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## Saami *-(š)goahti-* inchoatives: Their variation, history, and suggested cognates in Veps and Mordvin

The purpose of this article is twofold: first, to give an overview of the morphological and areal variation of the Saami deverbial inchoative suffixes (North Saami *-goahti-* and *-šgoahti-*), and second, to give an updated account of the history of said suffixes. To achieve the latter, a critical survey is made of previous literature dealing with these Saami suffixes as well as the phonetically and semantically similar derivational suffixes in Mordvin (Erzya *-kado-*, *-gado-*) and in Veps and Ladic (*-gande-*, *-škande-* ~ *-gade-*, *-škade-*). Several kinds of etymological cognate or loan relations between these suffixes have been posited. In the present paper, however, it is argued that the Saami *-goahti-* suffix is not related to other Uralic suffixes, but instead results from the affixation of an independent verb (North Saami *boahtit* ‘to come’). The *-š-* element attaching to the suffix is explained as a remnant of another derivational suffix still found as an independent inchoative marker *-ahtja-* present from South Saami up to Lule Saami.

### I. Introduction

The Saami inchoative suffixes, SaaN *-goahti-* and *-šgoahti-* and their variants, are widely used in Saami languages to derive inchoative verbs denoting the beginning of the activity or state expressed by the base verb. The origins of the suffixes are somewhat unclear; they have in previous literature been compared to derivational suffixes with similar functions and phonological appearance in Mordvin (Erzya *-kado-*, *-gado-*) as well as in Veps and Ladic (*-gande-*, *-škande-* ~ *-gade-*, *-škade-*), and various theories about the possible etymological relatedness of these suffixes have been suggested, including partial or full cognation of the suffixes as well as borrowing from one Uralic branch into another; Sammallahti (1977, 1998), for instance, derives the Saami suffix from a common Proto-Finno-Volgaic form. In the present paper, the previous explanations are critically assessed and a more elaborate model of the background of Saami *-(š)goahti-* based on the affixation of an independent verb is presented, and the *-š-* element is given a more solid explanation. In support of the claims made in this reassessment, the distribution of different inchoative suffix variants across the Saami languages is also studied.

The article is structured as follows: Section 2 briefly introduces the central terminology and the transcription used in the language samples. Section 3 contains a survey of the variation of inchoative suffixes across Saami languages (3.1), accompanied by shorter descriptions of the supposedly connected Mordvin and Veps-Ladic suffixes (3.2–3.3). Section 4 gives an overview of the diachronic treatment of the suffixes in previous literature (4.1: Veps-Ladic; 4.2: Mordvin; 4.3: Saami), assesses the tenability of different solutions, and gives a renewed account of the development of

the Saami suffix family. Section 5 summarizes the results and discusses some aspects of them in the wider context of Saami historical linguistics.<sup>1</sup>

## 2. Terminology and transcription

The term **inchoative** is generally used to describe the aspectual property of a verb or a clause that refers to the beginning of an action or a state (e.g. Bussmann 1996: 222). The term **inceptive** is sometimes used synonymously with inchoative (cf. Crystal 1997: 192), although some authors make a distinction by using inchoative with reference to the beginning of states and inceptive to the beginning of actions (e.g. Bybee 1992). The current paper is in line with the tradition of Uralic studies and uses inchoative (verb) as a label for semantically and morphosyntactically defined derivative classes: deverbal verbs with distinct inchoative suffixes, which only change the lexical aspect but not the part-of-speech or valency of the base verb. So the usage is somewhat narrower than in Indo-European studies, where the term “inchoative” is also used in reference to denominal state-change verbs such as *to darken* or *to liquefy*, which would belong to distinct categories in the Uralicist classification tradition. These categories include **translatives** (= transformatives, e.g. Bussmann 1996: 494), and further, **automatives** ( $\approx$  anticausatives) and **reflexives**. Translative verbs denote a change of quality or state in the subject, and are usually denominal (de-adjectival) derivatives. Automative and reflexive verbs are derivationally deverbal, but similarly denote a change in the state of the subject caused by the subject itself (reflexive) or with no explicit actor (automative). Both translative and automative verbs are intransitive, and come semantically close to inchoatives, especially those derived from intransitive verbs, in that all these refer to some kind of change in the state of the subject, and the focus is on the new state rather than the old one. The partial semantic overlap can manifest itself in identical morphemes used e.g. both in inchoative and translative functions, as is the case with the Mordvin *-kadâ-/gadâ-* suffix (see Section 3.2).

In the language samples used in the current article, the transcription of the Saami languages is converted into current standard orthographies where applicable, Pite Saami according to the working orthography as presented in Wilbur (2016) and Ume Saami according to Barruk (2018). Uralic languages and dialects with no established Latin orthography are quoted according to the source or adapted to a near-phonological transcription using the Uralic Phonetic Alphabet (UPA/FUT). The English translations of the word meanings are in most cases made by the current author on the basis of the glosses given in the indicated sources.

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1. I would like to thank Jussi Ylikoski for his useful comments in the finalizing stage of the article. All remaining errors and omissions are naturally my own responsibility.

### 3. Morphology and variation of the western Uralic suffixes

#### 3.1. Saami *-(š)goahti*

The North Saami inchoative suffix in question has two morphological variants: *-goahti-* and *-šgoahti-*. Any verb stem can serve as a basis for derivation, but the suffix variants have a complementary distribution: *-goahti* attaches to bisyllabic and contracted stems, while *-šgoahti-* attaches to trisyllabic — and, in the eastern dialects, also to contracted — stems (Nickel 1994: 262–263; Nielsen 1979 [1926]: 247–248). In Nielsen’s description (*ibid.*), the longer suffix variant incorporates the preceding *i* (*-išgoahtit*), which can equally be analyzed as the (infinitive) stem vowel of the trisyllabic base verb.

<i>lohka-t</i> ‘to read’	<i>lohka-goahti-t</i> ‘to begin to read’	(bisyllabic)
<i>liihko-t</i> ‘to like’	<i>liihko-(š)goahti-t</i> ‘to begin to like’	(contracted)
<i>muitali-t</i> ‘to tell’	<i>muitali-šgoahti-t</i> ‘to begin to tell’	(trisyllabic)

The suffix *-(š)goahti-* always has a secondary word stress on its first syllable, and the derivatives are conjugated like bisyllabic verbs:

<i>lohka-goahti-t</i> : <i>lohka-goađá-n</i> ‘to begin to read’ INF : PRS.ISG	cf. <i>boahti-t</i> : <i>boađá-n</i> ‘to come’ INF : PRS.ISG
<i>muitali-šgoahti-t</i> : <i>muitali-šgoađá-n</i> ‘to begin to tell’ INF : PRS.ISG	

The diphthong *oa* in the suffix is also peculiar, since it normally appears only in main-stressed initial syllables. Nickel (1994: 263) thus characterizes *-goahti-* verbs as “compound verbs” (*sammensatte verb*), and according to Nielsen (1979 [1926]: 248), they lie on the border between derivatives and compounds.

The *-goahti-* inchoatives have cognates in all Saami languages, and the suffix can be reconstructed into Proto-Saami as *\*-koatē-* (*\*-goatē-* : *\*-goadā-* in allophonic notation). According to Sammallahti (1977: 193), the languages west of North Saami use only the variant without *-š-*, whereas the eastern Saami languages apply the suffix with *-š-* to all kinds of verbs without stem type restrictions, and the plain *š*-less variant has become more or less marginal. The following brief survey describes the variation in more detail, and shows that the picture, especially in the western Saami languages, is more complex than this. While this section is mostly descriptive in

nature, some remarks on diachrony are already made based on the assumption that the distribution and the functions of the *-(š)goahti-* suffixes in North Saami reflect a relatively original (Proto-Saami) state of affairs, as supported by the evidence from the Saami language area as a whole.

From **Skolt, Kildin and Ter Saami**, T. I. Itkonen (KKLS, 1958) records both *\*-koatē-* and *\*-škoatē-* types of suffixes; *\*-koatē-* has its initial stop regularly voiced and spirantized after voiced sounds (in Paatsjoki Skolt and Akkala Saami even to *-v-*): Т раллгјѡрѣ<sup>d</sup>, К релл<sup>a</sup>γуѡрѣ<sup>δ</sup> ‘to begin to fear’ (← К релл<sup>vδ</sup> / Sk *pōöllâd* ‘to fear’; p. 352), Sk(P) *jiellvue’tted* ‘to begin to live’ (← *jiellet* ‘to live’; p. 60, 830).<sup>2</sup> In the Skolt Saami grammar by Feist (2015: 119), only the inceptive (= inchoative) derivative suffix *-škue’tt-* is mentioned. The marginality of the *š-*less suffix in Skolt Saami is illustrated by the fact that the dictionaries of Mosnikoff & Sammallahti (1988) and Sammallahti & Mosnikoff (1991) contain 125 verbs in *-škue’tted* (affixed to 77 bisyllabic, 38 trisyllabic, and 10 quadrisyllabic stems) but only one *š-*less *\*-koatē-* verb with two variants: *rämmgue’tted* ~ *rämmvue’tted* ‘to rejoice’. As expected with a suffix beginning with a consonant cluster, the *-škue’tt-* derivatives based on parisyllabic verbs show a weak-grade consonant center with facultative vowel and consonant shortening in the base, as illustrated by *looggškie’tted* ~ *logškie’tted* ‘to begin to read’ from *lookkâd* ‘to read’ (cf. Feist 2015: 119). Also in Kildin and Ter Saami, the inchoatives in *-šk-* seem generally to be built on the weak-grade stem of the base verb, while the stem before a simple *-g-/-γ-* is in the strong grade (cf. Szabó 1987: 70–71; Szabó 1968: 114, 116). To mention some areally more restricted variants, at least in Voronensk dialect of Kildin Saami, the suffix with *-šk-* has been reduced to *-šχ-* and further to *-š-*, as in *šireškude* ~ *širešude* ‘(he/she) began to play’, *tonn širešχuddiχ* ‘you began to play’ (Szabó 1967: 23; 1987: 77). In Skolt Saami, a shortened form of the inchoative suffix, *-(š)kuä-*, is in use beside the longer variants, e.g. *kiöč-škuä-m* ‘to look at’-INCH-PRS.ISG (Markus Juutinen, pers. comm.).

