THE BORDER BETWEEN PRODUCTIVITY AND NON-PRODUCTIVITY – ARE LIVONIAN FREQUENTATIVE VERBS DERIVATIVES OR LEXICALISED?

Santra Jantunen

University of Helsinki

Abstract. This paper takes a look at productive part of derivation of verbs in Finnic languages, frequentative verbs that have an *l*-derivational suffix in Livonian and how they occur and are constructed. The research is based on data of 15 different *l*-suffix verbs. The paper investigates how formally frequentative verbs are constructed in Livonian and if they are frequentative in their meaning. An essential criterion to interpret a verb as a derivative is that it has a derivational base, typically an underived word stem, and the paper attempts to find out if Livonian *l*-suffix verbs have one. Additionally, the paper aims to study if frequentative derivation is still productive in Livonian and to what degree frequentative *l*-derivatives have been lexicalised. Also other Finnic languages are taken into consideration when examining the derivational base and distribution for Livonian *l*-suffix verbs.

Keywords: Livonian, Finnic languages, verbal derivation, frequentative derivatives, productivity, lexicalisation

DOI: http://dx.doi.org/10.12697/jeful.2014.5.1.06

1. Introduction

Frequentative verb derivational suffixes are common and widely distributed among the Finnic languages. Livonian, however, seems to be an exception to this general Finnic pattern, as its frequentative derivatives seem to be less productive than in other Finnic languages. There is also a strong tendency for the frequentative derivatives to be lexicalised. In Livonian, the lexicalisation of the frequentative derivatives seems to be even more regular and general than in the other Finnic languages. For instance, in the following example (1), interpreting the verb *vanţlõ* 'look' as a frequentative is not all that clear:

(1) vied-īz tūlda vant-l-iz: jemā un mother pull-PST.3SG fire.PART and look-FREQ-PST.3SG min mag, kus doktār vòl LGEN where be.PST.3SG stomach doctor pan-d krūs pā-lõ, kūož vol se put-PTCP.PST on-ALL be.PST.3SG it spot pot tikkiž vol no-kittõ-d. tūorõz, se be.PST.3SG ASP-burn-PTCP.PST completely fresh it

'Mother lit the fire and looked: the spot on my stomach, on which the doctor had put the pot, was completely raw; it had burnt.' (SUST 250: 22)¹

The verb *vanţlõ* 'look' in the example appears to be a frequentative derivative; it seems to be formed by the stem and the suffix -*l*-, but in order to be a frequentative derivative, it also should have a stem from which the frequentative is derived. Such a stem is not found, however, so it is unclear whether it should be interpreted as a frequentative derivative.

In this article, I aim to clarify Livonian frequentative suffix verbs and their character with the help of the following questions:

- 1. How are formally frequentative verbs constructed in Livonian and why are they frequentative in their meaning?
- 2. If frequentative suffix verbs are frequentative in their meaning, is the derivational base to be found for them?
- 3. Is the frequentative derivation in Livonian still productive, and to what degree have frequentative derivatives been lexicalised?

I assume that, in fact, frequentative verbs in Livonian are lexicalised forms. This hypothesis will be discussed from a diachronic and comparative perspective.

In principle, the derivative type can be considered as productive if new derivatives can be produced into it. A new derivative can also be produced from whatever underived stem specific to that derivative type. Derivative types that are productive are transparent in their structure and meaning; that is, the derivative is to be understood as a whole, a combination of the word and the derivational suffix. To productivity is added also the predictability of the meaning: very pro-

Because the *l*-element can be segmented, I have separated it in the glosses from stemand other final elements. The same naturally applies to other segmentable elements, such as inflections of nouns and verbs, as well as postpositions and adverbs, whose structure is transparent.

ductive suffixes must have a predictable meaning when they are being used productively. Productive types of derivatives also do not have a tendency to lexicalise, so productive types of derivatives only have a few lexicalisations. Exceptions to this case, however, are especially the Finnish frequentatives with suffix -le-, which are widely distributed as lexicalisations, even though the derivative type is still productive. On one hand, this can be explained in that lexicalisation still describes the actual derivative itself, whereas productivity describes the whole derivative type. For example, to derive frequentative verb derivatives with the suffix -le is a very productive derivative type, but morphologically, an individual derivative belonging to this derivative type may also lexicalise, as in the Finnish tapella 'fight' (< tappaa 'kill') and the Estonian taplema id. New words can be connected to even the non-productive derivative type, because the already existent derivative type serves as a model for the formation of the new words. On the other hand, productivity is a gradual phenomenon in that the amount of productivity varies, and one process is more productive than the other or, in some cases, non-productive. It is not possible, however, to measure the degree of productivity. (Bauer 1983: 95, 1994: 57, 59-60, ISK 2004: § 164, Kangasmaa-Minn 1981: 32-33, Kasik 2004: 26, and 2013: 43.)

When discussing productivity, analogy needs to be taken into consideration: when is a certain lexeme an analogical form (i.e. modelled on the basis of the analogy of another lexeme) and when is its modelling productive in derivation or inflection? This difference is not at all clear in all cases. The analogical form is the new word form that is formed on the basis of the model of an already existent lexeme, yet it does not produce a productive series. It remains possible for the analogical form to function as an impetus for a series of new formations. with the first ones being analogically modelled, and subsequently modelling has become productive. The word formation based on an analogical process is taking place through a pattern. The word figure representing one of the derivative types serves as the pattern (i.e. the phonological form of the word, such as the Finnish verb vedättää 'have something pulled by somebody' with the suffix -ttA-). The pattern shows what kind of structure a particular word derived with a suffix has to have. The pattern is constructed from the end part of the stem (-ttA-), which often is a (derivative) suffix, in addition to the stem, which can be either the lexical stem or some other phonological element. Based on the pattern, new derivatives can be formed as well as other words with same figures. The same pattern can be represented by words with different basis, such as loan words, derivatives, and other words formed according to the same model. All the words of an individual derivative type can be formed according to a single pattern (for instance, the two-syllable *e*-noun derivatives in gradation of the Estonian that have been formed from a two-syllable verb stem, such as *hinn-e* 'grade', *tek-e* 'birth, origin'). On the basis of this pattern many new words have thus been formed, which are exceptional from the point of view of derivation: for instance, the word *selve* 'self-service' does not have an underived variant, so one cannot really describe it as a derivative type. (Bauer 1983: 96, 1994: 64, ISK § 147–148, and Kasik 2013: 41–42.)

