

Bisumsáme tjállemvuoge birra - A review of the official Pite Saami orthography

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1. Background and context

Pite Saami is a critically endangered¹ Uralic language spoken today by a handful of individuals stemming from Árjepluovve municipality² in Swedish Lapland, and from adjacent areas in Norway and Sweden. Historically, the language community was never particularly large, but was robust and vibrant, at least until the local North Germanic-speaking settlers gained a majority.³ This ultimately led to language shift among many Pite Saami speakers to the respective North Germanic language variants. Nowadays, only a small portion of the ethnic Pite Saami population speaks Pite Saami as a first language (Valijärvi & Wilbur 2011, Wilbur 2014: 6–7), and all speakers are bilingual in Pite Saami and Swedish/Norwegian.

During the course of the second half of the 20th century, the number of speakers decreased slowly but steadily for a variety of reasons mainly

¹ The online version of The Atlas of the World's Languages in Danger (Moseley 2010: accessed on 2020-03-03), created and published by UNESCO, lists Pite Saami as “critically” endangered, which is defined as the state in which “the youngest speakers are grandparents and older, and they speak the language partially and infrequently.” However, according to my own familiarity with the Pite Saami language community, the UNESCO definition for the attribute “severely” endangered is in fact more fitting. According to this definition, a severely endangered “language is spoken by grandparents and older generations; while the parent generation may understand it, they do not speak it to children or among themselves”. In fact, the UNESCO characterization of the degree “definitely endangered” is also partially suitable, as this says “children no longer learn the language as mother tongue in the home”. While these UNESCO categories are clearly meant to generalize and be applicable for many languages from across the globe in exceptionally varied situations, the sheer number of speakers of Pite Saami (around 35 individuals) clearly makes the attribute “critically” quite appropriate, whatever the actual demographics of the various generations of speakers.

² In Swedish, Árjepluovve is known as Arjeplog.

³ Wallström (1943: 20–21) discusses evidence that the initial generations of Swedish settlers in the area spoke some Pite Saami (around the turn of the 18th century).

connected to the detrimental influence of the majority culture.⁴ This adversely affected the situation that the Pite Saami language was in, a fate shared by other smaller Saami languages and indeed many other minority languages around the globe. However, the first two decades of the 21st century have witnessed a slow reversal in this trend, with an increase in awareness, respect and urgency concerning the language, as well as a change in attitude towards multilingualism.

One result of this change was the creation and official approval of a standard orthography for Pite Saami in August 2019, which is the focus of the current paper. In this, I take a critical look at this new orthographic standard by attempting to analyze it concerning its linguistic integrity and soundness as well as the potential it holds to affect the vitality of the Pite Saami language in the future. In doing so, I have tried to keep in mind as a guiding principle the following passage from an insightful chapter on orthography development in the context of language revitalization in Grenoble & Whaley (2005: 148):

“Although linguists, in their desire to develop orthographies that accurately capture the phonemic system of a language, may balk at involving speaker intuitions which may obscure the system, an orthography needs to be designed with potential readers in mind, and so needs to be suited to their needs and perceptions in ways that a linguistic account need not.”

This discussion is structured as follows. To begin with, Section 2 introduces the new orthography and the document that presents it, including a review of the document itself. Then, in Section 3, I provide a history of how Pite Saami has been written in the past, as well as how the current standard came about. Section 4 is a critical review of how successful the orthography is, i.e., how well it fulfills some ideals for what a standard orthography should be like (e.g., as outlined in chapter 6 of Grenoble & Whaley 2005). While this discussion highlights theoretical aspects, such as how well graphemes correspond to phonemic realities of the language, it also considers practical aspects such as how likely the orthography will be adopted by actual non-linguist users of the language. Finally, in Section 5, I look at what the future of Pite Saami may hold considering a written standard now exists, and what potential this orthography has in supporting the language community, especially in revitalization efforts.

⁴ It is beyond the scope of this paper to go into the history and effects of colonization on the Pite Saami language.

2. Bisumsáme tjállemvuohke - an overview

On the 20th of August 2019, the first officially recognized Pite Saami orthography was signed into life during a ceremony at Silvermuseet in Árjepluovve, Sweden. The document is entitled *Pitesamisk ortografi: Beslut om pitesamisk ortografi*,⁵ and at the time of writing this article and to the best of my knowledge, this document is only available via a link in an article in the North Saami language version of the Giellagáldu website; the accessibility of the document will be discussed briefly below. As dictated by the Saami parliamentary council (SPR) on the 15th of May 2018, this orthographic standard was developed by a working group organized and funded by *Sámi Giellagáldu*, a collaborative working group of the Saami parliaments in Norway, Sweden and Finland focussing on standardizing writing systems and new terminology for the Saami languages, as well as supporting revitalization efforts and language support for speakers.⁶ In its essence, the document contains guidelines specifying sounds in the Pite Saami language, and how to use a version of the Latin alphabet to represent these sounds in writing. The meta-language of the document is Swedish, but it contains many Pite Saami examples, which are of course written in the new orthography. The working group consisted of four members from both Sweden and Norway: two linguists specializing in Saami languages, and two fluent Pite Saami speakers (one of whose native languages is Pite Saami), in addition to a secretary. The group met four different times, and developed the document collaboratively during those meetings as well as off-site between meetings (Peter Steggo, personal contact).

The document is organized into the following parts:

1. *Uppdraget* (p. 1): a brief presentation of the working group's purpose and work
2. *Ordens struktur* (p. 1): a short description of prosodic structures relevant to words and morphology
3. *Pitesamiskans alfabet* (pp. 1–31): the main part of the document; here, the spelling rules are presented
4. *Dialektvariation* (pp. 31–33): a section on spoken dialectal variation and to what extent variants are accommodated by the orthography
5. *Särskilda skrivregler* (p. 34): a comment on incorporating loan words

⁵ “Pite Saami orthography: resolution on a Pite Saami orthography” (my translation).

⁶ Cf. the group's website <http://www.giella.org/about> (accessed on 2020-04-28).

6. *Slutkommentar* (p. 34): a statement from the working group about their stance concerning the document
7. *Textexempel* (p. 34): an example text (originally written and published by Lars Rensund in 1986) written according to the new orthographic standard

The rest of the current section provides details about the main part of the document (no. 3 above), as well as briefly about the final comment (no. 6 above). For more on dialectal variation (no. 4 above), see Section 4.4.1.

The main section of the document begins with the letters used for writing the Pite Saami language. Specifically, Pite Saami words are spelled using the graphemes⁷ presented in Figure 1. The document does not specify alphabetic order for Pite Saami, but it seems reasonable to assume that the order presented in the document (and repeated in Figure 1) can be considered alphabetic as this nearly completely aligns with the Swedish/Norwegian alphabets⁸ as well as with Lule Saami, which was frequently used as a point of comparison during orthography development. In this alphabet, non-standard Swedish/Norwegian characters are included immediately following the corresponding base letter, such that, e.g., <á> follows <a>, <đ> follows <d>, <ŋ> follows <n> and <t> follows <t>; the other two graphemes with diacritics, namely <â> and <ä>, are listed last, which is consistent with the Swedish/Norwegian alphabets as well. The document also notes that “in loan words, foreign words and names, other letters can also occur” (p. 1, my translation), and lists <c>, <q>, <x>, <y> and <z> as examples (surprisingly, <ö> is not listed, although this is potentially a common non-Pite Saami grapheme in loan words). Despite a lack of information concerning the status of upper-case letters, it seems safe to assume that the common corresponding upper-case letters are included in the alphabet as well, although it might have been useful to at least include the upper-case variants for the less common graphemes <á>, <đ>, <ŋ> and <t>.

a á b d đ e f g h i j k l m n ŋ o p r s t t u v â ä

Figure 1. The graphemes used in the Pite Saami orthography for native words.