As there has been no specific research before on the morphological variation of the Skolt and Kola Saami inchoative suffixes (Szabó 1987 focuses on their syntax and semantics), I have gathered two sets of data on the topic. The first data set consists of the verbs in the examples of Szabó 1987 (an illustrative sample, ca. 29% of his whole, unpublished material; Kld 66/251, T 33/87), added with the inchoative verbs found in the texts in Szabó 1968. The second data set consists of the inchoative verbs in KKLS within the alphabetical span of A–K, merging the data of volumes I and II (ca. 23% of the total lexical material measured in the volumes). Both data sets reveal a clear pattern in the distribution of *\*-koatē-* and *\*-škoatē-* variants: When attached to an originally trisyllabic stem, the *\*-škoatē-* suffix is virtually exclusive. With originally bi- and quadrisyllabic stems, however, Kildin Saami aligns with Skolt Saami by using mostly *\*-škoatē-* and only in specific cases *\*-koatē-*, while Ter Saami seems to have retained the old system with *\*-koatē-*, using only occasional *\*-škoatē-* derivatives

2. Cf. Skolt comitative plural ending *-vui'm* < *\*-ku(o)jm(ē)* and Sk(P) *čää'z3vvue'tkes* ~ (S) *čää'z3gue'tkes* ‘water vole’ < *čää'z3* ‘water.GEN’ + *kuē'tkes*. Cf. also T. I. Itkonen 1958: XXXII.

with bisyllabic verbs (see Tables 1, 2 and Figure 1). The few Akkala Saami samples follow the pattern of Skolt and Kildin Saami. As can be seen in Figure 1, the number of derivatives in *\*-koatē-*, used either exclusively or in parallel with *\*-škoatē-* in the same stem, increases from the westernmost Skolt dialects (Paatsjoki and Suõ'nn'jel) to Nuõ'ttjäu'rr and further to Kildin Saami.

orig.stem	Kildin			Ter		
	*k	*k/šk	*šk	*k	*k/šk	*šk
2	8	2	28	27	1	4
3	-	-	10	1	-	7
4	-	-	11	2	-	-

Table 1. Inchoative suffix variants in Szabó 1987 and Szabó 1968 (number of distinct base verbs). \*k = *\*-koatē-*, \*šk = *\*-škoatē-*, \*k/\*sk = both.

orig.stem	Skolt (P+S+N)			Kildin			Ter		
	*k	*k/šk	*šk	*k	*k/šk	*šk	*k	*k/šk	*šk
2	5	2	94	8	7	31	22	-	2
3	-	-	34	2	-	14	1	-	10
4	-	-	9	-	-	6	1	-	-

Table 2. Inchoative suffix variants in KKLS (A–K). \*k = *\*-koatē-*, \*šk = *\*-škoatē-*, \*k/\*sk = both.

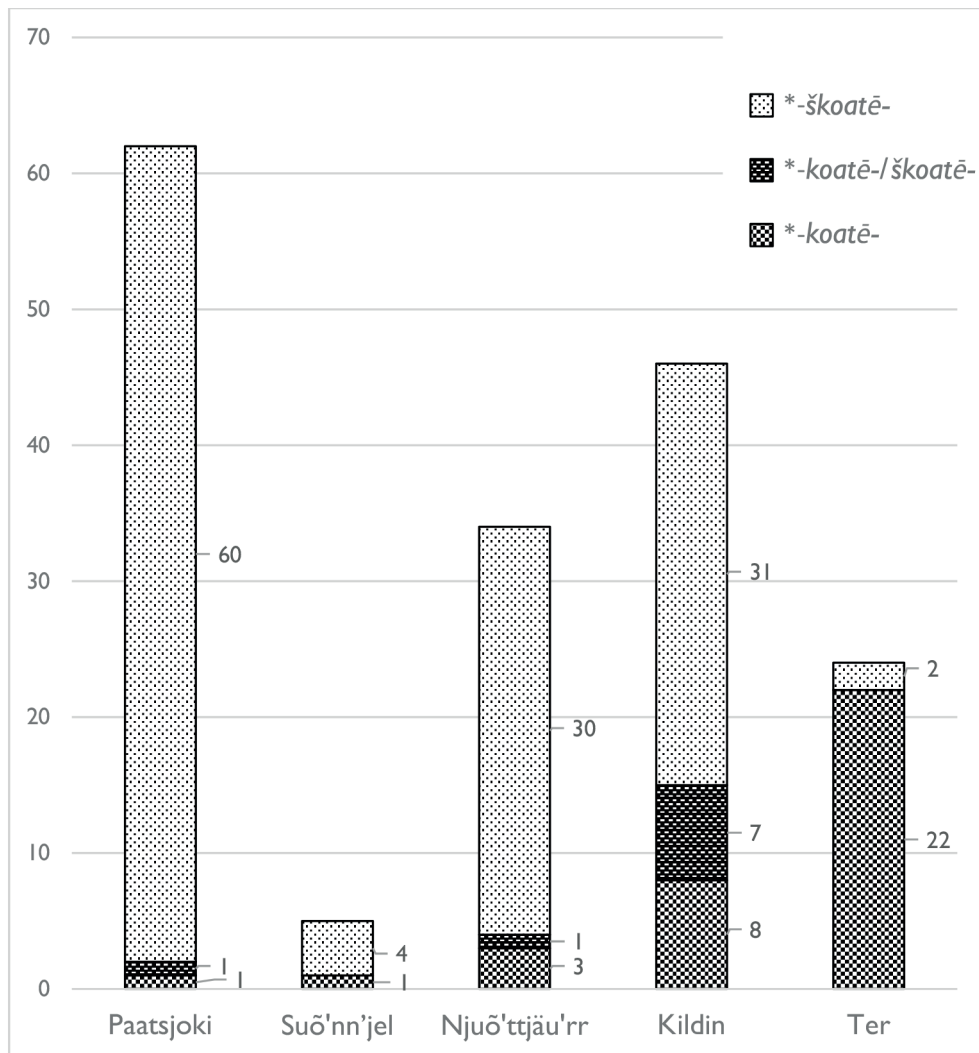


Figure 1. Inchoative suffix variants attached to bisyllabic verb stems in different dialects in KKLS (A–K).

While the proportions of the numbers in KKLS and Szabó data are rather similar, the actual lexemes making up the two data sets overlap only partly. Between dialects, the dispersion is considerable: most of the individual derivatives are attested only from one or two dialects (consider that in the KKLS data, there are altogether 262 mentions of derivatives representing 172 verb bases, mostly distributed among the four dialect areas Sk[P], Sk[N], K, T). Only a few verbs have a widely recorded range, including Sk *je'llevue'tted* (P, S, K, T) ~ *jeä'lšku'e'tted* (P, N, K)<sup>3</sup> 'to start living', *ä'psšku'e'tted*

3. In Szabó's data also Ter Saami: *jelliškēdin* (*aftsiješt*) 'begannen (miteinander) zu leben' (Szabó 1968: 56).

(P, S, N, K) ‘to begin to stink’ and *k̄iõrggneškue’tted* ‘to begin to get ready’ (P, N, K, T) (KKLS: 60, 830, 22, 814, 120).

Especially in those dialects where simple *\*-koatē-* derivatives are rare, they often express some special lexicalized meanings instead of just beginning, e.g. K *jāmmguad̄te<sup>δ</sup>* ‘to faint’ (also T) ← *jāmmē<sup>δ</sup>* ‘to die’ (KKLS: 49). Sk(S) *jie’llevue’tted* and its cognates in Skolt and Kildin Saami mean ‘to settle down, start living (somewhere)’, while the Ter word also often means ‘to keep on living’ in certain narrative contexts (KKLS: 60, 830; Szabó 1987: 95–96). Sk(N) *rämmguē’tted* ~ (P) *rämmvue’tted* ‘to rejoice’ even lacks an evident base verb and seems instead to be derived from the noun *rämm* ‘joy’; Sk(P) *johlvue’tted* ‘to prepare serving’ and its apparent correlate (S) *joohleed* ‘to romp about’ possibly originated independently from Finnish *juhla* ‘feast, party’ (KKLS: 420, 66, 833). In Ter Saami, the inchoative aspect of *\*(š)koatē-* derivatives is commonly overridden by a future interpretation when used in present tense (Szabó 1987: 98–102).

**Inari Saami** uses the *\*-škoatē-* suffix as a neutral inchoative suffix with all kinds of base verbs, while the *\*-koatē-* suffix variant is largely used in subitive or momentary meaning, e.g. *šurragyettiđ* ‘to (suddenly) make a buzz’ (Sammallahti 1977: 193; InLpWb § 608, 4726, 4807.2). The diphthong of the suffixes has shifted from original *\*oa* to the Proto-Saami *\*uo* type, as in *skillâgyettiđ* : PST.3SG *skillâguođij* ‘to (suddenly) chink; crash,’ though variants with *\*oa* have also been recorded, cf. *skillâguattiđ* ‘id.’ (InLpWb § 608, 4261.2).

For a comprehensive data set comparable with the Skolt and Kola Saami data, I have collected all the verbs with these suffixes presented in Inarilappisches Wörterbuch (InLpWb), which comprise 80 derivatives in *-gyetti-/guatti-* and 208 in *-škyetti-/škuatti-*. The *-škyetti-/škuatti-* verbs show uniformly inchoative semantics and represent all types of base stems, even the monosyllabic *leđe* ‘to be’ → *leškyettiđ* ‘to begin to be’ (InLpWb § 2041.2), which seems to be unique among the Saami languages. More than half of the *-gyetti-/guatti-* derivatives are attested in a subitive/momentary meaning (sudden, short, or occurring once), while an inchoative (beginning) meaning is also almost as common. A number of derivatives have been recorded in both senses, e.g. *viccâgyettiđ* ‘to squeak, cheep (once)’ or ‘to begin to squeak, cheep’ (InLpWb § 5534.2). Virtually all of the subitive/momentary and many of the inchoative *-gyetti-/guatti-* derivatives are based on onomatopoeic or generally sound-symbolic stems and usually do not have a formal base verb, but instead have correlate verbs in *-ijdiđ* and verbal nouns in *-ân*, such as *kommâgyettiđ* ‘to boom (once)’ – *komijdiđ* ‘to boom, rumble’ – *kommân* ‘booming, rumbling (n.)’ (InLpWb § 1660). This pattern or derivational paradigm (cf. Štekauer 2014) seems to be rather productive and can be compared to the Finnish expressive verb pattern *kumahtaa* – *kumista* – *kumina* ‘id.’ There are also a couple of translative-inchoative derivatives that could be analyzed as noun-based, e.g. *ávvygyettiđ* ‘to be delighted’, cf. *áávvu* ~ *ávvu* ‘joy, delight’ and *ávvuđiđ* ‘to be happy’ (InLpWb § 107).

The *-gyetti-/guatti-* derivatives are based on bisyllabic strong-grade vowel stems, except for a group based on *-r-*stems, all of which have a verbal correlate in

*-rdiđ* and some also a noun correlate in *-r* (e.g. *skuipergyettiđ* ‘to begin wandering around’; *skuiperdiđ* ‘to wander (alone)’; *skuuiper* ‘a lone animal’ [InLpWb § 4331]).<sup>4</sup> The *-škyetti-/škuátti-* derivatives again, in concord with the Skolt and Kola Saami data, require a weak-grade base stem when attached to a parisyllabic verb, as exemplified by *cogáškyettiđ* ← *coggâđ* ‘to support’, *caháškyettiđ* ← *cakkâđ* ‘to groan’, *šovvoškyettiđ* ← *šohhood* ‘to puff, hiss’ and *skyennidâđáškyettiđ* ← *skyennidâttâđ* ‘to be capricious’ (InLpWb § 200, 202, 4777, 4336). In contrast to the verbs with inchoative semantics, the subitive *-gyetti-/guátti-* verbs can serve as a base for further derivatives, such as *kicâgyettiđ* ‘to creak (once)’ → *kicâgyedettiđ* ‘to make something creak (once)’, *šuddâgyettiđ* ~ *šuddâguáttiđ* ‘to hiss (once/suddenly)’ → *šuddâgyedestiđ* ‘to hiss a little’ and even → *šuddâguáđástállâđ* ‘to hiss a little every now and then’ (InLpWb § 1424, 4797).

