable comparison pattern in two groups: Russian and Nenets at a distance of 35–37 points and Norwegian and Swedish at a distance of 47–48 points from Skolt Saami. Of all Indo-European languages, Russian is the closest to Skolt Saami typologically, which may be a reflection of the long contact history between Russian and eastern Saami languages. In the light of these numbers, the much shorter presence of Nenets on the Kola Peninsula has not brought Nenets and Skolt Saami typologically closer than expected by their genealogical relatedness. Attention may be paid to the closeness between Skolt Saami and Komi-Zyrian, which can be speculated to be linked to the fact that Komi-Zyrian, just like Nenets, has also been present on the Kola Peninsula, but as noted above, the results are not very reliable for Komi-Zyrian. According to Blokland and Riessler (2011), contacts between the Komi and Saami populations have not resulted in contact-induced structural changes in the respective languages.

Coming briefly back to Table 1 and looking at the typologically closest top 25 languages, Skolt Saami can, in wider macro-areal terms, be characterized as a northern Eurasian language. We may, however, observe, that the language possesses some typically western European features, as well, including suppletion in ordinal numerals (F53), the overlap between situational and epistemic modality (F76), and relative pronouns (F122, F123) (cf. Dahl 2008a: 554). Furthermore, it may be noted that, e.g., the word order properties of Skolt Saami have been influenced by neighbouring European languages in comparison to Uralic languages spoken more to the east, and that although not dominant in the language and thus not reflected in the feature value assignments in Section 2, European features such as particle comparatives (F121) are gaining ground in the language.

This section has discussed the typological distance between Skolt Saami and languages in the WALS database, focusing more closely on languages that are genealogically or areally close to Skolt Saami. A more comprehensive picture of the typological distances between these languages would require discussing and assigning values for all WALS features for each language. This would provide a good starting point for

29 The typological distance between Skolt Saami and the languages closest to it, apart from Finnish, North Saami and Estonian, is much higher than the distance between Finnish and the languages closest to it in Dahl (2008a). How this observation should be interpreted is not clear.

a detailed areal-typological study of the region, bringing new light to the contact history between Skolt Saami and its neighbours. Such a study would naturally need to go beyond the features in WALS and pay attention to any typological features that are of interest in view of the contact history of the region.

4. Conclusion

This paper has examined typological properties of Skolt Saami on the basis of the typological features in the *World atlas of language structures* (WALS). The properties of Skolt Saami with respect to each feature have been scrutinized and a value has been assigned to Skolt Saami for every feature. A typological profile of the language, taking into account different domains from phonology to morphosyntax and even aspects of the lexicon, has emerged from this discussion. The Skolt Saami values have been compared with values found in the WALS database for other languages in order to get an overall picture of which languages are typologically closest to Skolt Saami. The comparison has revealed no big surprises, the genealogically and areally closest languages, North Saami and Finnish, being typologically closest to Skolt Saami. It is worth noting that Russian, with its long contact history with eastern Saami languages, is typologically closest to Skolt Saami of all Indo-European languages in the database.

The WALS database provides a good starting point for working on the grammar of a language. It offers a set of features covering a variety of linguistic domains, and gives a firm typological background for discussing these features in the language under study. WALS provides a useful template for a typological overview of a language.

The WALS features are primarily intended for studying large-scale areal patterns, and they are rather well-suited for this purpose. When it comes to focusing on a smaller area or genealogical grouping, such as the neighbours of Skolt Saami, the WALS data as such cannot take us very far. To begin with, only a subset of the languages that would be interesting to include in the comparison are present in the WALS database, and for many of these only a subset of the features have been coded. WALS can provide a starting point for a typological comparison between an areally or genealogically restricted set of languages, but a thorough investigation of the areal typology of a region will have to take into account features not present in WALS that are interesting in terms of the contact history of the region.

The main contributions of this paper are, on the one hand, the general typological picture painted of Skolt Saami, and on the other, the discussion of each individual feature of the language, which I hope to be of interest for typologists, as well as to open up new questions and point at issues in need of more research for linguists working on Skolt Saami.

Abbreviations

1	= first person	INF	= infinitive
2	= second person	LOC	= locative
3	= third person	NEG	= negative
ABE	= abessive	NOM	= nominative
ACC	= accusative	PART	= partitive
CNG	= connegative	PL	= plural
COM	= comitative	PRES	= present
CMPR	= comparative	PST	= past
ESS	= essive	PTCP	= participle
GEN	= genitive	SG	= singular
ILL	= illative		

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