⁷ The technical term “grapheme” refers to the smallest building blocks of the writing system, especially when it is important to distinguish these from the actual sounds the graphemes may represent. Graphemes are marked by the less-than and greater-than symbols, e.g., <a>, <á>, . The term is roughly equivalent to the non-technical term “letter”.

⁸ Note that the order of the graphemes <â> and <ä> follow the Swedish standard, not the Norwegian standard.

Following this, the document presents the *språkljud* (“speech sounds”). It begins by describing the main ambiguities present in the written standard, specifically the fact that certain length distinctions are not marked in the orthography (cf. Sections 4.1 and 4.3). Note that recommendations are provided for how dictionaries and teaching materials can mark these distinctions, even if the standard orthography does not.

The document then presents a detailed inventory of Pite Saami vowels and consonants, and how these are represented in the written standard. The presentation of the vowels begins with tables dividing the vowels into groups based on place of articulation for monophthongs. In these tables, each vowel grapheme is presented with short descriptions of its pronunciation and distribution in the three relevant prosodic slots of the first, second and third syllable positions; examples of words are also provided. The document only uses the letters from the Pite Saami alphabet, and does not present the sounds using a phonetic alphabet such as UPA or IPA; length distinctions are marked when necessary by double vowels in supplementary “pronunciation spellings” provided in parenthesis (e.g., *deedij* ‘know.3SG.PST’, which is officially spelled *dedij*). A table describing “orthographic diphthongs” is also provided (p. 5). This is followed by a table presenting paradigmatic vowel alternations in the first syllable; these are dependent on both the quantity of the consonant center (grade I, II or III) and the second syllable vowel. Finally, a number of orthographic rules pertaining to vowel alternations are presented; for each rule (except for rule no. 5), there are examples presented in the correct orthographic form and the pronunciation, along with a Swedish translation. These rules deal mainly with the paradigmatic vowel alternations outlined in the preceding table, and with the consequences of not marking certain vowel lengths.

The next part of the document deals with consonants. The presentation of the consonants begins with tables dividing the consonants into groups based on manner of articulation. In these tables, each consonant grapheme (including grapheme combinations representing a single sound such as <sj>) is presented with short descriptions of its pronunciation and distribution in relevant prosodic slots such as word-initial position, the consonant center, etc.; examples are also provided. These are followed by a brief discussion of word-initial consonant graphemes, including those in loanwords, and a table of examples. Next, morphophonemic consonant alternations (i.e., consonant gradation) in the consonant center (referred to as the *stamkonsonant* “stem consonant”) are presented as nine alternation patterns (or “series”) which are divided into four main “groups”. After an overview of what consonant gradation entails and a brief introduction of some technical terms (e.g., “grade

III”, “strong grade”, “weak grade”, etc.), the gradation groups and patterns are summarized. The document then provides details in the form of two tables for each pattern. For each pattern, the first table presents an inventory of the actual known instantiations of consonant alternation sets (e.g., bbd:bd, bbj:bj, bbl:bl as three instantiations of pattern 4) and necessary comments, while the second table provides examples for each instantiation (e.g., *rabbda:rabda* ‘edge’, *libbja:libja* ‘decoration’, *gäbbne:giebne* ‘pot’) with a Swedish translation. Finally, brief discussions of consonant graphemes bridging the second and third syllables as well as consonant graphemes in word-final position are discussed in the last two subsections. Each of these sections also includes a table of examples.

After a few pages presenting variation in spoken Pite Saami and how this is dealt with in spelling (cf. Section 4.4.1), and a very short section dealing with how to adapt loanwords to the spelling rules, the document presents a *slutkommentar* “final statement” before the text example is provided on page 34. This statement is brief, yet worth detailing here because it seems to provide insight into the process of developing this orthography. The first paragraph points out that the members of the working group are in agreement about the “principles” of the spelling system. The second paragraph highlights the fact that the group considered a variety of factors concerning the language, linguistics, pedagogy and language politics in their work, while also emphasizing that not all variation can be accounted for, and ultimately that the document will provide a foundation on which to further develop the Pite Saami orthography. The third paragraph diplomatically and anonymously points out that not all members agree with all details in the descriptions of the language’s sounds.

Having outlined the document above, a brief critique of the document as such is in order as well (a contextualized critique of the actual orthographic system is provided from Section 4 onward). Overall, the document is well structured and detailed enough to cover most situations in which Pite Saami will be written, while also providing clear guidelines for teachers and even students. The language used in the descriptions is sufficiently specific and technical to present the spelling system effectively while being accessible at least to users who are somewhat familiar with Swedish linguistics terminology. This is wise because entirely avoiding technical jargon in such a document would have made it overly complicated without significantly improving its readability for the target audience. In addition, many examples are provided to support the technical descriptions; this further increases the chances that users without any linguistics background will still be able to understand the document, although it will certainly require some extra effort

on their part. It would have been useful to actually indicate what alphabetical order is, and future editions of the orthographic system could benefit from descriptions of how to punctuate and capitalize written Pite Saami. Finally, the “final statement” seems to be a kind of caveat, indicating that the document is not the only possible way to do things, and that disputes may exist. While I do not know for certain about the motivation behind this statement, its inclusion makes the document – despite its consistent, determined and rigid pedagogical approach to standardizing the language in written form – seem refreshingly human, and ultimately accepting that it is prone to flaws. Although it could be interpreted as a sign of conflict within the working group, I prefer the interpretation that its authors are also quite human, that language is a flexible phenomenon impossible to represent adequately to written form, and that even an authoritative document like this is subject to revision and improvement. Especially in the context of such a small and highly endangered language, this is an important fact.

Unfortunately, a final note is necessary, although hopefully this situation will be quickly remedied. Specifically, it seems unnecessarily difficult to actually obtain a digital copy of the orthography document since (to the best of my knowledge) the document is solely available via a link “hidden” in an article in the North Saami language version of the Giellagáldu website.⁹ The link at the beginning of the article leads to a scanned version of the signed orthography document. The document itself has an exceptionally cumbersome url.¹⁰ Furthermore, as far as I know, no DOI¹¹ exists which provides a permanent link to this document, and the continued availability of the links provided here cannot be guaranteed. It is unfortunate that this document, which is an important milestone and needed reference for the Pite Saami language community, seems to be so difficult to find, and not readily discoverable via a Swedish or Norwegian interface.¹² It even seems to be out of Google’s reach; at least my attempts to do a google search for “pitesamisk ortografi” on both google.no and google.se did not lead to any hits leading to the document or even to anything on www.giella.org.¹³

⁹ This article about the new Pite Saami orthography can be found at: <http://www.giella.org/articles/6YKrmI8IbgWVUc6KS7dyKp>

¹⁰ This is provided here as a matter of principle and in the name of transparency: https://assets.ctfassets.net/kkxfrpcp7iyu/01JD6UHiBbZ5J26a1ufEsf/051217eecfe9fe7cf374df0bb33a37b5/Pitesamisk_ortografi_23.08.19.pdf

¹¹ DOI is a “digital object identifier” which is intended to uniquely identify a specific digital object in the long term.

¹² Based on my own estimation, very few potential users of the new orthography read North Saami, which is the language used on the only webpage that links to the actual document.

¹³ These searches were carried out on 28-04-2020.