Thus, the development of generalizing the *\*-škoatē-* and marginalizing the *\*-koatē-* inchoative suffix, observable in Skolt and Kildin Saami, has only a partial counterpart in Inari Saami: while the *-škyetti-/škuátti-* suffix has become a neutral inchoative suffix usable with all stem types, the *-gyetti-/guátti-* suffix has remained in use with expressive verbs and in this environment has taken up a new function as a subitive/momentary suffix with a productive derivation pattern. The extant *\*-koatē-* inchoatives in Kildin Saami also show an inclination towards sound-symbolic or sound-denoting verbs (e.g. *kōrsguæp̄te*<sup>δ</sup> ‘to start snoring’; KKLS: 865). Finally, it is worth mentioning that the exceptional derivative Sk(N) *rämmguetted* (also P, K) ‘to rejoice’ (← *rämm* ‘joy’) has a close semantic and derivational parallel in the small group of translative-like derivatives with no direct base verb in Inari Saami, which contains verbs denoting a shift into a mental state: SaaI *ávvygyettiđ* ‘to be delighted’, *ilogyettiđ* ‘id.’ (*ávvu = ilo* ‘joy, delight’, *ávvuđiđ = ilodiđ* ‘to be happy, rejoice’; InLpWb § 107, 907), *kimegyettiđ* ‘to get ruttish, in heat’ (*kime* ‘rut, heat’, *kimedid* ‘to be in rut/heat’; InLpWb § 1501), *skyenigyettiđ* ‘to get angry/capricious’ (InLpWb § 4336) and *vyerigyettiđ* ‘to get muddle-headed (reindeer)’ (InLpWb § 5668).

**Pite and Lule Saami:** In contrast to Sammallahti’s (1977: 193) generalization, there seems to be syllable count-based form variation also in the Saami idioms west of North Saami. In Pite Saami, the suffix *-gâhte-* is only attached to bisyllabic and contracted stems (*bassa-t* ‘to wash’ → *bassa-gâhte-t* ‘to begin to wash’), while trisyllabic stems get a longer suffix *-atjgâhte-* (*báhkadi-t* ‘to get warm’ → *báhkad-atjgâhte-t* ‘to begin to get warm’) (Ruong 1943: 219–222; Lehtiranta 1992: 29). Ruong (ibid.) analyzes the latter type as a re-derivation of inchoatives in *-áhtja-* (*báhkad-áhtja-t* → *báhkad-atj-gâhte-t*) and thus the formant *-atjgâhte-* represents a combination of two inchoative suffixes. In Lule Saami, the situation is somewhat similar, although the longer

4. The complete list of these verbs with their original glosses and entry indices in InLpWb: *čuučârgyettiđ* ‘brodelnd zu kochen beginnen’ (418.2), *havdârgyettiđ* ‘brenzlig zu riechen, zu rauchen beginnen; zu dampfen beginnen’ (616.4), *kazârgyettiđ* ‘toben anfangen’ (1124.3), *molârgyettiđ* ‘einmal brummen’ (2486.2), *skuipergyettiđ* ‘anfangen herumzustreunen’ (4331.4), *teibârgyettiđ* ‘zu zappeln beginnen (Fisch im Boot); kurze Zeit zappeln’ (4943.2), *tuohkurgyettiđ* ‘anfangen zu toben, zu ringen’ (5147.2).



suffix *-asjgoahte-* has a sibilant instead of an affricate and is quite sparsely attested (the dictionary of O. Korhonen [2007] only has two examples: *dálkkuhasjgoahtet* ← *dálkkuhit* ‘to be bad weather’ and *rássjodasjgoahtet* ← *rássjodit* ‘to rain heavily [with wind]’; cf. also Kintel 1991: 49). Variants with a connecting vowel *-i-* have also been recorded, as in *lárkatjasjgoahtet* ~ *rárkatjisjgoahtet* ‘to begin separating reindeer’ (Grundström 1946–1954: 395, 831).<sup>5</sup> Comparable to Pite Saami *-áhtja-* (Ruong 1943: 134–137), a more common inchoative suffix for trisyllabic stems in Lule Saami seems to be *-áhtja-* (e.g. *dádjadahtjat* ‘to begin to understand’ ← *dádjadit* ‘to understand’; altogether there are 21 examples in O. Korhonen 2007).

From **Ume and South Saami**, only *\*-koatē-* inchoatives with bisyllabic base stems have been documented. Some examples from Ume Saami: *gálggagáhtiet* ‘to begin to flow’ ← *gálggat* ‘to run, flow’, *gualldduogáhtiet* ‘to begin snowing heavily’ ← *gualldduot* ‘to snow heavily’; and South Saami: *voejegátedh* ‘to start swimming’ ← *vojedh* ‘to swim’. There are some apparent examples of a *\*-koatē-* derivative based on a trisyllabic stem truncated to bisyllabic (SaaS *snijhkiegátedh* ‘to start crying’ ← *snijhkiedidh* ‘to cry’), but usually inchoatives of trisyllabic verbs seem to be formed with SaaU *-áhtja-* (*dájjadáhtjat* ‘to begin to understand’ ← *dájjadit*) and SaaS *-áhtje-/ihtje-* (*valkesáhtjedh* ‘to begin/prepare to set off’ ← *valkesidh*, *gáhkasjihhtjedh* ‘to begin to think that someone has stayed away long’ ← *gáhkasjidh*). The latter suffix combined with inchoative *-j-*, resulting in the suffix *-jahtje-* (Hasselbrink: *-jittj’e-*), can also be used with bisyllabic stems, e.g. SaaS *hajkijahtjedh* ‘to start running’ ← *hajkedh* ‘to run’. (Sources for Ume Saami: Schlachter 1958; Barruk 2018; and South Saami: Bergsland & Magga 1993; Bergsland 1994: 92; Hasselbrink 1981–1985: 179.)

**Old grammars and dictionaries:** According to early grammatical descriptions, the *\*-škoatē-* inchoative with a weak-grade bisyllabic base stem, characteristic of the eastern Saami languages, has also been used as a variant in some North Saami dialects. Leem in his grammar of the mountain dialect of Porsanger (Leem 1748: 283–295) presents the alternative derivatives:

- <Lokkagoaadam> ~ <Logasgoaadam> ‘Jeg begynder at læse’  
[← modern SaaN *lohkat*],
  - <Adnegoaadam> ~ <Anesgoaadam> ‘Jeg begynder at bruge’ [*atnit*],
  - <Lodnogoaadam> ~ <Laanosgoaadam> ‘Jeg begynder at bytte’ [*lotnut*],
  - <Rawegoaadam> ~ <Rawesgoaadam> ‘Jeg begynder at befale’ [*rávvet*]
- (Rask 1832: 132–133, quoting Leem 1748, writes <lokkagådam> and <logasgådam>). For trisyllabic stems, Leem gives the longer suffix variant, as in <Mon Dodbastam> : <Dodbastesgoadaam> ‘Jeg begynder at bekiende’. The sibilant <š> in <-sgoaadam> is peculiar, though, since Leem usually uses the letter combinations <sh> or <shi> for [š]. While it perhaps cannot be completely ruled out that the notation could reflect some

5. Grundström’s above-cited example with *-asjgoahtet* is from Northern Jokkmokk and the one with *-isjgoahtet* is from Central Jokkmokk, so at least any clear north–south dialectal division cannot be inferred, although the few other examples of Grundström containing *-isjgoahtet* (*hurádisjgoahtet* ‘to start humming to oneself’, p. 1336; *állánisjgoahtet* ‘to begin to be ready’, p. 1500) are from Northern Gällivare, which is nowadays usually classified as a Torne Saami (North Saami) dialect.

local pronunciation (cf. e.g. *íššskuđiskò~hte<sup>h</sup>t* ‘to begin to move half galloping’ in the Jukkasjärvi dialect of Torne Saami, where *š* > *s* occurs regularly; Collinder 1949: 275, 289),<sup>6</sup> it is more likely that this is only a matter of inconsistent orthography and the actual pronunciation was [š].<sup>7</sup> The inspection of Leem’s *Lexicon Laponicum* (1768) reveals another kind of pattern: The inchoative derivatives of bisyllabic stems have regularly a suffix in <-goadam> and contracted stems in <-shgoadam> (e.g. <ællegoadam> ← <ælam> ‘lever / vivo’, <addishgoadam> ← <addim> ‘forstaaer – – / intelligo – –’). Trisyllabic stems are treated varyingly in different parts of the dictionary: from the beginning until ca. page 110 there are plenty of inchoatives with the suffix <-esgoadam> (the last one is <bavzhjastesgoadam>), then in pages ca. 127–608 with the suffix <-ishgoadam> (<biettelishgoadam> – <Jollardishgoadam>, ca. 100 words), but after this, the trisyllable-based inchoatives become less frequent, and the whole latter half of the dictionary (after page 841, <Murtotishgoadam>) contains only three derivatives in <-ishgoadam> and two in <-esgoadam>. Thus it seems as if Leem changed his orthographic practice with the last derivative type during the composition work to better correspond to the pronunciation. There is also a clear-cut regularization concerning the derivatives of bisyllabic and contracted stems, which could still both have suffixes with or without <s> according to the 1748 grammar. This likely suggests that the *\*logaškoahēt* type was already dying out in East-Finmark and that the current suffix distributions were being established.

The grammar of Ganander (1743) based on Torne Saami corresponds to the eastern rather than the western varieties of modern North Saami in its distribution of inchoative suffixes (p. 67):

- Bisyllabic stems get <-kådam> (<lågcadt> → <logcakådam> ‘legere’ [*lohkat*])
- Contracted stems get <-skådam> (<laddidt> → <laddiskådam> ‘mittere’ [*sáddet*])
- Trisyllabic stems get <-skådam> (<wifkuodedt> → <wifkuodeskådam> ‘flavefcere’ [*fiskkodit*])
- Quadrisyllabic *-uvva-* verbs get <-skådam> attached to the full or shortened stem (<mätzaidowat> → <mätzaidowas-/mätzaidoskådtet> ‘fylvefcere’ [*meahcáiduvvat*]); cf. Saal *pillášuu-škyettiđ* ← *pillášuđ* : PRS.3SG *pillášuyâ* ‘to be spoiled’ (InLpWb § 3312).