Frequentative derivatives have a strong tendency to lexicalise in the Finnic languages. Lexicalisation is both a synchronic and a diachronic phenomenon; in the context of lexicalisation of frequentative derivatives, it is a diachronic process. The form is lexicalised when it can no longer be explained according to regular grammatical rules. The semantic and morphological transparency of the derivative decreases gradually, until the derivative loses its derivative-like quality and its frequentative character and it is considered to be a non-derived word. Non-transparency is not a necessary prerequisite for lexicalisation, however, and some of the lexicalised forms have remained completely transparent, such as many of the frequentative derivatives (for instance, tapella 'fight' in Finnish and taplema id. in Estonian). The meaning of the lexicalised derivative develops so that it is no longer a combination of the meanings of the word and derivational suffix, but instead it is distinct and simultaneously different from what would be expected on the basis of other derivatives derived with the same suffix. The meaning is often more abstract than the initial meaning. The semantics of the lexicalised lexeme cannot necessarily be presupposed in advance. Lexicalisation is a gradual phenomenon that unfolds in stages; in other words, the level of lexicalisation varies with different words. These kinds of lexicalised frequentative derivatives are, for example, ajatella 'think' (< ajattaa 'have something driven by somebody' < ajaa 'drive') and kävellä 'walk' (< käydä 'go, walk') in Finnish and *võitlema* 'fight' (< *võitma* 'win') in Estonian. (Bauer 1983: 49-50, 95, Brinton and Traugott 2005: 18, 21, ISK 2004: § 166, Kasik 2013: 46–47, and Laakso 1989: 64.)

Derivation of words is a common method of word formation among the Finnic languages, as well as the formation of compound words. By means of derivation from a derivational base, or for instance from a descriptive stem, a new lexeme is formed with one or more suffixes. A simple word and a derivative and even a compound word can act as the derivational base. The meaning of derivatives is commonly formed through the semantics of the word and the derivational suffix. New nouns, verbs and adverbs are formed through deri-

vation. Verbs can be derived from nouns and from other verbs. (ISK 2004: § 155, § 157, § 303.)

When describing the derivational suffixes of Finnish and Estonian. as well as of the other minor Finnic languages, Eeva Kangasmaa-Minn's way of dividing derivational suffixes into three classes – changers, transformers and modifiers [translated from Kangasmaa-Minn's concepts in Finnish] – is often used (see Kasik 2004, Kytömäki 1992, Laakso 1989, and Puura 2007). The changers change the category of the underived word, the transformers transform the valency of the underived word, and the modifiers modify the semantics of the underived word in order to thus express a quality of an action or of an event. Frequentative suffixes are modifiers. The Finnish grammar Iso suomen kielioppi (ISK 2004: § 303) does not separate the verbal derivational suffixes but instead the verbal derivatives into three groups: the derivative changers, the derivative transformers and the derivative modifiers. The derivative changers are the causative derivatives, the derivative transformers are the reflexive, automative and translative derivatives, and the derivative modifiers are the frequentative and momentative derivatives. In addition, outside of these groups remain the essential and sensive derivatives.

Frequentative suffixes modify the quality of the action or the event that is expressed by the verb. Frequentative derivatives express the frequency and continuation of an event, action or situation. The process that they express is often irregular and aimless, and an accidental and dismissive quality can often be noted in them (compare the Finnish verbs kulkea 'go, travel' ~ kuljeksia, kuljeskella 'roam, wander'). A typical example of the frequentativity is that the derivative expresses repetition of an event expressed by the underived word, which means that the event is iterative. The usage of the frequentative derivative is not compulsory, as it is common for both the derivative as well as its derivational base to work in the same context of usage. (ISK 2004: § 351, § 353 and Kangasmaa-Minn 1982: 58.)

This may also be expected in the context of Livonian frequentatives. But in light of the following examples and when dealing with the derivational bases of frequentative derivatives, this may not necessarily be the case with Livonian.

There is some earlier research on Livonian verbal derivational suffixes. They have been dealt with most extensively by Eduard Vääri in his doctoral thesis and articles based on that (Vääri 1974a, 1974b, 1975, 1976, 1980a, 1980b, 1981, 1982, 1983, 1984, 1985, 1986, and 1987.) Vääri has dealt with the Livonian verbal suffixes of both Courland and Salaca, but the style of the articles closely resembles a list. For his sources, Vääri uses both printed publications (for instance, E.N. Setälä's language specimen collection *Näytteitä liivin kielestä* (1953) and the Livonian dictonary *Livisches Wörterbuch mit grammatischer Einleitung* (1938) by Lauri Kettunen) as well as manuscript data, such as E.N. Setälä's material that deals with Livonian. The verbal suffixes have been introduced according to the appearances of verbs in the material, and for each appearance of a suffix there are listed examples and possible equivalents in cognate languages, as well as possible reconstructions and loan backgrounds. In other words, the introduction to the usage of derivatives is restricted to a listing of examples in already existent sources, and no attention is paid to the semantics, productivity or lexicalisation of the derivatives.

2. Frequentative derivatives in the Finnic languages

The derivation of verbs is an essential part of the grammar of the Finnic languages. In Veps in particular, the derivation of frequentative verbs is very productive and also connected to the expression of the aspect. When working with Livonian frequentative derivatives, one has to rely on research done on Finnish and Estonian verb derivatives. This is because these are the most explicated immediate cognates of Livonian, and the frequentative derivatives have not been researched as systematically and broadly in Livonian. There is also some research on verb derivatives in Veps and Karelian. For Veps, research on its verbal suffixes has been done by Marija Zajceva (1978) and research on its momentative and frequentative derivatives, along with their usage when expressing the aspect, by Ulriikka Puura (2007 and 2010); for Karelian, research has been done on Karelian verbs by Ljudmila Markianova (1985).

Among the Finnic languages, there are several different frequentative suffixes, whose productivity varies. However, those frequentative suffixes that include the element *l* are distributed among the whole Uralic language group, and the suffix -*le*- has equivalents in the whole of Finnic. The *le*-derivatives of Finnic are mostly deverbials that have either a frequentative or continuative meaning. (Hakulinen 2000: 261 and Laanest 1975: 183.)

In Finnish, frequentative derivatives are an open-class verb group, in that new frequentative derivatives can be continuously formed both through the conscious creation of terms and during the course of language users creating them. They can be formed from both verbs and nouns, though not from all verbs and nouns, especially not from those consisting of three syllables or more. According to the ISK, the most important frequentative suffixes in Finnish are -le-, -i-, -ksi-, -hti- and

the non-productive -O-. The most common suffix is -le-, which has four subcategories: -ele-, -ile-, -(i)Ctele- and -ske(nte)le-. In Finnish, in addition, there is the frequentative suffix -ise- and the stem-final suffix -U, which gives a frequentative context to the verb. These are only joined with descriptive stems (e.g. kolista 'rattle, clatter', hölskyä 'shake'). In addition, Lauri Hakulinen (2000: 265) presents a non-productive suffix -nt-, which appears as such in some words (oksentaa 'throw up', rakentaa 'build') and as part of a compound suffix, such as -skentele- and -ntele-. The ISK introduces these in connection with the suffix -ske(nte)le-. Suffixes describing continuation, such as -i-, have also been called continuatives. However, the ISK presents all suffixes as frequentatives, because even the verbs of same derivative type can have both meanings, and it is not always so easy to separate the concepts of frequentative and continuative from one another. (ISK 2004: § 164, § 340, § 351, § 357, § 366, § 367.)