3. The road to the current standard

The new standard Pite Saami orthography is hardly the first attempt at representing Pite Saami in written form.¹⁴ Over the last 130 years, a number of methods have been used, as is summarized in Table 1. In general, linguists collecting Pite Saami texts during the first half of the previous century and earlier each used their own variant of the Uralic Phonetic Alphabet (UPA); this included Hungarian linguist Ignász Halász, Finnish linguist Eliel Lagercrantz, Pite Saami linguist Israel Ruong, Swedish linguist Bo Wickman, and Finnish linguist Juhani Lehtiranta.

Israel Ruong also used an adapted version of the Swedish alphabet in a number of the texts he wrote down and which are archived at *Institutet för språk och folkminnen*¹⁵ (ISOF) in Uppsala. Carl Johansson collected a bit more than 60 pages of text in Pite Saami, and these can also be found in the ISOF archive, and are written in a modified version of the Swedish alphabet. J. K. Qvigstad used his own adaptation of a North Saami orthography (for instance *dab'ča* ‘whetstone’ and *nad̥da* ‘handle’). The texts in Lehtiranta’s publication from 1992 are transcribed in a less technical alphabet which could possibly be best described as a modified Swedish-Finnish alphabet (with spellings such as *åállulij̥t* ‘jaw.ACC.PL’ and *haavka* ‘pike.GEN.SG’), in addition to his UPA transcription.

Lars Rensund is certainly the most prolific Pite Saami author, and published a number of shorter texts (both prose and poetry) throughout his life in small booklets and in Saami periodicals. In Rensund’s representation of Pite Saami, only standard Swedish letters and orthographic principles are used.

As professor for Saami studies at Umeå University, Olavi Korhonen developed a modified version of the standard Lule Saami alphabet to write Pite Saami; it was used in teaching at the university, and is – to my knowledge – unpublished.¹⁶ The first digital collection of written Pite Saami was likely the blog maintained during 2007 and 2008 by Peter Steggo.¹⁷ The blog contains a number of heritage Pite Saami texts in a transcription based essentially on the spelling system developed by Korhonen (Peter Steggo, p.c.).

¹⁴ The following outline of the history leading to the new orthography is based on my own familiarity not only with the literature but – more importantly – with the main individuals involved and events that transpired over the last decade. Bibliographic references are provided whenever needed or relevant, but when not otherwise indicated, the information stems from my own observations and familiarity with the situation.

¹⁵ The Institute for Language and Folklore.

¹⁶ For instance, Korhonen used his orthography to transcribe a Pite Saami text (originally published by Lars Rensund) in a booklet titled *Samiska textprov: med glossor och kommentarer rörande vokalism och konsonantism* from 1992, and revised in 1994. I am grateful to Peter Steggo for telling me about this, and showing it to me.

¹⁷ <http://arbbe.blogspot.com/> (accessed 2020-04-21).

Table 1. A summary of orthographies used to write Pite Saami previous to the current standard, in approximate chronological order.

author(s)	period	UPA	orthography <i>adaptation of</i>		
			Swedish	saN	saL
I. Halász	1890s	✓			
E. Lagercrantz	1920s–1960s	✓			
J.K. Qvigstad	1920s			✓	
I. Ruong	1930s–1970s	✓	✓		
B. Wickman	1943	✓			
C. Johansson	?–1940s		✓		
J. Lehtiranta	1992	✓	✓		
L. Rensund	1950s–1990s		✓		
O. Korhonen	1990s				✓
P. Steggo	2007–2008				✓
Wordlist project ¹⁸	2008–2012				✓
J. Wilbur	2008–...				✓
A.-C. Sjaggo	2015				✓
O. Utne	2018–...				✓

To my knowledge, the current orthographic standard had its genesis in the project *Insamling av pitesamiska ord*,¹⁹ which was initiated in 2008 by members of the Arjeplog Saami association with funding from the European Union’s regional development fund. A number of individuals were involved at various periods throughout the project, and they all deserve to be mentioned here for the role they played in creating what ultimately formed the foundation of the official orthographic standard which exists today. They are (in alphabetical order): Nils-Henrik Bengtsson, Marianne Eriksson, Inger Fjällås, Eva-Karin Rosenberg, Gry Helen Sivertsen, Valborg Sjaggo, Dagny Skaile and Peter Steggo. The project resulted in a lexical database (as a Microsoft Excel table) of Pite Saami words with Swedish and Norwegian translations, as well as some grammatical information concerning morphological alternations and part of speech; it contains approximately 6800 entries. Based on my own knowledge of the project, which I consulted with regularly (as detailed below), the group used Lule Saami spelling conventions as a foundation, but altered these as needed, both to more accurately represent Pite

¹⁸ See below for more about the wordlist project.

¹⁹ “Collection of Pite Saami words”, hereafter referred to simply as “the wordlist project”.

Saami sounds and linguistic structures²⁰ as well as to clearly differentiate Pite Saami from Lule Saami.²¹ As shown in Table 1, all published Pite Saami texts since this project began have used some variant of their orthographic standard, up until and including the officially recognized standard from 2019. This includes publications by Ann-Charlotte Sjaggo, and the lexical app still under development by Olve Utne, as discussed below.

By some serendipitous stroke of fate,²² my own work with the Pite Saami language coincided with the work being done by the wordlist project. As a beginning PhD student with a scholarship to document the language,²³ my first visit to Árjepluovve commenced in June 2008, and I was pleased to find that this wordlist project not only was taking place (an indication of local interest in the language), but that they even had regular working meetings in the basement of the place I was staying (Samegårdén). I mention this not as an egocentric record of my own activities, but because this led to occasional informal symbiotic collaboration, with me learning about aspects of Pite Saami lexicography, and my own qualifications in general linguistics at least somewhat helping the group in their work with keeping a lexical database and abstracting phonological and grammatical structures from their own native speaker intuitions. In addition, my exposure to the group's work gave me a preliminary written standard to use in my own linguistic documentation work on the language.

This symbiosis led to a workshop specifically aimed at providing the Pite Saami language community with input from external experts in other Saami languages and orthography development, as well as a stage to discuss challenging aspects and the best way forward. The two-day workshop took place in May 2011 in Árjepluovve, and was made possible by the Saami Documentation and Revitalization Network (SaamiDocNet) with funding from NordForsk. The most tangible outcome of the workshop was the creation of a preliminary wordlist using the working orthography in summer 2011. That version contained a random selection of approximately one third of the lexical entries from the wordlist at that point, and was distributed to members of the language community, who were in turn asked to provide their own feedback and suggestions on spelling in general or even for specific entries.

²⁰ For instance, Pite Saami *luakktal/luokta* 'bay' in nominative singular and genitive singular, vs. Lule Saami *luokta/luovta*.

²¹ For instance: consistently doubling the initial consonant grapheme in a word-internal consonant cluster, e.g., Pite Saami *dåbbdåt* vs. Lule Saami *dåbddåt* 'know'.

²² ...or divine intervention?

²³ Five years of funding for my work on documenting Pite Saami were graciously provided by the Hans Rausing Endangered Language Project. While this funding was not directly intended to support orthography development, it provided me with the opportunity to work with the Pite Saami language community, and indirectly support them in precisely this undertaking.

However, to my knowledge, no significant feedback ever reached the wordlist project group. The project continued its work until funding ran out in 2012, at which point there seemed to be a general implicit consensus on how to spell Pite Saami words, although this was not specified in a written way (such as in the form of rules or guidelines), but could only be derived by studying spellings in the wordlist.