Ganander’s orthographic <sk> apparently stands for pronounced [šk], since a non-word-final [s] is consistently written with a long <ſ>, e.g. p. 68 <låneftam>, <låneftestam> and (above) <wifkuodedt>.

The North Saami grammar of Stockfleth (1840: II:160–161) presents inchoatives in <-goattet> for bisyllabic verbs (<Låkkagoattet>, <Árrogoattet>) and <-šgoattet> for

6. There is also a mention from Kvænangen dialect of Sea Saami about variation *š* ~ *š* ~ *s* in the potential marker (Lagercrantz 1929: 209), but the variant with *s* occurs only in the paradigm of parasyllabic *u*-stems, which leads one to suspect that these exceptional forms have been influenced by the imperative forms with *-us* (cf. ‘to angle’ POT.3SG *vōk<sup>u</sup>us*, POT.3SG *vōk<sup>u</sup>usq<sup>k</sup>* and ‘to be’ IMP.3SG *lē<sup>u</sup>kus*, IMP.3SG *lē<sup>u</sup>kusq<sup>k</sup>*; *ibid.* pp. 209, 203).

7. Note that according to Kemi (1994: 56), the suffixal *št* cluster was also written as <st> in Leem’s work (e.g. <duodastussa>).

longer verbs irrespective of their syllable count (⟨årrostišgoattet⟩, ⟨årrostastišgoattet⟩). While this may somehow reflect the distribution of some eastern North Saami dialects of that time (Stockfleth worked in Vadsø near the Russian border not far from the Skolt Saami area), it should be noted that at least the massive derivative trees at the end of the grammar seem to be partly mechanically construed (there, even the bisyllabic ⟨čuoovggat⟩ gets a ⟨-škoattet⟩ inchoative!), so Stockfleth may have made false generalizations. It is anyway suspicious that all the ⟨-škoattet⟩ derivatives of parisyllabic verbs are formed with a strong-grade stem, contrary to all the data about corresponding derivatives in eastern Saami as well as in Leem's grammar.

The "Swedish Lapp" dictionary of Lindahl and Öhring (1780) contains more than one thousand inchoative derivatives, which follow the pattern later documented from Pite Saami by Ruong (1943): ⟨aitset⟩ → ⟨aitsegåtet⟩ 'to begin to notice'; ⟨ajatallet⟩ → ⟨ajatallegåtet⟩ 'to begin to consider'; ⟨kuostetet⟩ → ⟨kuostetatjet⟩, ⟨kuostetatjegåtet⟩ 'to begin to get cold'. The material also resembles current Ume Saami data except for the type ⟨kuostetatjegåtet⟩. These observations are consistent with the usual claim that the old Swedish Saami literary language and consequently the work of Lindahl and Öhring is largely based on Ume Saami, with features also from Pite and Lule Saami (e.g. Korhonen 1981: 55). Fiellström's grammar (1738: 49) gives similar examples, e.g. ⟨hålegåtet⟩ 'begynna tala' [cf. SaaE *håaledh*, U *hållat* 'to talk'] as well as "southern dialect" forms such as ⟨håleagiet⟩ 'id.' corresponding to the South Saami derivative type *hajkijahjtjedh* 'to start running'.

**Other suffixes:** It should be finally noted that the Saami languages, having a rich system of verbal derivational morphology for expressing lexical aspect, also employ several other derivational suffixes for expressing inchoative (beginning) aspect. In addition to the above-mentioned Pite Saami *-áhtja-* and similar suffixes in other western Saami idioms, commonly used suffixes include *-j-*, generalized as SaaN *-á-* : *-áji-* (*vuodjit* 'to drive' → *vuodját* ~ SaaS *vuajajidh* 'to begin to drive'; SaaN *čierrut*, S *tjearodh* 'to cry' → N *čir'rot* : *čir'roji-*, S *tjörrijidh* 'to begin to cry'); SaaN *-iid-* (*golgat* 'to flow, run' → *golggiidit* ~ SaaI *ku'lgijidid* ~ SaaP *gulgiidit* 'to begin to flow, run'); SaaN *-(a)l-* (*čuoigat* 'to ski' → *čuoigalit* ~ SaaI *čuoig'gáliid* 'to start skiing'; SaaP *hudjat* 'to complain' → *hudjalit* 'to start complaining') (Sammallahti 1989, 2007; Bergsland 1994: 92; Ruong 1943: 228, 230). These suffixes tend to be areally and lexically more or less restricted in the inchoative function, though, and usually also have other possible functions (diminutive, subitive, frequentative, conative, etc.), so the *\*(š)koatē-* suffix appears to be the only one which is primarily used for deriving inchoative verbs throughout the Saami language area.

### 3.2. Mordvin *-kadâ-/gadâ-* ~ *-kâdâ-/gâdâ-*

The Mordvin verb-forming derivative suffix MdE *-kado-/gado-*, MdM *-kadâ-/gadâ-* ~ *-kâdâ-/gâdâ-* functions primarily as a denominal translative suffix, yielding derivatives which denote changing into a quality described by the base adjective, changing into the base noun or getting covered by the base noun (Bartens 1999: 160; Hallap 2000 [1955]: 265). For example (all examples in this section from Erzya):

<i>koža</i> ‘rich’	<i>koža-kadoms</i> ‘to get rich’
<i>ravžo</i> ‘black’	<i>ravš-kadoms</i> ‘to blacken’
<i>valańa</i> ‘smooth, even’	<i>vala-kadoms</i> ~ <i>valań-gadoms</i> ‘to become smooth, even’

These suffixes can also be found in a group of deverbal inchoative verbs (which may have a momentary or subitive nuance). Many of these have a correlate verb with *-na/-ńa/-no/-ńe-* which denote a sound and have a tinge of expressivity:

<i>avař-d’e-ms</i> ‘to cry’	<i>avař-gado-ms</i> ‘to begin to cry’
<i>tšara-ms</i> ‘to spin’	<i>tšara-kado-ms: pŕam tšarakadś</i> ‘my head began to spin (swim)’
<i>piž-ńe-ms</i> ‘to yell’	<i>piže-kado-ms</i> ‘to begin to yell’

In modern Mordvin languages, the suffix *-kado-/gado-* is highly productive as a denominal translative verbalizer (Hallap 2000 [1955]: 265; cf. the hundreds of derivatives in Luutonen & Mosin & Shchankina 2004: 454–464). The form variants have a distribution dependent on the preceding sound: *-kado-* attaches to vowels and voiceless consonants, while *-gado-* attaches to voiced consonants (usually the consonant following the second-syllable vowel; the third-syllable vowel is then displaced by the suffix). The adjective suffix *-na/-ńa* is also left off of *-kado-/gado-* derivatives; cf. *řipa-ńa* ‘flabby, wilted’ → *řipa-gadoms* ‘to wilt, wither’. (Hallap 2000 [1955]: 274–275.)

Derivatives with similar translative meaning are also formed with longer suffixes: 1. MdE *-lgado-*, M *-lgâdâ-*; 2. MdE *-škado-*, M *-škâdâ-* and 3. MdE *-škado-*, M *-škâdâ-*. The suffix with preceding *l* only attaches to vowel stems and in this position is, according to native speakers Olga Erina and Natalia Deviatkina (pers. comm.), actually the preferred translative suffix in productive use (instead of *-kado-*) at least in modern Erzya. The suffix variants with preceding *ś* or *š* only occur in a limited number of verbs. Examples include:

<i>pši</i> ‘hot’	<i>pši-lgadoms</i> ‘to become hot; to sweat’
<i>ašo</i> ‘white’	<i>ašo-lgadoms</i> ‘to become white’, cf. <i>ašola</i> ‘whitish’
<i>štapo</i> ‘bare, naked’	<i>štap-škadoms</i> ‘to become bare, naked’
<i>seń</i> ‘blue’	<i>seń-škadoms</i> ‘to become blue’

(Bartens 1999: 160–161; Hallap 2000 [1955]: 283–289).

The intransitive derivatives in *-kado-/-gado-* have transitive correlates with the suffix MdE *-kavto-/-gavto-*, M *-kaftâ-/-gaftâ-* ~ *-kâftâ-/-gâftâ-*. When this suffix is used denominally, its meaning is factitive (corresponding to the translative derivatives in *-kado-/-gado-*), and when used deverbally, it is causative (corresponding to the inchoative derivatives in *-kado-/-gado-*). The suffixes with a preceding *l, ś, š* have corresponding transitive correlates as well. Examples include:

<i>koža</i> ‘rich’	<i>kožakadoms</i> ‘to get rich’	<i>kožakavtoms</i> ‘to make rich’
<i>avařdems</i> ‘to cry’	<i>avařgadoms</i> ‘to begin to cry’	<i>avařgavtoms</i> ‘to make cry’
<i>ašo</i> ‘white’	<i>ašolgadoms</i> ‘to become white’	<i>ašolgavtoms</i> ‘to make white, bleach’
<i>štapo</i> ‘bare, naked’	<i>štapškadoms</i> ‘to become naked’	<i>štapškavtoms</i> ‘to undress, to strip’

(Bartens 1999: 161; Hallap 2000 [1955]: 290–292).

### 3.3. Veps-Ludic *-gande-/-škande-* ~ *-gade-/-škade-*

The derivational suffixes *-gande-* and *-škande-* occur in the whole speaking area of Veps and Ludic except for Northern Ludic, where the corresponding suffixes are *-gade-* and *-škade-*. The front vocalic variants *-gände-*, *-škände-*, etc. are rare due to weak or missing vowel harmony in these idioms. (Turunen 1973: 433.) Both derivative types have a similar conjugation:

	Central Veps		Northern Ludic (Haljärvi)	
	‘to begin to fear’	‘to begin to drive’	‘to begin to fear’	‘to begin to come’
INF	<i>varegata</i>	<i>ajaškata</i>	<i>varegata</i>	<i>tuleškata</i>
PRS.1SG	<i>vareganden</i>	<i>ajaškanden</i>	<i>varegaden</i>	<i>tuleškaden</i>
PRS.3SG	<i>varegandeb</i>	<i>ajaškandeb</i>	<i>varegadou</i>	<i>tuleškadou</i>
PRS.3PL	<i>varegatas</i>	<i>ajaškatas</i>	<i>varegatau</i>	<i>tuleškatau</i>
PST.3SG	<i>varegaňž</i>	<i>ajaškaňž</i>	<i>varegaž</i>	<i>tuleškaž</i>
(Ludic from Virtaranta 1986: 159, 176; Veps paradigms construed from the samples in Turunen 1973.)				

The derivatives are inchoative, denoting the beginning of the action or state expressed by the base verb. A future time reference is often implied, sometimes even as a primary interpretation (*not ĭ rippu aidal, pigā rippuškanđeb* ‘the seine net is not hanging on the fence, soon it will be hanging’; Kettunen 1943: 453). Occasionally the meaning is ‘be about to’ (*sä ĭtšę unohtaškaňžid* ‘you were about to forget yourself’; Kettunen 1943: 454).