According to the Estonian grammar Eesti Keele Grammatika (EKG), there are several verbal suffixes in Estonian with which frequentative verbs can be formed. For some of these suffixes, the only meaning is frequentative, while for some this is but one meaning among others. Such suffixes are -u-, -i-, -ki-, -gi-, -ku-, -gu- and -le-, as well as its more rare variants -skle- (-skele-), -dle- and -tle- (-tele-). According to Kasik (2004: 41), the most important frequentative suffixes are -le- (e.g. lendlema 'fly around' < lendma 'fly') and its variants -skle- (e.g. jookslema 'run around' < jooksma 'run') and -tle-(loetlema 'list' < lugema 'read'), as well as -i- and -u-. Of these, the productive instances in the modern language are -le- and -u-. With the suffixes -ki-, -gi-, -ku-, -gu-, frequentatives are formed from onomatopoetic stems, and they are no longer productive. As is the case with the Finnish frequentative derivative -le-, the Estonian equivalents similarly have many lexicalisations, such as käsitlema 'deal with' and osalema 'participate'. (EKG: 441, 443-444, 447-450 and Kasik 2004: 42, 45, 47.)

Veps has three frequentative suffixes: -(e)le-, -nde- and -ske-. From these can be formed the compound suffixes -ndele-, -skende-, -skel'e-, -el'eskel'e- and -skendel'e-. Their appearance varies, according to the different dialects of Veps. In addition, Veps has the suffix -i-/-oi-, which can be either frequentative or continuative. Of these, the suffix -(e)le- is very productive in Veps; it appears for example in verbs l'ähtelta < l'ähtta 'leave', tegelta < tehta 'do', l'endelta 'fly around' < l'eta 'fly'. (M. Zajceva 1978: 28, 68, 76, 95–99 and N. Zajceva 2003: 119–120.) Furthermore, it has been claimed that Russian would have affected the system of verb derivation in Veps and the other eastern Finnic languages. Consequently, the usage of frequentative and

momentative suffixes increased once they also started to be used to express the aspect (Laakso 1989: 66).

3. Livonian frequentative derivatives

In terms of quantity, there are far fewer verbal suffixes in Livonian than in other Finnic languages. According to Vääri (1974b: 35), there are around twenty, as well as several suffixes loaned from Latvian. For instance, according to ISK (§ 304), there are about forty verbal suffixes in Finnish. There are no equivalents in Livonian for many of the suffixes that appear in other Finnic languages. An example of such suffix is -i-, which was already mentioned earlier in the context of the Finnish and Estonian frequentative suffixes. Livonian has only one frequentative suffix, -l-. The Finnish suffix -nt- and the equivalent Veps suffix -nde- may, however, have a correspondence in Livonian. This may occur, for instance, in the word oksno 'throw up'. In addition, many of the verbal suffixes of Livonian are lexicalised or in other ways non-productive, and suffixed verb derivation has been replaced in Livonian by verbal prefix loans from Latvian, especially when aspectual relations are being expressed. See the following example (2), where a loaned prefix iz- from Latvian is connected to the verb *luggo* 'read', which, when connected to the Latvian verb with the equivalent meaning *lasīt* 'read' expresses the perfective aspect. (Laakso 1989: 58–59, 61, 66.)

(2)	<i>vanāmiez</i> old man	<i>kīt-s</i> , say-PST.3SG	<i>ku</i> that	ne they		kuolm three	<i>nēļa</i> four	<i>kõrd</i> time
	<i>iz-luggõ-nd</i> ASP-read-PTCP.PST		<i>bībõl</i> bible.GEN		<i>lebbõ un</i> through and	<i>vel</i> still		
	<i>tō-b</i> want-3SG	ikškõrd once	lugge read.			<i>lebbõ</i> . through		

'The old man said that they had read through the Bible three or four times and would like to read through it once more.' (SUST 250: 42)

To examine the Livonian frequentative verbs, I have collected data from two language specimen collections: Julius Mägiste's collection *Muistoja Liivinrannasta: Liivin kieltä Ruotsista* (SUST 250; 2006) and Seppo Suhonen's collection *Liivin kielen näytteitä* (CT 5; 1975). While collecting the data, I have used as a support the list of *l*-suffix verbs in Livonian presented by Vääri in his article (1974b). I have included all the *l*-suffix verbs in my data, regardless of their origin or

their possible divergent interpretations concerning the frequentativity. In my data, altogether 15 different *l*-suffix verbs appear. Occurrences vary widely, from a single or two or three occurrences to several tens of occurrences, as can be seen in Table 1:

Table 1. *l*-suffix verbs in the data.

Verb	Number of occurrences
ailõ 'run; drift'	21
imlõ 'wonder'	2
mõtlõ, mitlõ, mütlõ, mutlõ 'think'	57
mādlõ 'remember'	19
pīerslõ 'fart'	2
raļļõ, raillõ, raiļļõ, raḍļõ 'hit, beat, chop up'	11
rīḍļõ 'scold; argue, quarrel'	8
sõulõ 'itch, tickle'	1
sūrslõ 'exaggerate, boast'	1
taplő 'fight'	3
tõmbšlõ 'tug'	1
umblõ 'sew'	3
vaņţļõ, vankļõ 'look'	54
vodlõ 'wait'	26
võikslõ 'fight, compete'	1

Reciprocal verbs include taplo and võikslo, as well as possibly $r\bar{i}dl\tilde{o}$, at least with the meaning 'argue, quarrel', of which there is only a single example in my data. In other instances, its meaning is 'scold'.

4. Productivity of the Livonian frequentative derivation

According to morphological theory, productivity means the formation of new word forms from any suitable word stem, in this case frequentative derivatives. Among the Finnic languages, the derivational bases of the le-frequentatives can be words from different word classes. In Finnish, both verb- and noun-based frequentative verbs are formed with the frequentative le-suffix, such as muistella 'remember, reminisce, recall' < muistaa 'remember', riidellä 'argue' < riita 'a quarrel, an argument', *arkailla* 'be timid, shy' < *arka* 'timid, shy'. In addition, there are *le*-derivatives without any derivational base, such as *kuunnella* 'listen', *rukoilla* 'pray'. (ISK 2004: § 358, § 359, § 360). In Estonian also, deverbial and denominal frequentative verbs can be formed with the *le*-suffix. Most often the suffix is connected to a verb or a noun (e.g. *tegelema* 'occupy oneself' < *tegema* 'do' and *sõnelema* 'argue' < *sõna* 'a word'), but sometimes also to an adjective (e.g. *arglema* 'be timid, shy' < *arg* 'timid, shy') (EKG: 447, 449). Here Veps is an exception to Finnish and Estonian, as in Veps the frequentative suffix -(*e*)*le*- can only be connected to the verb (for instance, *and'elta* < *antta* 'give') (Puura 2007: 58–59 and M. Zajceva 1978: 76–77).

Pinpointing the derivational base for Livonian *l*-suffix verbs is difficult, in some cases even impossible. Accordingly, it is possible to assume that frequentative derivation in Livonian does not fulfil the demands of productivity. In the following, I will examine them as word-specific forms. To date, Livonian frequentative suffix verbs have typically been treated as single cases. This kind of treatment is of course natural in a dictionary setting, such as *Livisches Wörterbuch mit grammatischer Einleitung* by Kettunen (1938) as well as in the list-like work presented by Vääri (1974b) where he examines Livonian *l*-suffix verbs.