However, this was sufficient to allow this working version of a Pite Saami orthography to be used not only in my own documentary and linguistic work, but also by others interested in studying and writing the language. For instance, Ann-Charlotte Sjaggo published *Pitesamisk grammatik: en jämförande studie med lulesamiska* in 2015, a work which basically follows the orthographic rules at that stage of development.

In the meantime, interest in actively promoting²⁴ the Pite Saami language was growing on the Norwegian side, particularly at *Duoddara Ráfe pitesamisk senter* in Beiern, mainly due to Stig Morten Kristensen and Lennart Ranberg. Their political initiative ultimately helped move the Norwegian Saami parliament to decide to provide *Duoddara Ráfe* with funding to turn the wordlist into a full-fledged paper publication in book form. It then became my responsibility to turn this project into reality, and over the course of four months in 2016, I was able to dedicate myself full-time to this undertaking. Four months is an incredibly short time period to complete a lexicography project,²⁵ but it seemed more important to produce something visible and tangible, even if the result was not completely consistent or matured, rather than continuing work on Pite Saami on a seemingly endless lexical project, and thus surely postponing any potential usefulness of such work. Thanks to this funding and some additional funding from Arjeplog municipality to help cover printing costs, *Pitesamisk ordbok samt stavningsregler*²⁶ (Wilbur 2016b) was published in September 2016. The book was premiered during Saami Week in Árjepluovve at the beginning of October that year. It consists, as the title clearly indicates, of two parts: a dictionary with Pite Saami entries and Swedish and English translations, and the set of orthographic rules implemented in the first part. The dictionary part (Bengtsson et al. 2016) contains of an extensive selection of the entries from the wordlist which I had edited in a partly successful attempt to apply the spelling rules consistently, and to include relevant grammatical and lexical information for each entry. The orthographic rules (Wilbur 2016a) are presented as correspondences between graphemes and sounds, but do not cover morphological stem

²⁴ Perhaps ‘fighting for’ would be a more accurate description.

²⁵ Anyone even slightly familiar with lexicographic projects understands that these are typically projects that span a lifetime.

²⁶ “Pite Saami dictionary and spelling rules”.

alternations in nearly as much detail as the official document with the new orthography standard which was approved in 2019.

Although the set of rules in the Pite Saami dictionary were not sanctioned by any official political entity, they served as a reference point for further work promoting the language. One specific instance of this concerns language technology. In collaboration with Giellatekno (the research group for Saami language technology at the University of Tromsø), this initial orthography was used in developing language technology tools,²⁷ the lexical database *Nähttagibáhko* with inflected forms,²⁸ and even the initial spell checker (still under development).²⁹ In addition, several other online resources exist which implement these rules, including an extended version of the Pite Saami dictionary (Wilbur 2016b),³⁰ and of those initial spelling rules.³¹ Finally, a further lexical resource is being developed by Olve Utne; this is a mobile app with Pite Saami lexical items, example sentences and translations into Norwegian, Swedish, English and German; a beta version is available via Facebook.³²

With the continuing implementation of this preliminary Pite Saami orthography as a background, as well as a revival in interest in Pite Saami, in 2018 *Sámi Giellagáldu* (on behalf of the Saami parliamentary council) decided to implement a committee to draw up an official Pite Saami orthography. The committee consisted of Inger Fjällås, Ole Henrik Magga, Bruce Morén-Duolljá and Peter Steggo, as well as Ann-Charlotte Sjaggo as secretary. The committee met face-to-face four times in 2018 and 2019, and together composed the document that is now the basis for the official Pite Saami orthography. The orthography became officially recognized at a signing ceremony at Silvermuseet in Arjeppluovve on 20th August 2019. As a result, the Pite Saami language has achieved official status in relevant political realms in both Sweden and Norway.³³

²⁷ Specifically, these tools are based on automatic wordform generators and analyzers as well as syntactic parsers; see giellatekno.uit.no/cgi/index.sje.eng.html (accessed 28-04-2020).

²⁸ See bahkogirje.oahpa.no/ (accessed 28-04-2020).

²⁹ A beta version can be downloaded from divvun.org/proofing/proofing.html (accessed 28-04-2020).

³⁰ This is added to, corrected and updated regularly, and is based mainly on the wordlist from 2012 (Bengtsson et al. 2016); see saami.uni-freiburg.de/psdp/pite-lex/ (accessed 28-04-2020).

³¹ See <https://sjelex.keeleressursid.ee/stavningsregler/> (accessed 28-04-2020).

³² See the Facebook group *BidumBágo*.

³³ See Section 4.5 for more on revitalization efforts.

4. An assessment of the standard orthography

It seems reasonable that most speakers of the world's majority languages take for granted the existence of a writing system. However, speakers of small, minority languages are likely more appreciative of and have a better understanding for what it means to develop an orthographic system, as its existence is hardly a given. For some of those minority language speakers, it could even be that the mere existence of a standard orthography is reason enough to be satisfied with that orthography, and its symbolic import outweighs its actual usefulness. For instance, the fact alone that Pite Saami now has an officially recognized orthography has suddenly promoted the language to a legitimate political entity, which hopefully will have nothing but positive outcomes (cf. Section 4.5 on revitalization, as well as the outlook summary in Section 5). Nonetheless, it is worth exploring the new orthography with a critical eye in order to both highlight its strengths and discover potential challenges that could be addressed in future revisions.

In the following sections, I try to do just that. In addition to examining the rules applied in the orthography document³⁴ based on my own familiarity with Pite Saami linguistic structures (especially phonological, morphological and morphophonological ones), I also apply some general criteria for assessing orthographic systems for any language. To do this, I refer mainly to Chapter 6 in Grenoble & Whaley's *Saving languages* (2005), which presents a number of criteria, many of which are especially useful in the context of endangered languages. With that chapter as a point of reference, in the following sections, I explore the official document presenting the new Pite Saami orthography with respect to its consistency in dealing with symbol-sound correspondences (Section 4.1), how successfully it makes morphemes uniquely recognizable (Section 4.2), aspects of "diacritic overload" and the ease of entering it on a keyboard (Section 4.3), how well it deals with representing variation (Section 4.4), and, last but not least, how well it stands to support revitalization efforts (Section 4.5). My own background is in descriptive linguistics, and as a result, it would be most natural for me to focus on how well the orthography represents Pite Saami as a linguistic system; however, I have tried to go beyond this abstract linguistic framework and consider the orthography in its actual context, as the first standardized writing system for a critically endangered language for which the vast majority of native speakers are in the oldest generations; the orthography will thus be most useful if it is accessible to learners of the language. This approach is highlighted, and indeed inspired by Grenoble & Whaley, who point out that "orthographies for communities

³⁴ See Section 2 for more details about the document itself.

creating revitalization programs should be designed primarily with beginning readers in mind” (2005: 142; see also Section 4.5).

4.1 Symbol-sound correspondences

Ideally, the underlying phonemic structure of any given word is represented unambiguously in a language’s orthographic system. In other words, each grapheme should reliably correspond to a single sound (Grenoble & Whaley 2005: 140).³⁵ To a large extent, the new Pite Saami orthography adheres to this principle, as the set of examples in Table 2 illustrates. Here, the symbols (graphemes) on the left correspond uniquely to the sounds (phonemes) on the right, and vice versa. In other words, when readers see <á>, then they know this refers to a long -a- (the underlying sound /a:/, although its actual pronunciation may vary depending on its context).

Table 2. A selection of symbol-sound pairs for Pite Saami.