The suffix variant with *š* seems to be fully productive, while the *š*-less *-ga(n)de-* is attested in a restricted number of verbs and typically attaches to verb stems ending

with *ai/äi* as well as some *i-* and *u-*stems. As a rule, the stem-final *ai/äi* or *a/ä* changes into *e* before the suffix: *varai-ta* → *vare-gata* ‘to begin to fear’, *heläi-dä* → *hele-gata* ‘to begin to tinkle’, *el’ä-da* → *el’e-gata* ‘to begin to live’ (exceptions: *era-gata* ‘to part’, *häda-gata* ‘to get alarmed’). Also, in Ludic, the stem-final *e* usually changes into *i* before the *-škande-* suffix: *lähte-* → *lähti-škande-* ‘to begin to leave’, *näge-* → *nägi-škande-* ‘to begin to see’. (Turunen 1973: 431–439, cf. Tunkelo 1943: 256.)

The derivational bases for *-ga(n)de-* are often expressive verbs, and when not, the meanings tend to be translative as much as inchoative, and have causative correlates in *-ta-* or *-goit(a)-*. It is noteworthy that the *-goit(a)-* causatives, like *-ga(n)de-* inchoatives, cause a stem vowel change of *a(i)/ä(i) > e*:

*levi-gata*                      cf. *levi-tada* (VeC; Turunen 1973: 435)  
‘to become broader’        ‘to make broader’

*güüdu-gata*                cf. *güüdu-tada, güüdu-goitta* (VeC; ibid.)  
‘to begin to gain speed’    ‘to hasten’

*robe-gata*                cf. *robe-gō’ita* ← *robā’ita* (VeS; ibid., Lehtinen 1985: 75)  
‘to begin to rustle’        ‘to make rustle’        ‘to rustle’

Mixing into other verbal paradigms can sometimes be observed (e.g. VeC Voilahti *virigatat* [pro *virigandet*] ‘you begin to light [a fire]’; Turunen 1973: 437) as well as combinations of two inchoative suffixes (Lu Naamoila *meš’ humegāškaqž* [*hume-gaž* + *-škanž*] ‘the forest began to sigh’; Turunen 1973: 434). There are also examples from Haljärvi Ludic, where the inchoative suffix is accompanied by an automative-reflexive *-u-*: *levi-gand-u-da* ‘to begin to spread’, *virī-gand-u-da* ‘to be kindled’ (Virtaranta 1986: 132–133). (Note that these forms have *-gand-* with *n*, although the regular inchoative suffixes in this dialect are *-gade-/škade-*!)

#### 4. History and relatedness of the suffixes

The background and possible interrelations of the suffixes discussed here have been addressed with different kinds of explanations by previous scholars:

##### 1. Agglutination of several suffixal elements:

- a) The Veps and Ludic suffixes are based on the Finnic translative (?) element *-ka/-kã-* found in such derivatives as Livonian *ädägõb* ‘is alarmed’ and possibly Finnish *hätääntyä* ‘id.’ (? < *\*hätä-γä-nte-*, cf. Fi. *hätä*, Liv. *ädã* ‘distress, trouble’). – Setälä (1899); Posti (1942); Zajceva (1978); Lehtinen (1985).
- b) The Veps and Ludic suffixes are connected to the Finnic nominalizer suffix *\*-ek(e)*, present also in Veps-Ludic adverbs such as *elegil* ‘alive; maintained by smb.’ (cf. *elä-* ‘to live’). – Turunen (1973).

c) The initial component of the Mordvin suffix is possibly cognate with Finnic *-ka-/kä-* found in Livonian *-gõ-*, Veps *-gande-* as well as the Mari translative suffix going back to *\*-ka-/kä-* in e.g. *paðâr-γaš* ‘to become brittle’ (cf. *paðâra* ‘brittle’). – Hallap (2000 [1955]).

## 2. Change of function:

d) The Veps suffix is originally frequentative in meaning, possibly related to the frequentative suffix *-skende-* ~ *-škende-*. – Kettunen (1922, 1943).

## 3. Cognation of the entire suffix:

e) The Mordvin suffix *-gadâ-/gâdâ-* is possibly cognate with Ludic *-gade-*; the longer suffix variant *-škadâ-/škâdâ-* may correspond to Ludic *-škade-/škâde-*. – Hallap (2000 [1955]).

f) The Mordvin suffix is possibly cognate with Finnic *\*-kada/-kädä-* in Fi. *pelkään* ‘I am afraid’, Est. *vihkan* ‘I hate’ (? < *\*vihkaðan*). – Hallap (2000 [1955]).

g) The Veps-Ludic and Saami suffixes are cognates (the *n* in Veps *-gande-* is secondary). – Sammallahti (1977).

h) The Mordvin and Saami suffixes are cognates (?). – Sammallahti (1998).

## 4. Borrowing of the suffix:

i) The Veps and Ludic suffix has been borrowed from Saami. – Tunkelo (1946).

j) The Saami suffix has possibly been borrowed from Veps-Ludic. – Turunen (1973).

In the following section, I will discuss the arguments concerning different theories of origin for each suffix family. I will start with the Veps-Ludic suffixes, which have so far been the most thoroughly researched.

### 4.1. The background of Veps-Ludic *-gande-/škande-* ~ *-gade-/škade-*

The Veps-Ludic inchoative suffixes *-ška(n)de-*, *-ga(n)de-* have been the subject of two in-depth articles by Aimo Turunen (1973) and Tapani Lehtinen (1985). Turunen presents an extensive collection of this type of derivatives sorted according to the stem vowel, and argues that since a frequent class of *-ga(n)de-* derivatives has a base verb with stem vowel *a(i)/ä(i)* which changes into *e* in the derivative, the inchoative suffix has a connection to (is based on?) the nominalizer suffix *-ek* : *\*-eke-*. This claim is supported by a group of adverbs formed with the said nominalizer from the same verb stems which occur in the inchoative verbs (e.g. *elegil* ‘alive; maintained by smb.’, cf. *elä-* ‘to live’ and *elegata* ‘to begin to live’). (Turunen 1973: 436–437.) The connection with *-ek(e)* is, however, rejected by Lehtinen (1985: 65), who points out that only four distinct verb stems have these adverb correlates, and moreover, one would expect the inchoative suffix to contain the vowel *e* (*\*-gende-*) instead of *a*, if it was based on *\*-eke*. Instead, Lehtinen supports the idea already put forward by Setälä (1899: 99–100) that the Veps *-gande-* is the historically primary suffix variant and contains the Finnic suffix *\*-ka-*, which is reflected in the Livonian translative verbalizer *-gõ-*. The latter component would be the frequentative suffix *\*-nte-* (cf. Veps *jokse-nde-n* ‘to run around’ PRS.1SG). The original function of the combined suffix was supposedly

that of a denominal translative verbalizer, similarly to the Livonian one, but it later got deverbal usage based on such ambiguous derivatives as *tora-gata* ‘to begin to quarrel’, cf. *tora* ‘quarrel’ or *tora-ta* ‘to quarrel’. Translative and inchoative semantics come close to each other, as both denote some kind of a change: moving into a new state or action. (Lehtinen 1985: 66–67.)

On the basis of the Russian translations of different inchoative derivatives (mostly from Zajceva 1978 and Zajceva & Mullonen 1972), Lehtinen concludes that the Veps *-gande-* derivative type has developed into its present form following the model of the Russian verbal semantic system. The *-gande-* verbs seem to correspond to Russian inchoative verbs with perfective aspect (usually with the prefix *za-*). These verbs are often of expressive nature and emphasize the beginning of an action as an event of its own, in contrast to the imperfective inchoatives, which are formed with an auxiliary verb *načat’* or *stat’* and describe the beginning of an action as a phase of a longer process. The latter ones have a semantic correspondence to Veps *-škande-* inchoatives. Notably, the *-škande-* suffix and the Russian imperfective inchoative type are also fully productive, whereas Veps *-gande-* and the Russian perfective inchoatives are not. (Lehtinen 1985: 74–78.)

A similar development is observable in Karelian, where the reflexive, passive and translative verb suffixes *-utu-/yty-* and *-vu-/vy-* have been taken into an inchoative use (e.g. *heleytyö* ‘to begin to jingle’, cf. *helissä* ‘to jingle’; *kiljevyyö* ‘to begin to squeal’, cf. *kiljuo* ‘to squeal’; *elevyö* ‘to revive; to begin to live’, cf. *eleä* ‘to live’). Also these verbs usually have perfective inchoatives as their Russian equivalents. Many of them can be interpreted as translative as well as inchoative (cf. e.g. *heleytyö* with *helie* ‘bright; clear’), and Lehtinen (1985: 73) supposes that these kinds of correlations have also led to the semantic development from translative to inchoative in Karelian. The frequent change of stem vowel into *e* before the suffixes probably originates from derivatives based on *\*-eða* adjectives (*helie* < *\*heleðä* etc.; Lehtinen 1985: 73–74). It should be added that the “satellite vowel” *e* before the Veps *-gande-* suffix may at least partly have a similar background, although there are other possible factors such as the analogy of the semantically similarly change-oriented translative verbal suffix *-(e)ne-* and adjectival comparative suffix *-mpV*, which both also have the property of changing the preceding stem vowel *a/ä* into *e* (e.g. Fi. *kova* ‘hard’ → *kovene-* ‘to become hard’, *kovempi* ‘harder’).

The preceding sibilant *š* in the suffix variants *-škande-/škade-* have been explained as a loan from Saami on the one hand, and as a Finnic suffixal component on the other. As it seems likely that the *-gande-* suffix is a Finnic-internal development, the loan hypothesis can be rejected for the part of the *-škande-* variant as well. For a language-internal explanation, Turunen (1973: 449–450) proposes that the *š* originates from the conditional mood marker *-iš(i)*; the conditional stem as a base for the derivatives would also explain the occurrence of *i* in place of the stem vowel *e*. There is, however, morphological discrepancy, for instance in the Central Veps area where the stem vowel and the *i* are distinctly preserved in the conditional forms (*punoizš* ‘would twist/plait’, *lähteizš* ‘would go’), but the inchoatives do not contain an *i* (*punoškandob*,



*lähteškandeb*) (ibid.). More importantly, the combination would be morphotactically odd — derivational, i.e. word-forming suffixes, do not attach to mood markers — and the semantic or functional motivation remains vague (Lehtinen 1985: 80). Lehtinen (1985: 80–81) offers a better explanation based on expressive-continuative verbs in *-iže-* (: *-iš-*), for example Ve. *värišta* : *väriže-* ‘to tremble, shiver; to weep’, which would have made a continuative(-inchoative) derivative *\*heliš-kande-*. Semantically, these verbs are close to the base verbs of the most productive Russian *za-* inchoatives, and after the Russian model they would supposedly have been favored bases for derivation when the *-gande-* suffix was beginning to gain deverbal use. This presupposes, though, that the *-gande* suffix was once attached to the consonant stem, contrary to its current use. The change of the stem vowel from *e* to *i* before *-ška(n)de-* in Ludic and Northern Veps is, according to Lehtinen (1985: 81), a secondary phenomenon, based on the fact that a suffixal *š* is regularly preceded by an *i* (due to the sound law *is > iš*), which, for its part, regularly replaces the stem-final *e*; the sequence *eš* is thus virtually non-existent. Therefore the combination of stem-final *e* + suffixal *š* gets a “surface-phonemic” realization as *iš* even if the *š* of the suffix is historically analogical.