Vääri (1974b: 57) states at the end of his treatment of *l*-suffix verbs that when comparing the dictionary of A.J. Sjögren with verbs used in modern Livonian, it can be observed that there are fewer *l*-suffix verbs in modern Livonian. According to him, it is characteristic of modern Livonian that it is no longer possible to form new verbs with the suffix *-l*-, and therefore the usage of the suffix *-l*- is restricted to the verbs he listed earlier in the same paper.

According to Kettunen's dictionary (1938), there are four verbs that appear in my data, which have a derivational base: $ail\tilde{o}$, $s\tilde{o}u(v)l\tilde{o}$, $tapl\tilde{o}$ and $t\tilde{o}mb\tilde{s}l\tilde{o}$.

The verb *ailõ* is linked by Kettunen (1938: 3–4) to *aijjõ*, *ajjõ* 'drive', which have equivalents throughout the Finnic languages (for example, in Finnish *ajaa* 'drive' and Estonian *ajama* id.). SSA 1 (62) also connects the verbs *ailõ* and *aijjõ*, but does not mention their possible derivative relationship. Regarding historical sound utterances, connecting the verbs *ailõ* and *aijjõ* does not necessarily work. According to my data, *ailõ* would be the only frequentative derivative to originally have a short first syllable, and it would thus be an exception in its structure, compared with other frequentative derivatives. At least with some of the other Finnic languages, it is possible to form a *le*-derivative based on equivalents of the verb *aijjõ* (for instance, Finnish and Karelian *ajella* 'drive, cruise', Vote *ajõlla*, *ajella* id.) (KKS 1: 24

and VKS: 115). On the basis of this, the frequentative derived from the verb *aijjõ* would also be possible in Livonian. It is still possible, however, for *ailõ* to be a German loan from the verb *eilen* 'rush', in which case it certainly would not be a frequentative derivative, even though the ending implies that. Thus, with certain presuppositions both interpretations of the origin of the verb *ailõ* are feasible.

On the basis of my examples, the verb has a certain amount of polysemy: its meaning can be either 'drift' (example 3) or 'run (also for horses, fish)' (example 4), or possibly even the more active 'sail'. The meaning of the verb also has some continuativity, even though in some of its meanings the typical vagueness or randomness of the frequentative derivatives can be observed, such as in example (3):

(3)	<i>kuoig-īd</i> ship-PL	<i>pimdõ-s</i> dark-INE		<i>āttõ</i> be.PST.3PL	
	<i>ai-lō-nd</i> drift-FREQ-PTCP.	PST	<i>kūolka</i> Kolka.GEN	Ī.	
	nanā nose. GEN		<i>pā-lõ.</i> on-ALL		
	'Ships have drifted	pe Kolka.' (S	SUST 250: 78)		

(4)	<i>un</i>	<i>nei</i>	<i>kīeru-b</i>	<i>teggiž</i>	se	<i>ibbi</i>
	and	now	turn-3SG	again	the	horse
	<i>un</i> and	<i>ai-lu-b</i> run-FREQ-	3SG	<i>mā</i> ground	<i>taggiž</i> . back	

^{&#}x27;And so the horse again turns and runs back down.' (SUST 250: 99)

Kettunen (1938: 361) connects the verb $s\tilde{o}u(v)l\tilde{o}$ (example 5) to the verb $s\tilde{o}uvv\tilde{o}$, $s\tilde{o}vv\tilde{o}$ 'itch'. SSA 3 (233–234) connects the verbs $s\tilde{o}uvv\tilde{o}$ and $s\tilde{o}uvl\tilde{o}$ to the Finnish, Ingrian, Karelian, Lude and Estonian wordfamily $syyhy\ddot{a}$ 'itch' or to the Estonian verb $s\ddot{u}gada$, $s\ddot{u}geleda$ 'itch', which do not have any direct contact with each other. In Kettunen's dictionary, there are also two examples of the usage of the verb $s\tilde{o}uvv\tilde{o}$, $s\tilde{o}vv\tilde{o}$; see example (6):

(6) sigā sõvā-b sälgõ. pig scratch-3SG back.PART

'A pig scratches its back.' (Kettunen 1938: 361)

The verb *taplõ* is a frequentative derivative from the verb *tappõ* 'kill, slaughter' (Kettunen 1938: 409). The verb *tappõ* has correspondences in throughout the Finnic languages, and aside from Livonian the frequentative derivative also occurs in Finnish (*tapella* 'fight'), Ingrian (*tapella* id.), Karelian (*tapella* 'kill; abuse, bully; fight') and Estonian (*taplema* 'fight') (SSA 3: 269–270). The verb *taplõ* is lexicalised in Livonian as well as in Finnish (*tapella* < *tappaa* 'kill') and in Estonian (*taplema*). In all these three languages it has the meaning 'fight'; see example (7):

(7) $m\bar{\delta}k$, mis $iz\bar{a}$ $iz\bar{a}$ sword which father's father

vôļtūo-ndīņõkuod-āj,be.PST.3SGbring-PTCP.PSTwithhome-ILL

kis voļ rūoţšliz-t-õks which be.PST.3SG Swede-PL-INS

kub-sõ tap-lõ-n, *krīevõ-d-õks* together-INE fight-FREQ-PTCP.PST Russian-PL-INS

vandzō-n immōr. wander-PTCP.PST around

"...sword, which had been brought home by grandfather, who had fought with Swedes and wandered around with Russians." (SUST 250: 155)

The meaning of the underived verb $tapp\tilde{o}$ is 'kill, slaughter'. In conjunction with this underived verb, it seems that the particle $m\bar{o}(z\tilde{o})$ 'towards the earth' is often used to express the perfective nature of the action, in this case, killing or slaughtering (see example (8)).

(8) **Tapā-m mā** piškīz tikāpūoga. kill-1PL ground.ILL little.GEN goatling.GEN

'We will kill a little goatling.' (SUST 250: 114)

In his dictionary, Kettunen has three examples of the verb $tapp\tilde{o}$ where the particle $m\bar{o}(z\tilde{o})$ does not appear. From among the examples, however, especially example (9), where the tense is perfect, seems to be perfective. Furthermore, Kettunen (1938: 409) has $m\bar{o}(z\tilde{o})$ $tapp\tilde{o}$, whose meanings he gives as 'kill, beat to death, murder'.

(9) sigā-d, nīem-õd tap-tõd, attõ pig-PL cow-PL slaughter-PTCP.PST be.3PL set sīezõr-d attõ īe-nõd flea-PL be.3PL remain-PTCP.PL only häz tappām-õd. without kill-PART

'The pigs and cows have been slaughtered. Only fleas remain.' (Kettunen 1938: 409)

The verb $t\tilde{o}mb\tilde{s}l\tilde{o}$ is derived from the verb $t\tilde{o}mb\tilde{o}$ 'wrench, drag, pull'. The frequentative derivative $t\tilde{o}mb\tilde{s}l\tilde{o}$ (example 10) is formed with the help of a compound suffix, where a sk-suffix appears in front of the frequentative suffix -l-. From the same derivational base is formed $t\tilde{o}m(b)l\tilde{o}$, which includes the plain suffix -l-, of which there are no examples in my data. The verb could also have continuative meaning.