<u>grapheme symbol</u>	<u>sound (phoneme) in IPA</u>
<a>	/a/
<á>	/a:/
	/p/
<d>	/t/
<đ>	/ð/
<e>	/e/
<f>	/f/
<g>	/k/

Similarly, when writers want to represent the underlying sound /a:/, then they have to use the grapheme <á>. Keeping these relations consistent should make both reading and writing significantly easier to learn, which is an especially important factor for a critically endangered language like Pite Saami, which would only be further hindered by unreliable symbol-sound correspondences (such as those prevalent for instance in the standard English orthography).

However, the standardized orthography does not adhere to this principle for all letters and sounds, as there are a number of exceptions. In a few cases, one symbol can refer to multiple sounds, while in a few other cases, a single

³⁵ Aside from the fact that, as Grenoble & Whaley point out (2005: 140), an alphabetic orthography is the best choice of orthographic systems concerning sound-to-symbol correspondences, using a different system such as a semi-syllabic system (e.g., for Hindi) or a logographic system (e.g., Chinese) would have likely met with significant resistance by speakers and learners who are only used to alphabetic systems. This is sufficient reason to not consider further whether or not an alphabetic system is the best choice for Pite Saami, and this will therefore not be discussed in any more detail here.

sound has multiple means of representation, as discussed in the following two sections.

4.1.1 One symbol, multiple sounds

Although the orthography marks the length distinction for the vowels represented by <a> and <á>, this is not the case for the graphemes <â> and <u>, which do not differentiate length distinctions that do in fact exist for these vowel sounds: /ɔ/~ɔ:/ and /u/~u:/, respectively. The working group behind the orthography document is fully aware of this drawback, as the document points out that these length distinctions are not visible in spelling (p. 7). Furthermore, a footnote on p. 2 implies that the working group does not feel entirely responsible for allowing such ambiguities in vowel length. Specifically, the footnote points out that the working group presented the Pite Saami language community with suggestions about how to mark vowel length, but the community instead recommended using the system ultimately presented in the document. In principle, the working group could have ignored the language community's preference; however their choice to listen to the language community was likely a wise decision (see Section 4.5), even if this decision is not ideal from a purely linguistic point of view.

Similarly, a distinction between extra long geminates (in grade III)³⁶ and the other geminates (in grade II) is not captured in the orthography. The orthography document deals with this ambiguity by using an apostrophe to mark extra long (quantity III) geminates in the gradation pattern tables on pages 17 and 18, e.g., <ff'> (as opposed to the shorter geminates in quantity II which are presented as a doubled consonant, e.g., <ff>), but points out that the apostrophe is not used in spelling (p. 17).

In Table 3, three sets of minimal pairs or near minimal pairs are presented to illustrate how these length distinctions are relevant for the pronunciation, but not marked in the orthographic representations. Note that, while the third example in this table presents the length ambiguity of the specific compound grapheme <ff>, this is true for all quantity III vs. quantity II geminate contrasts (such as <jj>, <mm>, <ŋŋ> and <ssj>). The theoretical ambiguity of <h> is not included because it is never truly ambiguous, as discussed below.

These phonemic contrasts are underspecified in the written form, which is unfortunate because it can be somewhat problematic for beginning learners of the language. However, even if it is not allowed in the official orthography, lexical and pedagogical resources can indicate these contrasts, much as the orthography document does.

³⁶ Note that I have chosen to use <::> (a doubled IPA length symbol) to transcribe grade III geminates.

Table 3. Symbols which correspond to more than one sound (here, the geminate grapheme <ff> is exemplary for any geminate), and examples.

symbol	sound	example		
		orthographic	phonemic	gloss
å	/ɔ/	båhtjet	/pɔ ^h tʃet/	‘milk.INF’
	/ɔ:/	båhtet	/ pɔ: ^h tʃet /	‘come.INF’
u	/u/	gulliv	/kul::iv/	‘hear.1SG.PRS’
	/u:/	gulliv	/ku:l::iv/	‘fish.1SG.PST’
ff	/f:/	jáffo	/ja:f:o/	‘flour.GEN.SG’
	/f::/	jáffo	/ja:f::o/	‘flour.NOM.SG’

Although learners will simply have to remember these distinctions when reading and writing, well planned dictionaries and teaching materials should make finding and understanding these distinctions easier, and thus prevent these orthographic ambiguities from becoming an unsurmountable problem.

Note that the grapheme <h> is also ambiguous because it can correspond to an unvoiced glottal fricative /h/ (as in *hiejos* ‘poor.ATTR’) or the preaspiration of a following plosive or affricate in the consonant center (as in *båhtet* ‘come.INF’). However, this ambiguity is never problematic because these two contexts are mutually exclusive. In other words, <h> can only indicate preaspiration when preceding a plosive or an affricate in the consonant center; in all other cases, it corresponds to an unvoiced glottal fricative.

4.1.2 One sound, multiple symbols

Each singleton, unaspirated plosive sound can be represented using two ways, depending on the location of the sound in a word. Specifically, in word-final position, the graphemes <p>, <t> and <k> are used, while in all other cases, the graphemes , <d> and <g> are used, respectively, as illustrated in Figure 2.

$$\begin{array}{c}
 \textit{buorep} \text{ /pu}^{\wedge}\text{orep/ ‘better.NOM.SG’} \\
 \text{vs.} \\
 \textit{buoreba} \text{ /pu}^{\wedge}\text{orepa/ ‘better.NOM.PL’}
 \end{array}$$

Figure 2. Example of using multiple symbols (and <p>) for one sound (/p/).

Note that, while <p> and represent the same underlying sound, namely /p/, the pronunciation of some speakers exhibits allophony that aligns with this graphemic distinction such that this phoneme is postaspirated word-finally (when <p> is used); the same is true for the other two plosives as well. This “double” representation may seem unnecessary, but, with this allophony in

mind, this “allography” is not only acceptable, but potentially an advantage for learners, as it actually corresponds to a pronunciation difference which is probably at least salient to non-native speakers. In addition, it may seem familiar to some learners, as similar rules exist in other Saami orthographies.

Technically speaking, there is another situation in which single sounds are represented by multiple symbols. This is the case when a combination of graphemes, which otherwise represent single sounds individually, correspond to a single sound when used in combination. For instance, the combination <nj> (the graphemes <n> and <j>) represents a palatal nasal (/ɲ/). Here are some other examples, but this list is not exhaustive: <sj> refers to a palatal sibilant (/ʃ/), <vv> refers to a labio-dental fricative in either quantity II (/v:/) or quantity III (/v::/), <hp> refers to a preaspirated bilabial plosive (/ʰp/), and <ts> refers to a alveolar affricate (/t͡s/).

From a purely theoretical point of view, this situation should be avoided since it is better to have a single symbol represent a single sound. However, the alternative would be introducing new graphemes for these sounds (for instance using <ʃ> instead of <sj>), thereby adding to an alphabet which otherwise aligns nicely with extant alphabets used in the area, and possibly making the use of modern technology more difficult as well (as discussed in more detail in Section 4.3). However, the orthography’s grapheme combinations will likely be familiar to most users since these are used in Norwegian/Swedish and/or Lule Saami orthographies as well, so learning them should not be overly difficult for most users. More importantly, none of the grapheme combinations used to represent single sounds can occur in other contexts in which the sounds represented by the graphemes taken individually are intended. Thus, confusion as to what these grapheme combinations represent is highly unlikely, once their symbol-sound correspondences have been internalized by orthography users.

With the above exceptions in mind, the Pite Saami orthography quite successfully adheres to the ideal of a one-symbol-one-sound principle. However, with the exception of the lack of visible length distinctions on certain vowels and geminates, even these exceptions are likely no big deal for both learners and native speakers.