All in all, Lehtinen’s account on the background of the Veps inchoative suffixes is reasonably well argued, and the hypothesis of the contact-induced emergence of derivational inchoatives in Veps, Ludic and Karelian is in accordance with the fact that these are the only Finnic languages with an extensive system of morphological inchoative formation and at the same time those which have had the most intensive contacts with Russian, where the aspectual inchoatives are found as established categories (cf. Lehtinen 1985: 66). A comparable sign of Russian influence is that Veps also extensively applies frequentative and momentary suffixes to express imperfective vs. perfective aspect (see Puura 2010). The combined translative suffix *\*-kA+nte* is probably an Old Veps innovation (reflected also in Livvi *huriendu-* ‘to begin to buzz’ < *\*huregantu-*; Lehtinen 1985: 63; cf. Setälä 1899: 86). It is not impossible that the Finnish translative derivative type *hätäntyä* (?← *hätänte-* < *\*hätäyante-*, cf. Agricola ⟨rupeis hätendemen⟩) reflects the same *\*-kAnte-* suffix, which would then date back to common Northern Finnic, although these derivatives have been reconstructed with *\*-δA+ntU* or *\*-δe+ntU* rather than *\*-γA+nte* suffixes in works after Setälä (cf. Hakulinen 1979: 279, 302). The transitive correlate type of *virigata* ↔ *virigoita* seems to contain the same *\*-ka-* element (*\*-koitta-* < *\*-ka+itta-*); the transitive type also occurs in Votic, e.g. *sōizagoittaa* ‘to bring to a stop’ ← *sōisōa* ‘to stand’ (cf. Setälä 1899: 88). The original short Finnic translative *\*-kA-* reflected in Livonian *ädāgōb* ‘is/becomes alarmed’ (?\**hätä-kä-pi*), *vī’egōb* ‘is angry, sulks’ (?\**viha-ka-pi*) may also have cognates in Mari translative *-γa-* and the initial part of the Mordvin translative-inchoative *\*-kadā-/\*-kādā-* etc. The same *\*-ka-* suffix may also be reflected in the Saami translative suffix *-gi-t*, e.g. SaaN *bahčagit* ‘to become bitter’ ← *bahčča* ‘bitter’ (< *\*-nk-* ?< Pre-Saami *\*-m(i)+kA-*).

The Northern Ludic suffix variant *-gade-* clearly represents a secondary development based on the consonant stem forms of the paradigm: the regular *-gande-* paradigm forms PRS.3PL *varegatau*, INF *varegata* ‘to begin to fear’ are formally parallel to

e.g. PRS.3PL *langetau*, INF *langeta* ‘to fall (down)’, from which we get PRS.1SG *langeden*, PRS.3SG *langedou* as an analogical model for PRS.1SG *varegaden*, PRS.3SG *varegadou*. Even in some *-gade-* dialects, the *n* is still preserved in past tense forms such as *vareganž* ‘id.’ PST.3SG (Turunen 1973: 450). The opposite assumption of *-gade-* being the original form and *-gande-* being analogical (Sammallahti 1977: 192) is not plausible, considering the wide coverage of *-gande-* in Veps-Ludic dialects in comparison to *-gade-* in the compact Northern Ludic area, and the apparently sporadic nature of the cited examples of secondary *-n-* such as *rubeta* : *rubendab* pro *rubedab* ‘to begin’ INF : PRS.3SG.<sup>8</sup>

#### 4.2. The background of Mordvin *-kadê-/gadê- ~ -kâdê-/gâdê-*

The Mordvin *\*-kadê-*, *\*-kâdê-*, etc. suffixes have been most thoroughly examined by Hallap (2000 [1955]) in his study of Mordvin verbal derivation. The main dialectal variants equal Proto-Mordvin *\*-kad(ê)-/\*-gad(ê)- ~ \*-kâd(ê)-/\*-gâd(ê)-* (identical to modern Moksha forms). The variants can be reconstructed as Pre-Mordvin *\*-kati-*, or possibly *\*-kata-*,<sup>9</sup> which would regularly result in the Proto-Mordvin suffixal vowel combination *a-ê* after second-syllable PMd. *\*ê* and *ê-ê* after second-syllable *\*a* (cf. Hallap 2000 [1955]: 55, 277–278; Bartens 1999: 69–70; Ravila 1929: 119). Different vowel variants would then have been generalized in different dialects.

As the Ludic *-gade-/gâde-* suffix is clearly a product of late analogy, its etymological comparison with the Mordvin suffixes can be rejected. Also the comparison with Estonian *vihkama* ‘to hate’ and *salgama* ‘to hide, keep secret’ is dubious, since these verbs probably do not go back to Proto-Finnic *\*-kaða-*, but got their *k/g* in an analogical shift to a gradation paradigm (other Finnic idioms have equivalents of Finnish *vihaa-*, *salaa-*); Fi. *pelkää-* ‘to be afraid’ might be the only verb actually reconstructable to Proto-Finnic *\*-kaða-/kâdä-*,<sup>10</sup> and even here the suffix has no clear function in relation to the underived verb (cf. e.g. North Saami *ballat* ‘id.’ < PU *\*peli-*). A more credible solution is to analyze the Mordvin *\*-kadê-/kâdê-* as a

8. For example, in Kettunen’s Veps and Ludic lexical materials (VVS), there are 60 entries of verbs with conjugation *-ta* : *-ndan* (of 28 distinct verbs, from 9 localities), including no single instance of an apparent paradigm shift from *-ta* : *-dan*. The conjugation data of the *-ta* : *-dan* verbs (164 entries) also contain no indication of such variation. Neither does Tunkelo mention this kind of developments in his extensive treatment of Veps historical phonology (1946: esp. 362ff.).

9. Like Hallap (2000 [1955]: 278) notes, *\*-kata-* after second-syllable *\*a* would strictly, according to Ravila’s (1929: 119) rule, become *\*-kâda-*, but parallel cases for preserved fourth-syllable suffixal *\*a* are lacking, so *\*ê* might as well be regular in this position.

10. Another candidate is Fi./Ing. *perata* : *perkaa-* ‘to clean (fish, berries); to clear (forest); to weed’ ~ ?Est. dial. (Wiedemann) *põrata* : *põrgan*, though the Kar. *perkoa*, Lu. *pergada* forms reflect the suffix *\*-ka-* instead of *\*-kaða-*. Fi. *hylätä* : *hylkää-* ‘to leave, desert’ (*\*hylkäidä-*: Ing. *hylkäjä-*, Lu. *hülgäitä*, Ve. *hülgäita*) and *karata* : *karkaa-* ‘to jump, dance; to run, escape’ (*\*karkaidä-*: Ing. *karkaja-*, Lu./Ve. *kargaita*) reflect *\*-kaidä-* instead of *\*-kaða-*; as for the innovative Finnic derivational suffix *\*-aidä-/\*-äidä-*, see Lehtinen (1979). Fi. (mostly eastern dial.) *selätä* : *selkää-* ‘to search the nets without drawing them in; to repair the top (“back”) of a fence, etc.’ derives its *-kä-* element from the base noun *selkä* ‘back’. (Distributions and meanings from SSA and SKES s.v. *selkä*.)

compound suffix, where the initial component is equal to Livonian translative *-gõ-* and the initial part of Veps *-gande-* (< PU *\*-ka-/kã-*) as well as their possible cognate suffix in Mari (cf. Hallap 2000 [1955]: 279; Lehtinen 1985: 64). The latter component would then stem from one of the widely and diversely used Mordvin verb derivational suffixes MdE *-do-/d'e-*, M *-dê-/d'ê-* (< PU *\*-te-*) or MdE *-da-/d'a-/do-/d'e-*, M *-da-/d'a-/dê-/d'ê-* (< PU *\*-ta-/tã-*) (Hallap 2000 [1955]: 101–122, 282).

In this compound suffix scheme, we still have a couple of phonological peculiarities to explain. Firstly, the suffix-initial *\*k* should by regular sound laws have been developed into a Proto-Mordvin fricative (*v* or *j*) intervocalically, but instead we have *-k-* after vowel stems. This could be explained as analogy to the regular suffix variant after a voiceless consonant; possibly there was an attempt to keep the suffix distinct from the frequent (reflexive-passive) *-vV-* and (frequentative) *-jV-* derivational suffixes. Secondly, the Pre-Mordvin suffix *\*-kati-* or *\*-kata-* would supposedly have had a front-vocalic allomorph *\*-käti-* or *\*-kätä* respectively, which would have yielded PMd. *\*-käd(ə)-/\*-gäd(ə)-* (?~ *\*-ked(ə)-/\*-ged(ə)-*) for use after front-vocalic stems and palatalized consonants, in accordance with the usual Proto-Mordvin vowel harmony. Still, only back-vocalic allomorphs of this suffix occur,<sup>11</sup> which is quite unique; remarkably, only the factitive-causative *\*-kaχt(ə)-/\*-kêχt(ə)-*, etc. suffix behaves similarly (cf. Hallap 2000 [1955]: 276, 290–292).<sup>12</sup> A Proto-Mordvin leveling in favor of the back-vocalic variants must thus be assumed.

The phonotactic peculiarities mentioned above could be seen as an indication of an alternative origin of the suffix, namely, suffixation from an independent, back-vocalic verb. To explain both of these peculiarities, the suffixation process would then not have been fully undergone at the time of the fricativization of intervocalic *\*k*, but would have been developed far enough at the time of the suffixal *\*a > ê* change to account for the vowel variants (cf. Hallap 2000 [1955]: 282–283). It is not clear whether this scheme is chronologically viable. On the other hand, there is such a striking parallelity between the intransitive *\*-kad(ə)-/\*-gad(ə)-/\*-käd(ə)-/\*-gäd(ə)-* verbs and the corresponding transitive verbs in *\*-kaχt(ə)-/\*-gaχt(ə)-/\*-kêχt(ə)-/\*-gêχt(ə)-*, the latter of which most probably go back to a combined suffix from Pre-Mordvin *\*-ka-/kã-* and *\*-kta-/ktã-*, that an analogical suffixal background also for the former seems likely (Hallap 2000 [1955]: 283, 293).<sup>13</sup> Also, no such independent verb has been

11. There are a couple of examples of Moksha *-gäd(ə)-* and *-akäd(ə)-*, which seem quite recent with their mixed vocalism. If MdM *šérǵed'əms*, E *šérǵed'ems* 'to cry out; to call' contains the same suffix, this would be a unique example of a suffixal element with PMd. *\*ε* (cf. Hallap 2000 [1955]: 271, 274, 276–277). Another case might, though, be MdM *pšked'əms* ~ *pəške:d'əms*, E *pškad'ems*, etc. 'to utter, say', provided that this represents the same derivative as E *piškadoms* and *pižakadoms* 'to cry out, shout', cf. E *pižnems* 'to shout'.