(10)	tõmb-šlõ-nd	tõmb-šlõ-nd		sīe	lōja
	pull-FREQ-PTCP.PST	pull-FREQ-PTCP.PST		it.GEN	boat.GEN
	<i>jūs</i> , beside	<i>äb</i> NEG	<i>lā</i> go	<i>mierrõ</i> . sea.ILL	

'They pulled and pulled the boat. It does not move to the sea.' (CT 5: 20)

The distribution of the verb $t\tilde{o}mb\tilde{o}$ (example 11) covers the whole of Finnic (e.g. the Finnish, the Ingrian and the Karelian *temmata* 'wrench, drag, pull', as well as the Estonian $t\tilde{o}mmata$ id.). In addition to Livonian, the frequentative derivative with the suffix *-le-* formed from it occurs in Finnish and Estonian as well: *tempoilla* and $t\tilde{o}mblema$. In example (11), there also occurs the aforementioned verb *ail* \tilde{o} (in the meaning of 'run'); compare example (4). (Kettunen 1938: 414–415, SSA 3: 282, and Vääri 1974b: 52–53.)

(11)	no siz well then	<i>kargō-nd</i> jump-PTCP.PST		<i>ilz</i> , up	<i>tõmbõ-nd</i> pull-PTCP.PST		
	<i>rētšõ-d</i> fish basket-PL	<i>sälgõ</i> back.ILL	<i>ja</i> and				
	<i>ai-lõ-nd</i> run-FREQ-PTCP.PST	<i>randõ</i> . shore.ILL					

'Well then, they jumped up, took the fish baskets, put the baskets on their backs and ran to the shore.' (CT 5: 18)

Moreover, four verbs in my data (*imlõ*, *raļļõ*, *raillõ*, *raillõ*, *raillõ*, *raillõ*, *raillõ*, *raillõ*, *raillõ*, *raillõ*, according to Kettunen (1938), be derived from a noun. Of these, *imlõ* and *sūrslõ* are clear cases.

Kettunen (1938: 72–73) connects the verb *imlõ* (example 12) to the verb immõ; he gives the meaning 'sich wundern' ('wonder') for both of these verbs and proposes a correspondence between them, not a derivative relationship. He suggests that the noun im 'a wonder' is a derivational base for the verb immõ. Vääri (1974b: 38) connects both the noun im and the adjective imli 'wonderful' to the verb imlõ, but he does not suggest a derivative relationship between the pair; instead he states that they are words closely connected to the verb imlõ. The noun im has a wide distribution in Finnic; it occurs in all Finnic languages, except Veps (SSA 1: 221). Concerning Livonian, SSA 1 (221) gives only the noun im itself, compared to other languages (except Lude, for which only the verb is presented) with both the noun and the verb derived from it (for instance, from the Karelian imeh 'a wonder, strange; smiling, laughing' comes imehtie 'wonder, smile, laugh', and from the Estonian ime 'a wonder' comes imestada, imetleda 'wonder'). Nowhere in the all of the data I have researched does immõ appear, nor does Kettunen has any examples of it. According to Vääri (1974b: 38), imlõ has changed into an archaic and has been replaced by the loan verb brīno, brīno from Latvian. This would explain why there are only two examples of that in my data.

(12)	<i>mōnikka</i> inlander			lā-nd go-PTCP.PST			
	<i>jūrõ,</i> to-ILL	<i>lōja</i> boat.GEI	N	<i>jūr</i> to	<i>ja</i> and		
	<i>vaṇṭ-ļõ-n</i> look-FREQ-PTCP.PST			<i>ja</i> and	<i>im-lõ-n</i> : wonder-FREQ-PTCP.PST		
	" <i>ōi</i> oh	<i>jumāl</i> god		<i>kui</i> how	<i>pāgiņ</i> much		
	<i>täs</i> here	um be.3SG	<i>kaļḍi"</i> . fish.PAl	RT.PL			

^{&#}x27;A person who lives inland had gone to the boat and looked and wondered, "O God, how much there is fish here!" (CT 5: 22)

The derivational base of the verb $s\bar{u}rsl\tilde{o}$ (example 13) is the adjective $s\bar{u}r$, $s\bar{u}r$ 'big'. The distribution of the adjective covers the whole of Finnic languages (for example, the Finnish suuri, the Veps suri, $s\bar{u}ri$

and the Estonian *suur*). (Kettunen 1938: 388–389 and SSA 3: 224–225.)

rōm-sso (13)bet рā no se head.GEN well but it joy-INE völmi völ ka nei being also be.PST.3SG SO sūr, kи īrg-izt begin-PST.3PL big.NOM-GEN that iõvā sūrs-lõ. already brag-FREO.INF

'Well, but sometimes people were so drunk that they started to brag.' (CT 5: 70)

Kettunen (1938: 340) connects the verb $r\bar{\imath}dl\tilde{\imath}$ to the noun $r\bar{\imath}d$ 'a quarrel, an argument', which according to his dictionary appears only in Salaca Livonian. In the newer dictionary, $L\bar{\imath}v\tilde{\imath}k\bar{\imath}el-\bar{e}stik\bar{\imath}el-letk\bar{\imath}el$ $s\tilde{\imath}n\bar{a}r\bar{\imath}nt\tilde{\imath}e\bar{\jmath}$, the word $r\bar{\imath}d$ does not appear at all; for the meaning of 'a quarrel, an argument' the word $r\bar{\imath}dlmi$ appears, which is connected to the verb $r\bar{\imath}dl\tilde{\imath}e\bar{\jmath}e$ (Viitso & Ernštreits 2012: 267). The counterparts of both the noun $r\bar{\imath}d$ and the frequentative derivative $r\bar{\imath}dl\tilde{\imath}e$ occur in all of Finnic languages (for instance, in the Finnish riita 'a quarrel, an argument' and riidella 'argue, quarrel', in the Estonian riid 'a quarrel, an argument and riidlema 'argue, quarrel', and in the Veps rid 'a quarrel, an argument, a dispute and $r\bar{\imath}d'elta$ 'dispute, argue, quarrel). The frequentative derivative seems to have lexicalised in the whole of Finnic. (SSA 3: 76.) In example (14), the meaning of the verb is 'scold', as in most appearances of my data.

(14)	minā I	<i>rīḍ-ļ-iz</i> chastis	z se-FREQ-PS	T.1SG	<i>eņtš</i> own	<i>nāiz-ta</i> , wife-PART
	<i>mikš piero</i> why	ākst	<i>ta</i> she	ānda-b give-3SG	ì	<i>krūz-õks</i> tankard-INS
	<i>krīevõ</i> Russian-C	GEN	<i>zōldatō-d-a</i> soldier-PL-		<i>völ-tõ</i> beer-P	ART
	<i>juodõ,</i> drink.INF	7	<i>ku</i> that	<i>säb</i> it.NEG	uo be.3SG	knaššõ. prettv.PART.SG

^{&#}x27;I chastised my wife that it is not nice to give beer to Russian soldiers in a tankard.' (SUST 250: 16)

Regarding the meaning 'argue, quarrel', which is common to other Finnic languages, there is only one example. Here $r\bar{\iota}dl\tilde{\varrho}$ corresponds completely to its Finnic counterparts in both meaning and reciprocity; see example (15).