4.2 Uniquely recognizable morphemes

Ideally, each and every morpheme should have a unique form in an orthography so as to be unambiguously recognizable (Grenoble & Whaley 2005: 141). This is especially useful for cases of homophony; Pite Saami has many such cases (e.g., the syncretism of nominative plural and genitive singular forms). The Pite Saami orthography clearly fails to reach this ideal; a

few examples of ambiguous orthographic forms are listed in Table 4. In the first example in this table *bissin*, even the lexical morpheme in the stem is ambiguous (it could mean ‘fry’ or ‘wash’), while all cases exhibit ambiguous grammatical morphemes.

Table 4. A few examples of homophony and ambiguous spellings.

<i>ambiguous</i>	
<i>orthographic form</i>	<i>possible readings</i>
bissin	‘fry.3PL.PST’
	‘fry.1DU.PRS’
	‘wash.3PL.PST’
	‘wash.1DU.PRS’
lä	‘be.3SG.PRS’
	‘be.3PL.PRS’
	‘be.2SG.PRS’
	‘be.CONNEG’
luokta	‘bay.NOM.PL’
	‘bay.GEN.SG’

However, due to the complex, non-linear morphophonology of the Pite Saami language, the entire concept of “uniquely recognizing” morphemes is problematic, so this is not exactly the orthography’s fault, especially since an alphabet-based orthography is necessarily linear (while Pite Saami morphology is strikingly non-linear).

The alternatives, such as having a logographic system (e.g., Chinese) or accepting a highly inconsistent correlation between graphemes and sounds (e.g., English), would be much worse choices for Pite Saami. While fluent literate speakers have considerably less difficulties with spellings for words that sound the same (an example from English for this is *sea* vs. *see*), this is only after the years of work involved in learning a spelling system (Grenoble & Whaley 2005: 141).³⁷ However, the Pite Saami language community most likely does not have any truly fluent users of the orthography (at the same level of literacy as for instance Swedish or Norwegian). As a result, the main target user group for the orthography consists of orthography learners (both fluent speakers and language learners); for this group, which is vital to revitalization efforts, it is much more important to have consistent and reliable symbol-to-sound relationships than symbol-to-morpheme relationships. With

³⁷ This is perhaps one of only a few positive aspects of English orthography, and certainly an advantage of a logographic system like Chinese.

this in mind, this seeming ‘shortcoming’ of the orthographic standard is understandable, forgivable, and in fact the best choice given the alternatives.

4.3 Avoiding diacritic overload and minimizing keystrokes

Having (wisely) chosen an alphabet system, the next integral part of orthography development is selecting a set of symbols to represent the phonemes of the given language. While using symbols that language users are already familiar with is clearly an advantage at least concerning the ease of learning, it is often the case that any “loaning” alphabets do not suffice in covering the target language’s sounds. Rather than creating entirely new characters, more practical technical solutions include multiple graphemes to refer to a single sound (cf. Section 4.1.2), adding diacritics,³⁸ and using additional markings on familiar letter symbols to represent some sounds. All three solutions are implemented to some extent in the Pite Saami orthography; this section discusses the advantages and disadvantages of these solutions from both technical and practical perspectives.

Starting with the use of diacritics, as Grenoble & Whaley point out, there may be technical reasons to avoid diacritics in general, and to specifically avoid what they call “diacritic overload” (2005: 146), which is when more than one diacritic on a single character base is used (such as for instance <á̃>, which has both an acute accent and a ring on the base <a>). The case is in fact the same for letters with additional marks, such as <ŋ> (a base <n> with a hook on the bottom right). Specifically, such letters may require the user to make more keystrokes or even unfamiliar keystrokes when typing, or may not be accessible at all (especially on mobile devices), which is a possible deterrent to using a new writing system. Furthermore, there can even be sociological reasons to avoid such letters because users may perceive diacritics (especially when there is diacritic overload) or non-standard letters as too strange, foreign or visually unpleasant, thus decreasing the new orthographic standard’s chances of finding acceptance.

The new Pite Saami orthographic system successfully restricts the use of diacritics to three characters, strictly speaking: <á>, <ä> and <å>. The latter two are familiar to most users, since they are part of the Swedish alphabet as well.³⁹ In addition, there are three other Pite Saami graphemes which, while strictly speaking do not host any diacritic, have marking in addition to the base character; these are <ŋ>, <đ> and <ɛ̃>. These latter three are not found in the

³⁸ Diacritics are supplementary marks written above or below a base symbol, such as the two dots (called dieresis) on top of the letter a in <ä>.

³⁹ Norwegian users are surely familiar with <ä>, even if they use <æ>; for more, see Section 4.4.2.

respective Nordic alphabets, but are used in other Saami alphabets, so may be familiar to some users as well. Thus, there are a total of six graphemes which are derivations from a base letter, at least two of which are familiar to potential Pite Saami orthography users.⁴⁰ Finally, a few grapheme combinations exist that represent a single sound (cf. Section 4.1.2) such as <nj>, <sj>, <tj> and <ts>.⁴¹

This set of “deviant” graphemes and grapheme combinations seems quite reasonable in size, especially considering that many of these are used in alphabets that users are at least familiar with, if not in fact fully literate in. However, using these solutions comes with two caveats.

The first caveat is only relevant for users who actively want to type Pite Saami, and essentially only pertains to <á>, <ŋ>, <đ> and <ɛ>. Specifically, it is these graphemes that have diacritics or other additional markings which may be difficult to find on standard keyboard layouts, especially those not shared by Nordic alphabets, and particularly when using mobile devices, on which accessing uncommon graphemes is even less straightforward for untrained users than on laptop and desktop computers.⁴² This could result in users of the orthography not adhering to the standard simply because they do not know how to implement it digitally, or that their devices do not support these characters at all without adding a supplemental app. For mobile devices running iOS and Android systems, Divvun (together with Giellatekno at the University of Tromsø, specializing in language technology for Saami and other minority languages), offers a separate app called “Sami keyboards”⁴³ to fulfill specifically this lack in the standard software. While, at least in the iOS version, the installed app does not offer a specifically Pite Saami keyboard, the Lule Saami keyboard has all necessary graphemes, and in fact only <đ> and <ɛ> are not accessible directly via a single keystroke.⁴⁴ Another workaround for iOS is using the Finnish layout, which has all of the graphemes relevant for Pite Saami, although these are only accessible by pushing and holding the respective base letters. In addition to the potential

⁴⁰ Note that the number of words which may be spelled using the graphemes <đ> or <ɛ> is quite small. Furthermore, words using these two letters also have acceptable variant spellings using <ɕ>/<d> or <s>, respectively, which makes them potentially avoidable as well, if necessary.

⁴¹ This is a bit simplified since it actually disregards geminate length (e.g., <nnj> or <dtj>). Furthermore, <hp> (and other <h>-plosive combinations) are also combinations representing a single sound (preaspirated plosives); however, the phonological status of preaspiration is debatable, so I leave these out here for simplicity’s sake.

⁴² Note that finding non-standard graphemes on typewriters may be even more problematic, but due to my own lack of knowledge about typewriters and to the fact that I am assuming that typewriters are uncommon today, especially among younger potential users of the Pite Saami orthography, I will not go into this aspect any further.

⁴³ Cf. divvun.no/keyboards/mobileindex.html (accessed 2020-04-21).