12. There is also at least one Common Mordvin suffix which uniformly has a front-reduced vowel independent of the phonological environment: the frequentative *\*-šə-* (Hallap 2000 [1955]: 235–236).

13. There have been attempts to analyze the *\*-kaχt(ə)-* suffix family as derivatives based on the *\*-kad(ə)-* verbs, but the assumed development in lines of *\*-kad + \*-χtê > \*-katχtê > \*-kaχt(ə)-* would be totally unexpected, since the consonant cluster *-tχt-* has in other words either been preserved (in some Erzya dialects) or developed into *-tft-* (in Moksha) or *-st-* (in other Erzya dialects) (Hallap 2000 [1955]: 293).

pointed to which would be both phonologically and semantically a suitable source for the assumed suffixation. The verb *kadoms* ‘to leave (behind)’ would fit phonologically, but it would not be semantically plausible to assume it to be the primary source of the translative-inchoative suffix family, since the suffixed verbs are intransitive whereas *kadoms* is a transitive verb, like the majority of its underived cognates (e.g. SaaN *guođđit*, Mari *kođem*, Hung. *hagy* ‘id.’; cf. SSA s.v. *kadota*). At the most, we could perhaps suppose that certain uses of the verbs MdE *kadoms*, M *kadâms* ‘to leave’ and E *kadovoms*, M *kadâvâms* ‘to be left’ have had a supporting analogical influence to the establishing of the post-vocalic *\*-kadâ-* suffix variant; cf. e.g. E *čavo kadoms* ‘to leave empty, deserted’, *čavo kadovoms* ‘to be left empty, deserted’ and *štapokadovoms* ~ *štapo kadovoms* ‘to get naked; to be left naked’ (MdWb s.v. *čavo, štapo*).

As for the origins of the suffix variants *-lgado-/-škado-/-škad-*, the initial consonants have probably been abstracted from base stems with *-l, -ś, -š*, such as MdE *ašo* ‘white’, *ašola* ‘whitish’ → *ašolgadoms* ‘to become white(r)’, M *valaža* ‘slippery’ → *valaškâdâms* ‘to become slippery’ and E *šijaža* ‘silvery’ → *šijaškadoms* ‘to become silvery’ (Hallap 2000 [1955]: 285; Bartens 1999: 160–161).

### 4.3. The background of Saami *-(š)goahti-*

As the inchoative verb derivation suffix SaaN *-goahti-* and its cognates are found in all current Saami languages, the suffix can justifiably be derived from Proto-Saami (*\*-koatē-*). Above we have concluded that the Veps-Ludic translative-inchoative suffixes *-gande-*, *-škande-*, etc. are the result of semantic recategorization of a suffix cluster, carried out in the Vepsian branch of Finnic under the influence of Russian. Against this background, the possible Vepsian loan origin of the Saami *-(š)goahti-* suffix (proposed by Turunen 1973: 450) can be excluded on chronological grounds: According to current datings, the dispersal of Proto-Saami to the current Saami-speaking areas must have taken place during the first centuries CE, whereas the independent development of the Ladogan, and consequently the Vepsian branch of Finnic did not begin until ca. 700 CE, and neither did the Slavic contacts (Aikio 2012b: 104; Kallio 2014: 164–165). The connection is also phonologically poorly justified. Chronologically there is a slight possibility that the eastern Saami *-š-* element could partly reflect early Vepsian influence on eastern Saami idioms that were once located further south in the neighborhood of the Veps, but the borrowing of this kind of a co-affix would in practise presuppose the borrowing of larger items, derived lexemes in the first place, of which we have no evidence in this case.

Sammallahti (1977) has proposed that the Saami and Veps-Ludic inchoative suffixes go back to a common Pre-Saami-Finnic form *\*-(š)kota-*. To achieve the common reconstruction, he assumes that the Ludic *-(š)kade-* suffix is primary and the Veps-Ludic *-(š)kande-* is secondary, citing other cases of secondary, analogical *n* in Veps such as *rubeta* : *rubendab* (pro *rubedab*) ‘to begin’ INF : PRS.3SG. In this case, however, it is far more likely that the *n*-less forms are secondary, since they only

occur in Northern Lüdic, where the *n* can still be observed e.g. in past tense forms such as *varegañž* (see above). As to the vowel correspondence, Sammallahti refers to the group of words exhibiting Saami *oa-ē* ~ Finnic *a-e*, such as SaaN *čoalbmi* ~ Fi. *salme*- ‘sound, strait’, which Aikio (2015) has recently shown to be a regular correspondence of words in PU *\*a-i*. The hypothetical (West-)Proto-Uralic suffix would then be *\*-kati-*. As the consonantism of the Veps-Lüdic suffixes cannot be credibly derived from this form and there is another, formally and semantically satisfactory explanation for them involving the Finnic suffixes *\*-ka-/-kä-* and *-nte-*, we should dismiss the reconstruction for the part of Veps-Lüdic. The Mordvin translative-inchoative suffixes *\*-kad(ə)-*, *\*-kâd(ə)-*, etc. can, however, be reconstructed to PU *\*-kati-(-/kâti-?)* or possibly *\*-kata-(-/kâtä-?)*, with the reservations discussed in Section 4.2. Sammallahti later (1998: 92) revised his reconstruction of the Saami suffix to Finno-Volgaic (≈ West-Uralic) *\*-kata-/-kâtä-* (without further explanation), which points to an etymological equation with the Mordvin suffix family treated here. That reconstruction is, however, incompatible with the phonological shape of the Saami suffix, both in the traditional and in Aikio’s framework. Thus, *\*-kati-* would be a tentative common reconstruction for the Saami and Mordvin suffixes, but not an unproblematic one.

The main problem in analyzing SaaN *-goahti-* as a descendant of a (West-)Proto-Uralic suffix lies in its phonotactics: the diphthong *oa* does not otherwise occur in non-initial syllables of current Saami languages. If there was a supposed Pre-Saami *\*-kati-* as a normal suffix, we would expect developments such as *\*meni-kati-m* > PSaa. *\*meñegādeṃ* > *\*meñegeadeṃ* > SaaN *\*\*mannageađan* ‘go-INCH-1SG’. A suffixal labial vowel would not yield *oa* either in modern Saami. The Proto-Saami non-initial long labial vowel, (Middle) Proto-Saami *\*ō*, has in the unstressed second syllable developed into *ō* or further *uo* or *u* (SaaN *u*) in other Saami varieties except for Skolt and Kola Saami and the southmost South Saami, where it has been illabialized into *ā* (Sammallahti 1998: 24, 29). In a secondary-stressed position, usually the third syllable, the vowel has remained long (*uo*) in southern South Saami and shortened to *u* in other idioms (e.g. SaaS [S] *baanahtoevedh* ~ [N] *baanahtovvedh*, SaaL *báneduvvat*, SaaN *bánehuvvat*, SaaSk *pää’ntööväd*, SaaK *pāñxóvvv<sup>δ</sup>* ‘to become toothless’). The only bound morphem, which has a secondary-stressed *uo* in all Saami languages, is the adjective-nominalizer SaaN *-vuohta* (< PSaa. *\*-vuote*), which is customarily taken to be an affixed loan from Proto-Finnic *\*vuote* (> Fi. *vuosi* ‘year’).<sup>14</sup> The Saami suffixes *-goahti-* and *-vuohta* share the phonotactic peculiarities that they always take the secondary word stress on their first syllable and have an abnormal labial diphthong in that position, which is why they have often been described as compound-like elements, despite their otherwise suffix-like behavior (e.g. Nielsen 1979 [1926]: 248, Lehtiranta 1992: 29–30). Historically, this is most naturally explained by

14. Alternatively, the source of affixation could be an inherited word reflected as an independent word in South Saami *voete* ‘manner, way’ and East Khanty *ot* ‘thing, matter’ (Aikio 2012a: 234 footnote).

assuming both to reflect an agglutinated lexical item whose affixation process is in an intermediate stage where they still possess some properties of independent lexemes. Affixation is a standard process of the development of suffixes in languages, and although there are some rare examples of an opposite process of suffixes developing into independent words, e.g. the SaaN abessive *haga* ‘without’ (see Ylikoski 2016), it would definitely be odd if this kind of degrammaticalization process were to start with developing phonological features otherwise forbidden in a suffixal position.

Thus, if the *-goahti-* suffix goes back to an independent word, we should point out the concrete item. A phonologically fully-corresponding verb stem (PSaa. *\*koatē-~PU \*kota-/\*kati-*) has not been indicated, but Ylikoski (2009: 127) has briefly proposed that the source might be SaaN *boahtit* (< PSaa. *\*poatē-*) ‘to come’.<sup>15</sup> The semantic connection between ‘coming’ and ‘beginning’ is rather clear (cf. e.g. English *come to know*); the shift of meaning from ‘movement’ to ‘beginning’ has been recorded for instance in English *start* ‘to begin’ < ‘to leap (into something)’, Latin *initium* ‘beginning’ < ‘entrance’ ← *in-* ‘in(to)’ + *ire* ‘to go’. The phonological shape, however, needs further explanation concerning the initial consonant. A spontaneous change of *p* to *k* is not entirely impossible, since both are voiceless stops and differ only in terms of the place of articulation, but the *k* might well have a material source in a former construction involving the infinitive of the content verb before *boahti-*. For example:

<i>*sukē-dēk</i>	<i>poadā-m</i>	>	<i>*sukē(-dV)-koadā-m</i>
row-INF	come-1SG		row-INCH-1SG
‘I come to row’			‘I begin to row’

This presupposes that the favored word order at the time of the affixation was still the Uralic verb-final type, which actually seems to have been the case even long after the break-up of Proto-Saami, since both modern South Saami and 18<sup>th</sup>-century North Saami (Porsanger/Karasjok dialect according to Leem 1748) still show SOV basic word order (Magga 2003: 35; Kemi 1994: 61). There are no parallels of the development of a cluster *\*kp* in Proto-Saami, but it seems entirely possible that it would have been simplified to *\*k* in a suffixation process, along with the reduction of the rest of the original infinitive ending *\*-tēk*. The reduction and loss of the unstressed third syllable between a bisyllabic verb stem and the still (secondarily) stressed bisyllabic suffixoid seems quite natural, since the Saami languages show a strong preference of word forms consisting of bisyllabic stress groups especially in verbal conjugation (Korhonen 1981: 259–260), and the original infinitive ending does not carry any significant function in the agglutinated construction. This explanation goes well together with the fact that inchoatives with plain *\*-goatē-* only take parisyllabic base verbs in all Saami varieties.