"...and now that beautiful wife quarrelled with that man..." (SUST 250: 112)

The fourth verb (rallo, raillo, raillo, radlo) is more unclear. It is an interesting verb, because it has correspondences in the other Finnic languages (for example, in the Estonian raiuma and the Vote rad'ioa), but with a frequentative suffix it only appears in Livonian (Kettunen 1938: 328 and Vääri 1974b: 46-47). Kettunen (1938: 311, 328) suggests the possibility of combining it with the noun raigā 'thigh, pelvis, hip', which corresponds to the Finnish raaja 'limb' (with a similar contextual meaning as, for instance, the Finnish words potkia, potkaista 'kick' and potka 'knuckle'). This is uncertain, however, so it remains unclear whether the verb rallo, raillo, raillo, radlo has a derivational base. SSA 3 (31) connects the Livonian verb rallo, raillo, raillo, radlo with the aforementioned Estonian and Vote verbs, as well as with the Finnish noun raaja 'a limb' and the verb raajoa 'chop up a slaughter animal; cut, bruise' derived from it, with the Karelian word roakie 'the hind appendage of a (slaughter) animal; a trot', and with the Veps word ragj: jokseb ragjal 'trot'. A verb correlate could be found in the other Finnic languages. In light of my examples, the verb raļļō, raillō, raiļļō, radļō could at least in some cases have a frequentative meaning (compare example 16), but the irregularity and aimlessness typical of the frequentative derivatives is not necessarily present. In example (17), it is not so easy to interpret the verb as frequentative:

(16)	<i>ja</i>	siz	<i>vanā</i>	<i>mīez</i>	<i>vöļ</i>
	and	then	old	man	be.PST.3SG
	<i>väggi</i> very	<i>murāgõl</i> sad	<i>ja</i> and	<i>itk-īz:</i> cry-PST.3SG	

<i>"kus</i> where	min I.GEN	<i>kīraz</i> , axe	<i>miss-õks</i> what-INS
ma	ni	raļ-ļõ-b ?	,,
I	now	chop-FRI	EQ-3SG

^{&#}x27;And then the old man was very sad and cried: "Where is my axe? What will I now use to chop wood?" (SUST 250: 180)

(17)	<i>ta</i> it	<i>vóļ</i> be.PST.3SG	nei so	<i>rai-l-tõd</i> chop-FRF	EQ-PTCP.PST	<i>pū</i> tree.GEN
	sizzõl, into	<i>pitkālt</i> much	sizzõl, into	<i>pitkā</i> long	<i>vait</i> . gap	

^{&#}x27;A long gash had been cut deep into the wood.' (SUST 250: 65)

Based on these examples from my data, it would seem as though both deverbial and denominal frequentative derivatives would be natural in Livonian. In addition to the derivatives that have a derivational base, there still remain the seven verbs with the *l*-suffix (*mõtlõ*, *mādlõ*, *pīerslõ*, *umblõ*, *vaṇṭļõ*, *vòdlõ*, *võikslõ*), for which I have not been able to find a derivational base in Livonian. Based on the other Finnic languages, derivational bases or correlates are to be found for the verbs *mõtlõ*, *pīerslõ* and *vòdlõ*.

The verb *mõtlõ* is connected to the noun *mõtkõz* 'a thought', from the same underived word stem, and it corresponds to the Estonian verb *mõtlema* in its usage as well (Kettunen 1938: 221). According to SSA 2 (166–167), the Estonian *mõtlema* would be derived from the Germanic loanword *mõõt* 'measure', and the Livonian *mõtlõ* would additionally be from the same base. Both of these describe mental activity without an actual frequentative meaning, as in examples (18) and (19):

(18)	<i>bet</i> but	<i>pòis</i> boy		<i>mõt-l-iz:</i> think-FREQ-PST.3SG		
	"mis what		ma I	<i>ni</i> now	tie-b?" do-3SG	

^{&#}x27;But the boy thought: "What do I do now?" (SUST 250: 186)

(19)	<i>bet</i> but	<i>rek</i> road.GEN	I	iz-tuļ ASP-come.PST.3SG
	pavissi comple		<i>äpku</i> than	<i>mēg</i> we

voļmõ **mõt-lõ-nd**.

be.PST.1PL think-FREQ-PTCP.PST

'But our journey went completely differently than we had thought.' (SUST 250: 60)

For the verb *pīerslõ* (example 20), correspondences can be found throughout Finnic (for instance, the Finnish and Karelian *pierrä* 'fart' and the Veps *perda* id.). In addition to Livonian, however, the derivative with *-le-* occurs only in Finnish (*piereskellä*) and in Ingrian (*pēreskellä*). The word in question is onomatopoeic. (SSA 2: 349.)

(20) no siz lēba ōj

well then bread.GEN owen.NOM-GEN

eittõs iz tuoit throw.INF NEG.PST dare.3SG

piers-lõ.

fart-FREO.INF

'Well then, you better not fart when you put the bread into the oven.' (CT 5: 76)

The verb *vodlõ* (examples 21 and 22) also has underived correspondences throughout Finnic (for instance, the Finnish *odottaa* 'wait', the Veps *vottatada* id. and the Estonian *oodata* id.). Verbs with the *lesuffix* occur in all Finnic languages, with the exception of Estonian and Veps (such as the Finnish *odotella* 'wait around', the Karelian *vuotella* id. and the Vote *ōtella* 'wait around, wait'). (SSA 2: 258.)

(21) se $\tilde{o}d\tilde{o}g$ vanā-d it night.NOM-GEN old-PL

līvliz-t vod-l-izt

Livonian-PL wait-FREQ-PST.3PL

mārttidi.

martti PART PL

'That night the old Livonians were awaiting marttis (cf. Estonia *mardisandid*).' (SUST 250: 40)

(22) amād voļţţō vāgiž un all be.PST.3PL silent and vod-l-iztō, ku nā-ks wait-FREQ-PST.3PL that see-COND.3SG

 $ming\bar{\imath}z$ -t $m\bar{o}$ - $d\tilde{o}$. some-PART land-PART

'Everyone was quiet and waited that they would see some land.' (SUST 250: 62)

Actually, verbs lacking a derivational base, which appear to be frequentative *le*-derivatives, seem to be formed from the stem, and the frequentative suffix, are *mādlõ*, *umblõ*, *vanţlõ* and *võikslõ*.