⁴⁴ With ‘keystroke’, I also mean “finger-stroke” on mobile devices.

difficulties in finding these special symbols on a keyboard, accessing them sometimes requires extra effort, i.e., using more than a single keystroke. While this may not sound like much “effort” (indeed, it is merely lifting a finger), minimizing keystrokes is clearly preferred by many users, especially in informal settings, as exhibited by the standardization and even internationalization of such keyboard abbreviations as ‘lol’, ‘btw’, ‘omg’, etc.

With this in mind, it is quite relevant that an orthography be easily implemented in digital technologies, especially for orthographies like the one for Pite Saami, which are partially aimed at winning over younger user groups who are technologically savvy and lazy on their keyboards. With the few exceptions noted above, the Pite Saami orthography should be easily adoptable when using current technologies, although strict adherence to using all graphemes may prove difficult for the reasons mentioned. Nonetheless, the alternative would be restricting the alphabet to only those symbols already available on relevant standard keyboard layouts (i.e., Swedish and Norwegian), and this would come at a higher price. Not only would the dialectal variation accessible via <đ> and <ţ> not be possible, which would thus possibly alienate some users,⁴⁵ but vital contrastive linguistic distinctions accessible through the graphemes <á> and <ŋ> would not be visible in the orthographic representations of the language. This lack of transparency would be difficult for fluent speakers, but especially for learners who rely on orthographic representations corresponding unambiguously to linguistic realities (as discussed in Section 4.1).

The second caveat is perhaps more important for that very reason: in a few cases, contrastive length distinctions are not unambiguously coded in the orthography. Specifically, this concerns the graphemes <â> and <u>, as well as the way grade III geminates and grade II geminates are represented. The details of these underrepresented length distinctions are presented in Section 4.1.1 and summarized in Table 3 above, as well as reasons why this can be considered a weakness in the orthography. Choosing to allow such ambiguities likely stems from an attempt by the orthography developers to limit ‘diacritic overload’ and an overly redundant, ‘foreign’-looking spellings. Technical alternatives could include using the acute accent to mark length on the vowels (based on the model of the <a> vs. <á> length distinction), and thus use <ú> and <ấ>. For the latter, one could certainly argue that this is a case of ‘diacritic overload’, which has practical, aesthetic and technical problems (as discussed above). However, I cannot really find any good reason to not accept the former, especially considering <á> is acceptable; perhaps this

⁴⁵ Cf. Section 4.4 for more on this variation.

choice was made simply because users have seen <á> in other, more common Saami spelling systems (basically North Saami and Lule Saami), but not <ú>.

Another possibility for long <â> would be to double the grapheme, i.e., <ââ>. Even though this approach is used for long consonants (e.g., <bb> in *tjábbe* ‘beautiful’), I have heard speakers disapprove of this for vowels because it “looks too Finnish”, for instance.⁴⁶

As for choosing to suppress the length distinctions between grade III geminates and grade II geminates, the main alternative could be using an apostrophe between the single elements of a quantity III geminate, such as <f'f>. Indeed, the document presenting the orthography uses precisely this approach in a number of tables presenting grade alternations, although the document specifically points out that this is not accepted in the orthography.⁴⁷ Note that this approach is also adopted in Lule Saami, which may have been one source of inspiration for this restriction.

Table 5. Examples of hypothetical symbol-sound correlations, and the resulting spellings which are unambiguous concerning length distinctions.

symbol	sound	example		
		orthographic	phonemic	gloss
å	/ɔ/	båhtjet	/pɔ ^h tʃet/	‘milk.INF’
á	/ɔ:/	báhtet	/ pɔ: ^h tʃet /	‘come.INF’
u	/u/	gulliv	/kul::iv/	‘hear.1SG.PRS’
ú	/u:/	gúlliv	/ku:l::iv/	‘fish.1SG.PST’
ff	/f:/	jáffo	/ja:f:o/	‘flour.GEN.SG’
f'f	/f::/	jáf'fo	/ja:f::o/	‘flour.NOM.SG’

In summary, the new standard orthography successfully minimizes the number of keystrokes needed to type words and avoids diacritic overload. The resulting drawbacks, as discussed above, are minimal.

4.4 Representing variation

Within the Pite Saami language area, there is a certain amount of linguistic variation between speakers; this can correlate with a variety of factors, including geographic, demographic, sociological, and even individual ones. As Grenoble & Whaley (2005: 151–158) discuss quite thoroughly, a shared standard orthography can serve as an identity building factor which can

⁴⁶ They were presumably referring to the fact that long vowels are marked in Finnish orthography using a doubled vowel grapheme.

⁴⁷ For example, “in these tables, the apostrophe (') indicates grade III, but it is not used in the spelling system” (my translation, p. 17).

successfully contribute to revitalization efforts for highly endangered languages. Creating a successful standard involves a balancing act between representing enough variation so as not to alienate users, while simultaneously ensuring that the standard is consistent and not overly variable. In other words, allowing too much variation risks spoiling the creation of a single, unifying standard. While dealing with variation mainly corresponds to the representation of spoken language (dealt with in Section 4.4.1), even written variation can be a factor, as discussed briefly in Section 4.4.2.

4.4.1 Spoken variation

The document describing the new Pite Saami orthography dedicates more than two pages to a number of specific cases of variation in spoken Pite Saami and how these are each dealt with in the written standard (pp. 31–33). Each description of a type of variation presents the relevant variants in the spoken language using orthographic representations, and indicates clearly whether the variation is accepted in the standard.⁴⁸ In cases where more than one variant is acceptable, the document points out that it is important to stick to one variant consistently, and not mix the variants within a text. For instance, the word for “rock.NOM.SG” can be pronounced and spelled three ways: *gärrge*, *gäddge* and *gäddge*; these three spellings are all acceptable, “as long as one is consistent” (p. 32, my translation). On the other hand, the word for ‘bay.NOM.SG’ has two main pronunciations: *luakkta* or *luäkkta*; here, only the former spelling is accepted in written form. A few more examples are presented in Table 6.

The orthography document successfully and consistently points out that all these cases of variation are acceptable in *spoken* Pite Saami. This is very important, as it emphasizes that the document does not attempt to prescribe how people speak, but it is instead focused on how to represent Pite Saami in *written* form. Although a variety of spoken variants are acceptable in written form as well (cf. Table 6 and the document itself), and speakers who identify with such variants should have no complaints about the orthographic system, speakers who identify with spoken variants that do not have an exact written representation will hopefully also understand that some sacrifices need to be made in the name of standardization, and that these compromises only concern the written forms.

⁴⁸ Note that only the description of variation between short <ä> and long <â> in the second syllable (p. 32) lacks this recommendation, but that is simply because the written language does not distinguish between short and long <â> even when it does not depend on dialectal variation.

Table 6. Variant forms of a selection of Pite Saami words, and whether these are acceptable written forms (✓) or not (X).

<i>accepted</i>		
<i>variant</i>	<i>written form?</i>	<i>gloss</i>
gäddge	✓	‘rock.NOM.SG’
gärrge	✓	
gäddge	✓	
muossá	✓	‘maternal_aunt.NOM.SG’
muottá	✓	
mannat	✓	‘go.INF’
mannad	X	
várest	✓	‘mountain.ELA.SG’
váres	X	
luakkta	✓	‘bay.NOM.SG’
luäkkta	X	
biegga	✓	‘wind.GEN.SG’
biekka	X	

Although the document does not force individual writers to adhere to its guidelines, to what extent speakers of non-written variants follow the official orthography will be an important test of its viability and success.