15. Saami *\*poatē-* ‘to come’ itself lacks an etymology beyond Proto-Saami. In the vowel-historical framework of Aikio (2015), the verb stem could be reconstructed to PU *\*pati-* and connected to Fi. *patikka* ‘a journey on foot’, *patikoida* ‘to walk’ and *pade* ‘path’. On the other side, the Finnish words can also reflect a Germanic loanword (← Proto-Germanic *\*pab-*, cf. German *Pfad* ‘path’) (SSA s.v. *pade*).

The co-affix *š* in *-šgoahti-* needs its own explanation. Sammallahti (1977) proposes that it might either be a Vepsian loan element, which we already found dubious, or based on the potential mood suffix (PSaa. *\*-ńć-*, SaaN *-žž-* : *-čč-* : *-ž-* : *-š*). The latter explanation faces the same difficulty as Turunen's conditional mood explanation for Veps: the morphotactics does not allow a mood marker to be followed by a derivational suffix. Nor does it seem plausible that a finite verb form in potential mood would have been used adverbially in constructions like that above. Most likely the *-š* element has been generalized from verb stems which themselves have been derivatives containing *š* or a consonant (cluster) later reduced to *š*; cf. Lehtinen's explanation for Veps-Ludic *-ška(n)de-* above. A possible source would then be in the verbs with the diminutive-frequentative suffix SaaN *-aš-* (< PSaa. *\*-ěhčě-* < *\*-ěkčě-* ~ Fi. frequ. *-(e)kse-*) as in *attašit* 'to give a little at a time' ← *addit* 'to give' (cf. Korhonen 1981: 337; Sammallahti 1998: 92; LpD s.v. *áddášit*). The above-mentioned suffix would also phonologically match the inchoative suffix variant with an affricate in Pite Saami *-atjgáhte-*, and Ruong (1943: 219–222) actually analyzes SaaP *-atjgáhte-* as a combination of two inchoative suffixes, *-áhtja-* and *-gáhte-* (*báhkad-áhtja-t* → *báhkad-atj-gáhte-t*, both 'to begin to get warm'). In Lule and South Saami there is a similar inchoative suffix *-ahtj-* with a short *a* (< *\*ě*) in the third syllable, e.g. SaaL *aled-ahtjat* 'to begin to raise' ← *aledit* 'to raise', SaaS *valkes-ahtjedh* 'to begin/prepare to set off' ← *valkesidh* 'to set off' (O. Korhonen 2007; Bergsland 1994: 92), which is phonologically equal to the expected secondary-stressed form of the diminutive-frequentative suffix mentioned above (PSaa. *\*-ěhčě-* : *-ěkčě-*) and can be thought of as a functionally differentiated variant of the same suffix (as a parallel, compare the instances of other Saami diminutive and frequentative suffixes in an inchoative function, e.g. SaaN *vázzilit*, S *vaedtsielidh* 'to start going, to go away'; N *biekkastit*, S *biegkestidh* 'to begin to blow [wind]'). The Ume and Pite Saami *-áhtja-* suffix is probably historically identical with these, except that the short *a* in the secondary-stressed third syllable has been replaced with long *á*, possibly due to an association with another inchoative suffix *-á(j)-* occurring in the unstressed second syllable (e.g. SaaP *jáhttat* 'to begin to move' ← *jáhtet* 'to move, migrate').

It is thus possible that an inchoative suffix based on PSaa. *\*-ěhčě-* : *\*-ěkčě-* was once used in the whole Saami area, but later it was functionally replaced by the phonologically and semantically more distinct *\*-goatě-*, and additionally amalgamated with it (*\*-ěkčě-goatě-*) in certain Saami varieties. The rise of this combined suffix was clearly motivated by syllable structure, as it originally attaches to trisyllabic stems: the general preference of Saami languages towards word-forms consisting of bisyllabic stress groups made e.g. *\*peķe|peķče|goatā* 'begins to get warm' more favorable than *\*peķepe|goatā* (from *\*peķe-pe-* 'to get warm'; borders of stress groups marked here with '|'). The phonological reduction of the combined suffix to *\*-čkoatě-* ~ *\*-škoatě-* later diminished the syllable-structural difference in comparison to *\*-goatě-* and opened up the possibilities for broadening the use of the *\*-škoatě-* suffix also to parisyllabic stems, which has happened in eastern Saami. The weak grade stem in eastern Saami derivatives such as SaaSk *looggškue'tted* thus most

likely reflect an analogical adaptation of *\*-škoatē-* to the gradation pattern of other *\*-CCV(-)* suffixes, rather than the original *\*-kčē-goatē-*. As regards the vowel at the border of the stem and the suffix, it seems that Lule and Pite Saami maintained their association with the *-á/ah̄tja-* inchoative, while North and eastern Saami generalized *i* as the third syllable vowel by analogy with the infinitive stem (cf. SaaN *bahkadit* ‘to get warm’ → *bahkadışgoah̄tit* ‘to begin to get warm’).

## 5. Conclusions and discussion

The current paper has discussed the variation and history of phonologically similar derivative suffixes with inchoative and partly translative functions in three western Uralic language branches — Saami, Mordvin and the Veps-Ludic sub-group of Finnic — with a special focus on the Saami *-(š)goah̄ti-* suffix. The suffixes in question have in previous literature been connected with varying historical interpretations and combinations as either etymological cognates or loan items. The current survey shows, however, that each suffix has its own development history within its language branch, and that only some etymologically connectable components can be identified (Mordvin-Finnic *\*-ka-/k̄ä-*), as well as common tendencies in the semantic-functional development of derivational suffixes, such as the change from translative to inchoative or frequentative to inchoative. Specifically, it was argued that the Saami *-goah̄ti-* suffix is a result of the affixation of an independent verb (*\*poatē-* > North Saami *boah̄tit* ‘to come’), and the *-š-* element in *-šgoah̄ti-* is a remnant of another frequentative/inchoative derivational suffix (*\*-eh̄čē-* : *\*-ek̄čē-* > SaaN *-aš-*, SaaP *-atj-* : *-áhtja-*). Judging from the distribution comprising all known Saami varieties, the inchoative suffix *\*-goatē-* developed in common Proto-Saami; a grammatical morpheme would hardly have reached such an extensive coverage through later dialectal diffusion. The combined inchoative suffix *\*-ek̄čē-goatē-* (> SaaP *-atjḡáhte-*, SaaN *-(i)šgoah̄ti-*) was probably a somewhat later innovation, excluding the proto-dialect of South (and Ume) Saami, and was motivated by syllable stress structure. The use of the combined suffix, originally limited to trisyllabic stems, was then generalized in eastern Saami to bisyllabic stems as well; the innovation seems to be relatively late, since it has still only started to spread into Ter Saami.

It can be further noted that the *-ah̄tja-* inchoative suffix appears in precisely those Saami languages, South Saami through Lule Saami, which lack the historically identical *\*-kčē-* conditional marker. The background of this complementary distribution can be explained in several ways: as parallel developments based on the supposedly primary diminutive/frequentative function of the suffix, or as the receding of one of the homophonous categories as the other one gained popularity. As certain features of the western Saami *-l-* conditional have been explained as analogical effects of the supposedly older *\*-kč-* conditional (Korhonen 1981: 255), a plausible scenario could be that the advent of the *-ah̄tja-* inchoative in western Saami gave an impetus to the replacement of the homophonous but semantically incompatible



conditional marker in a secondary-stressed position — and later everywhere — with a novel conditional marker based on the *-l-* frequentative suffix.<sup>16</sup> True, the broad distribution of the *\*-čkoatē-* inchoative would also suggest an early origin for the *\*-ekčē-* inchoative, but as a matter of fact, the main function of the first part of the combined suffix need not have been inchoative at the time of the establishment of the suffix complex. Another sign of an attempt to minimize the number of different functions of the secondary-stressed *\*-ekčē-* suffix is that it is severely marginalized as a variant of a diminutive or frequentative suffix. As such, it is found only in eastern Saami (Korhonen 1967: 136–137), and even there it seems to appear only in combination with the *-l-* frequentative suffix, as SaaI *-lâhčâ-* ~ *-luhčâ-* ~ Sk *-lõðččâ-* (material of InLpWb and Sammallahti & Mosnikoff 1991).<sup>17</sup> The situation also resembles the areal-functional distribution of the cognate Finnic suffix *-ks(e)-* → *-ksi-*, which only acts as a frequentative suffix in northern Finnic (Fi. *ole-ksi-n* ‘to be’-FREQ-1SG), while in southern Finnic it has developed into a conditional mood marker (Est. *ole-ksi-n* ‘to be’-COND-1SG) and lost the frequentative function completely.

16. According to an alternative explanation by Sammallahti (1998: 83), the *-l-* conditional stems from the combination of a present tense marker *\*-k* and the contracted past tense of the copula verb, *\*li-* (i.e., *\*-kli-* > *\*-vli-*). While this would formally explain the *-v-* element (SaaL *málestivlum* ‘I would cook’) and the weak-grade stem (SaaN [west] *oaddálin* ‘I would sleep’), the functional and morphosyntactic motivation of such a construction remains vague.

17. A few of these derivatives have an inchoative meaning, but this is clearly inherited from the corresponding *-l-* derivative, e.g. SaaI *vázzálâhčâđ* ‘hin- und hergehen; zum Spaziergehen aufbrechen’ ← *vázzilid* ‘losgehen, zu Fuss aufbrechen’; Sk *vâ'z3lõðččâđ* = *vâ'z3led* ‘to set off walking.’

## Abbreviations of languages

Est.	Estonian	(Saa)N	North Saami
Fi.	Finnish	(Saa)P	Pite Saami
Hung.	Hungarian	(Saa)S	South Saami
Ing.	Ingrian (Izhorian)	(Saa)Sk	Skolt Saami
Kar.	Karelian	(Saa)U	Ume Saami
Liv.	Livonian	Sk(P)	Paatsjoki dialect of Skolt Saami
Lu.	Ludic		Saami
(Md)E	Erzya (Mordvin)	Sk(S)	Suõ'nn'jel dialect of Skolt Saami
(Md)M	Moksha (Mordvin)		Saami
PMd.	Proto-Mordvin	Sk(N)	Nuõ'ttjäu'rr dialect of Skolt Saami
PSaa.	Proto-Saami		Saami
PU	Proto-Uralic	Ve.	Veps
(Saa)I	Inari Saami	VeC	Central Veps
(Saa)K	Kildin Saami	VeS	Southern Veps
(Saa)L	Lule Saami		

## Grammatical glosses

1	1 <sup>st</sup> person	INF	infinitive
3	3 <sup>rd</sup> person	PL	plural
COND	conditional	PRS	present
FREQ	frequentative	POT	potential
IMP	imperative	PST	past
INCH	inchoative	SG	singular

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