According to Vääri (1974b: 44–45), mādlõ is a case of metathesis. Originally, -l- would have been a part of the stem, and the verb without a frequentative suffix would have been transferred through metathesis over to the group of frequentative verbs (compare the Estonian mäletama 'remember'). Kettunen (1938: 240) also suggests the possibility of metathesis; he presents two reconstructions (*mähtel-, *mälehtel-) and connects the verb to the Estonian verb mäletama and the Finnish verb märehtiä 'chew (the cud)'. E. N. Setälä (1899: 353) and Lauri Posti (1942: 247-248) have presumed metathesis as well. The presumption of metathesis, however, does not seem plausible. It does not explain the long vowel of the first syllable, which, in any case, does not appear in the aforementioned correspondences of the cognate languages. However, according to Setälä (1899: 353), the long \bar{a} would be the result of the original confluence of $\ddot{a}h$. The verb $m\ddot{a}dl\tilde{o}$, and especially its consonant cluster -dl-, might be an analogical form from the verb mõtlõ. Evidence of the frequentative derivativeness of the verb $m\bar{a}dl\tilde{o}$ is the case of its object: usually the case of the object of the frequentative derivatives is partitive (ISK 2004: § 352) (for instance, in the Estonian mäletan teda 'I remember him' and in the Livonian *siedā* and $m\bar{i}nda$ in examples (23) and (24)). In its meaning, however, *mādlõ* is more continuative than frequentative.

(23)	siedā	та	mād-lõ-b,	
	se.PART	Ι	remember-FREQ-3SG	it
	vóļ	sūr	salāndõm.	
	be.PST.3SG	big	theft	

^{&#}x27;I remember that it was a great theft.' (SUST 250: 195)

(24)	<i>bet</i> but	<i>sinnõn</i> you.DAT	<i>sīepierāst</i> therefore	<i>ku</i> that	<i>sinā</i> you	
	<i>jõga</i> every	<i>kõrd</i> time	<i>ūod</i> be.2SG	mīnda I.PART		
	mäd-lõ-n remember-FREQ-PTO <i>lānga</i> thread.GEN		CP.PST	<i>ja</i> and		<i>punīz</i> red.GEN
			zied offering.NOM	I-GEN	and-õn give-PTCP	.PST

^{&#}x27;But for you, because you have remembered me every time and given me red thread as an offering...' (CT 5: 104)

It is not possible to find a derivational base for the verb *umblõ* (example 25), but it occurs through the whole of the Finnic area with the *le*-suffix (for instance, in the Finnish, Ingrian and Karelian *ommella* 'sew', in the Veps *ombelta*, *ombōda* id. and in the Estonian *õmblema* id.) (SSA 2: 266). The verb seems to have lexicalised throughout Finnic languages. A further indication of that is that it is found in dictionaries as a reference of its own (see, for example, SSA 2: 266 and KKS 4: 40).

SSA 3 (385) connects the verb *vanţlõ* (examples 26 and 27) possibly to the Finnish verb *vaania* 'stalk', which also has a Germanic loan etymology. According to Kettunen (1938: 470), however, this connection is certain. Definite correspondences are, however, the Erzya *vanoms* and the Moksha *vanôms* 'look at, observe; look after somebody, protect' (SSA 3: 385).

[&]quot;...those kinds of square rags were sewn from old mittens or socks..." (CT 5: 8)

(26)	ne vēl-id those brother-PL			laskõ-bõo let-3PL	d
	<i>sīn</i> there		<i>tubbõ,</i> room.ILL	<i>laz</i> IMP	<i>ta</i> he/she
	:			aiodā	

ni $va\eta t-l-\tilde{o}b$ $sied\bar{a}$ now look-FREQ-3SG it.PART

muļkkiz-t veļļõ.

stupid-PART brother.PART

'Those brothers let her enter the room, so that she would now look at the stupid brother.' (SUST 250: 102)

(27)	paṇṭṭō	<i>molmôd</i>	<i>eņš</i>	
	put.PST.3PL	both	own	
	<i>flīnt-id</i> gun-PL	<i>tubā</i> room.GEN		
	<i>nurkkõ</i>	<i>un</i>	<i>vanţ-l-izt</i> ,	
	corner.ILL	and	look-FREQ-PST.3PL	
	kus	<i>sō-b</i>	<i>ap-istõ.</i>	
	where	can-3SG	ASP-sit.INF	

'Both of them put their guns in the corner and looked around to see where they could sit.' (SUST 250: 14)

The verb *võikslõ* (example 28) has a correspondence in Estonian only: *võistlema* 'compete, fight'. As well as the verb *tõmbslõ*, that has a compound suffix that is formed from the suffixes *-sk-* and *-l-*. The meaning of the verb, however, may be more continuative than frequentative. (Vääri 1974b: 55.)

(28)	<i>ja</i> and	siz then	<i>iz-t</i> NEG.PST-l	PL	<i>ūotõ</i> be.3PL	nei so
	<i>või-nõd</i> can-PTC	või-nõd can-PTCP.PST		<i>vastõ</i> against		
	<i>võik-slõ</i> struggle-FREQ.INF <i>pā-l</i> on-ADE		<i>ja</i> and	<i>lainõ-d</i> wave-PL	<i>ōŗad</i> sandbank.	GEN
			visk-īzt toss-PST.3PL		<i>lōja</i> boat.GEN	

immõr	ja	mied
over	and	man.PL
upānd-izt	järā.	
drown-PST.3PL	away	

^{&#}x27;...and then they couldn't struggle against the waves and the waves tossed the boat over on the sandbank and the men drowned.' (CT 5: 40)

5. Conclusions

At the beginning of the article, I presented rather transparent criteria, according to which the frequentative derivation of Livonian does not seem to be very productive, even though on the basis of the other Finnic languages one might presume that to be the case. Evaluating the productivity of Livonian *l*-suffix verbs and the lexicalisation of individual verbs, the derivational base criterion of the verb works rather well: among the verbs of my data, seven verbal stems (the deverbial derivatives $s\tilde{o}u(v)l\tilde{o}$, $tapl\tilde{o}$ and $t\tilde{o}mb\tilde{s}l\tilde{o}$ and the denominal derivatives imlõ, rīdlõ and sūrslõ, and possibly also rallõ) can be found in Livonian. Additionally, the verbs motlo, pierslo and vodlo (also rallo may belong to this group) do not have an underived stem in Livonian, but such can be found in other Finnic languages. The verb ailo remains obscure in its origin: it has been derived either from the verb aijiō, which means that ailō has a derivational base, or it is a German loan, in which case it only appears to be a frequentative derivative in its form. The verbs without derivational bases are $m\bar{a}dl\tilde{o}$, umblo, vantlo and võikslo.

In particular, the verbs $m\tilde{o}tl\tilde{o}$, $r\bar{t}dl\tilde{o}$, $tapl\tilde{o}$ and $umbl\tilde{o}$ seem to have lost their frequentative character in Livonian as well as in other Finnic languages. The changed meaning 'scold, tell off' might also indicate the lexicalisation of the verb $r\bar{t}dl\tilde{o}$ in Livonian. In sum, this demonstrates the decreased productivity of the investigated category in connection of the mentioned verbs.

Frequentative derivatives are not very widely encountered in Livonian. For instance, it is difficult to indicate aspectual meaning in their usage (in comparison with, for instance, the expression of aspect in Veps by means of frequentative derivatives). In Livonian, the aspect is primarily expressed through particle adverbs (see *tapām mā* in example 8) and verbal prefixes of Latvian origin (see examples 1, 2, 19 and 27). For its own part, this certainly diminishes the frequency of occurring frequentative derivatives.