4.4.2 Variation in writing traditions

The grapheme <æ> is not included as an alternative to <ä> in the document describing the Pite Saami orthography. This is different from the Lule Saami orthography, which allows for orthographic variation such that <ä> is used in Sweden and <æ> is used in Norway (in alignment with the fact that <ä> is used in the Swedish alphabet, and <æ> in the Norwegian alphabet). Since this official document does not mention <æ> as being an option, it is therefore technically not an official option. Although the majority of Pite Saami native speakers today are from the Swedish side, it could be wise to allow variation between <ä> and <æ> with the goal of maximizing grass-root support for revitalization efforts on both sides of the border. Perhaps this was simply an oversight of the committee that created the document, but perhaps it was intentional; in either case, it seems to me that not including the possibility to have this specific variation runs the risk of alienating potential users (such as teachers, learners and authors) who are used to using Norwegian-based input methods in modern technology, as well as in handwriting.

On the other hand, this is a relatively insignificant aspect of the orthography, and does not affect the effectiveness and utility of the standard as a whole.

With this in mind, I would not expect it to significantly impact revitalization efforts in a negative way, although the symbolism of only allowing a grapheme associated specifically with Sweden may hold more weight than I can imagine as an outsider. And, ultimately, people are free to write as they choose in unofficial instances, so it is possible that some Norwegian users may simply use <æ> anyway, perhaps out of principle, or simply out of habit.

4.5 Supporting revitalization efforts

When designing or even reviewing a writing system, it is essential to contextualize the orthographic standard because, although some generalizations can be made, ultimately, every orthography attempts to fulfill its purpose for linguistic, political and cultural situations that are at least as unique as the linguistic diversity that drives speakers to develop unique orthographies to begin with. For the Pite Saami context, something that Grenoble & Whaley point out seems particularly relevant, namely that “orthographies for communities creating revitalization programs should be designed primarily with beginning readers in mind” (2005: 142). The extent to which the Pite Saami language community is actively working on revitalization programs will not be covered here, but it is clear that the language’s current situation requires a significant amount of revitalization for the language to remain vital in the coming years. Specifically, to summarize the situation (cf. Section 1), most native speakers are in the older generations and only a small number of younger speakers are potentially learning the language natively; this imbalance in the distribution of the age of speakers indicates that new speakers are needed, and the needs of this group of beginning readers and writers alike should be prioritized over the needs of the larger group of fluent older speakers in order to help maximize revitalization efforts. The more easily accessible the language is via its orthography, the better are the chances that revitalization efforts will prove successful; the writing system is surely a small part of the effort, but a language like Pite Saami needs all the help it can get.

Having thus identified the importance of focusing on new readers and writers, the current official orthographic standard fulfills this criterion quite successfully, although not entirely. As mentioned in previous sections, a few weaknesses of varying gravity exist which will likely make learning the language via reading and writing somewhat difficult. Specifically, these are:

- a few cases of using one symbol to represent multiple sounds, or multiple symbols to represent one sound (cf. Section 4.1)

- the difficulty of making morphemes uniquely recognizable in an inherently morphophonologically complex language (cf. Section 4.2)
- the relative inconvenience involved in accessing a few characters on standard keyboard layouts (cf. Section 4.3)
- variation in spelling reflecting dialectal variants (cf. Section 4.4)

However, as discussed in the respective sections on these points of criticism, none of these taken alone is crucial enough to significantly affect the overall success of the orthography. Furthermore, these points are different enough from one another, and small enough in number, that these relative shortcomings taken together should not prohibit the orthography from being useful either, even for beginning readers and writers. It may require some extra effort, particularly in these respects, but in comparison to learning orthographies for other languages, the Pite Saami writing system in fact quite reliably corresponds to linguistic realities. Although the availability of resources for learning orthographies used for large languages such as those for English or French (just to name two particularly inaccessible systems for learners) make it nearly pointless to attempt to compare these with Pite Saami, the fact remains that millions of learners successfully navigate English and French reading and writing; in comparison, learning to read and write Pite Saami should be a walk in the park. In addition, dictionaries and teaching materials can help compensate as well, especially concerning the underspecified length distinctions by marking these in a way not used in the official orthography.

Although the focus here has been on beginning language users, it should also be pointed out that the Pite Saami orthography should be even more accessible to native speakers learning to read and write in their native language. This is because they have the advantage of possessing native speaker intuition to guide them. Especially pertaining to the underspecification of length distinctions, native speakers will know instinctively what the correct length is, even if it is not represented unambiguously in writing. Hopefully the flexibility of the orthography in allowing a number of dialectal variants will satisfy native speakers' desire to feel that each individual spoken Pite Saami variant is sufficiently represented. Indeed, successful acceptance on behalf of native speakers can have important symbolic and practical affects in revitalization efforts.

5. Outlook and potential

In summary, the new orthographic system should prove to benefit rather than inhibit revitalization efforts. While its medium-term and long-term effects remain to be seen, it is hopefully an effective part in the complex process of promoting the status of Pite Saami and, even more importantly, increasing the number of Pite Saami speakers. Overall, it minimizes linguistic shortcomings and maximizes the needs of the language community, particularly those of language learners. The writing system forms a reliable, detailed standard that can be easily implemented in producing much needed teaching materials. Official recognition of this standard will hopefully lead to tangible results felt in the Pite Saami community because this administrative political act has put Pite Saami officially on the map as its own politically legitimated entity, whereas before the standard was official, Pite Saami was often just considered a dialect of Lule Saami, if it was visible at all. This will hopefully make it easier for specifically Pite Saami language projects, such as those desperately needed to promote revitalization, to receive funding. Furthermore, it should require local and regional governmental agencies to officially support using the Pite Saami language in relevant public spheres (such as in day-care and care of the elderly). This document has hopefully triggered a chain of events critical to the Pite Saami language's continued survival as a spoken language. Namely, this improvement in social status will promote an increase in language use, which will ultimately boost the number of speakers such that at some point, Pite Saami's future will no longer be endangered.

At the time of writing, the Pite Saami orthography is only eight months old, but already the first ever Pite Saami book has been published, and it uses this new standard. In late February 2020, *Biejve Nájjda* was released (Somby 2020); it is a translation by Pite Saami speakers Inger Fjällås and Peter Steggo of the Saami children's book *Solens dattar* by Marry Áilonieida Somby. Despite this new book and a number of online lexical resources that use the new standard (as outlined in Section 3), the Pite Saami language is still lacking any published, easily accessible teaching materials, such as a primer. The official recognition of a generally successful orthographic standard has already removed one of the hurdles encountered in producing such needed materials in support of revitalization efforts. This orthography has the potential to do even more in paving the way to a more promising future for the Pite Saami language.

Finally, to come back to the scholarly source that has informed my evaluation of the new Pite Saami orthography, I would like to emphasize one more passage from Grenoble & Whaley (2005) in highlighting the fact that it is not me as an outsider and academic with a supposedly critical and distanced

eye, and in fact not even a political entity like *Sámi Giellagáldu* who will in the end determine the success or failure of this spelling system. Instead, “[r]egardless of how linguistically and technically sound an orthography might be, its initial (and continued) acceptance by the people for whom it is designed is critical in determining its eventual effectiveness and use” (p. 137). In is my sincere hope that the Pite Saami language community will make the most out of the opportunity given to them with the creation of an official *bisumsáme tjállemvohke*.

Abbreviations

1—first person; 2—second person; 3—third person; ACC—accusative; CONNEG—connegative; DU—dual number; ELA—elative; GEN—genitive; INF—infinitive; IPA—International Phonetic Alphabet; NOM—nominative; PL—plural number; PRS—present tense; PST—past tense; saL—Lule Saami; saN—North Saami; SG—singular number; SPR—Saami parliamentary council; UPA—Uralic Phonetic Alphabet.

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