Compared with the other Finnic languages, this category (frequentative derivation as well as to a greater extent verbal derivation) is clearly more marginal in Livonian. This may represent one change that has taken place in the language, and one can reflect whether this may, to a greater extent, be related to the typological shift that has taken place in Livonian.

Address:

Santra Jantunen
Department of Finnish,
Finno-Ugrian and Scandinavian Studies
P.O. Box 24
00014 University of Helsinki
E-mail: santra.jantunen@helsinki.fi

Tel.: +358 445 723 728

Abbreviations

1, 2, 3 – persons, ADE – adessive, ALL – allative, ASP – aspect, COND – conditional, DAT – dative, ELA – elative, FREQ – frequentative, GEN – genitive, ILL – illative, IMP – imperative, INE – inessive, INF – infinitive, INS – instrumental, NEG – negation, NOM – nominative, PART – partitive, PL – plural, PST – past, PTCP – participle, SG – singular

References

- Bauer, Laurie (1983) *English word-formation*. (Cambridge Textbooks in Linguistics.) Cambridge: Cambridge University Press.
- Bauer, Laurie (1994) *Introducing linguistic morphology*. Edinburgh: Edinburgh University Press.
- Brinton, Laurel J. and Elizabeth Closs Traugott (2005) *Lexicalisation and language change*. (Research Surveys in Linguistics.) Cambridge: Cambridge University
- CT 5 = Suhonen, Seppo (1975) *Liivin kielen näytteitä*. (Castrenianumin toimitteita, 5.) Helsinki.
- EKG = Mati Erelt et al., eds. (1995). *Eesti keele grammatika I: Morfoloogia. Sõnamoodustus.* Tallin: Eesti Teaduste Akademia Keele ja Kirjanduse Instituut.
- ISK = Hakulinen, Auli, Maria Vilkuna, Riitta Korhonen, Vesa Koivisto, Tarja Riitta Heinonen and Irja Alho (2004) *Iso suomen kielioppi*. (Suomalaisen Kirjallisuuden Seuran toimituksia, 950.) Helsinki: Suomalaisen Kirjallisuuden Seura.

- Hakulinen Lauri (2000) Suomen kielen rakenne ja kehitys. Viides, muuttamaton painos. Helsinki: Helsingin yliopiston suomen kielen laitos.
- Kangasmaa-Minn, Eeva (1981) "Derivaatiopuun pudonnaiset". In *Sananmuodostuksen ongelmia. Seminaari Seilissä 3.–4.9.1981*, 29–33. (Suomen kielitieteellisen yhdistyksen julkaisuja, 7.) Turku.
- Kangasmaa-Minn, Eeva (1982) "Derivaatiokielioppia I: verbijohdokset". *Sananjalka* 24, 43–63.
- Kasik, Reet (2004) *Eesti keele sõnatuletus*. Teine, täiendatud ja parandatud trükk. Tartu: Tartu Ülikooli Kirjastus.
- Kasik, Reet (2013) *Komplekssete sõnade struktuur*. (Tartu Ülikooli Eesti keele osakonna preprindid, 3.) Tartu.
- Kettunen, Lauri (1938) *Livisches Wörterbuch mit grammatischer Einleitung*. (Lexica Societatis Fenno-Ugricae, 5.) Helsinki: Suomalais-Ugrilainen Seura.
- KKS 1 = Virtaranta, Pertti, ed. (1968) *Karjalan kielen sanakirja*. Ensimmäinen osa A-J. (Lexica Societatis Fenno-Ugricae, XVI, 1.) Helsinki: Suomalais-Ugrilainen Seura.
- KKS 4 = Koponen, Raija, ed. (1993) *Karjalan kielen sanakirja*. Neljäs osa O-P. (Lexica Societatis Fenno-Ugricae, XVI, 4, Kotimaisten kielten tutkimuskeskuksen julkaisuja, 25.) Helsinki: Suomalais-Ugrilainen Seura.
- Kytömäki, Leena (1992) Suomen verbiderivaation kuvaaminen 1600-luvulta nykypäivään. (Turun yliopiston suomalaisen ja yleisen kielitieteen laitoksen julkaisuja, 40.) Turku.
- Laakso, Johanna (1989) "Muodon ja funktion suhteesta itämerensuomen verbinjohtimistossa". *Virittäjä* 93, 50–69.
- Laanest, Arvo (1975) Sissejuhatus läänemeresoome keeltesse. Tallinn: Eesti NSV teaduste akadeemia Keele ja kirjanduse instituut.
- Markianova, Ljudmila Fedorovna (1985) *Glagol'noe slovoobrazovanie v karel'skom jazyke*. Petrozavodsk: Karelija.
- Posti, Lauri (1942) *Grundzüge der livischen Lautgeschichte*. (Suomalais-Ugrilaisen Seuran Toimituksia, 85.) Helsinki: Suomalais-Ugrilainen Seura.
- Puura, Ulriikka (2007) Vepsän kielen momentaaniset ja frekventatiiviset verbijohdokset. Johdosten rakenteen, merkityksen ja käytön tarkastelua. Unpublished Master's Thesis. Helsinki: Helsingin yliopisto, Suomalais-ugrilainen laitos.
- Puura, Ulriikka (2010) "Frequentative and momentative verbal derivation in Veps language". *Linguistica Uralica* 46, 261–280.
- SSA 1 = Itkonen, Erkki and Ulla-Maija Kulonen, eds. (1992) *Suomen sanojen alku*perä. Etymologinen sanakirja. 1. A-K. Helsinki: Kotimaisten kielten tutkimuskeskus ja Suomalaisen Kirjallisuuden Seura.
- SSA 2 = Kulonen, Ulla-Maija, ed. (1995) *Suomen sanojen alkuperä*. Etymologinen sanakirja. 2. L-P. Helsinki: Kotimaisten kielten tutkimuskeskus ja Suomalaisen Kirjallisuuden Seura.
- SSA 3 = Kulonen, Ulla-Maija, ed. (2000) *Suomen sanojen alkuperä*. Etymologinen sanakirja. 3. R-Ö. Helsinki: Kotimaisten kielten tutkimuskeskus ja Suomalaisen Kirjallisuuden Seura.

- Setälä, E. N. (1899) Yhteissuomalainen äännehistoria. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Setälä, E. N. and Väinö Kyrölä (1953) Näytteitä liivin kielestä. Suomentanut ja julkaissut Väinö Kyrölä. (Suomalais-Ugrilaisen Seuran Toimituksia, 106.) Helsinki: Suomalais-Ugrilainen Seura.
- Sjögren, J. A. (1861) Joh. Andreas Sjögren's Livisch-deutsches und deutsch-livisches Wörterbuch. Im Auftrage der Kaiserlichen Akademie der Wissenschaften bearbeitet von Ferdinand Joh. Wiedemann. (Joh. Andreas Sjögren's Gesammelte Schriften, Band II. Theil I.) St. Petersburg.
- SUST 250 = Mägiste, Julius (2006) Muistoja Liivinrannasta. Liivin kieltä Ruotsista. Suomentanut ja julkaissut Anneli Honko. (Suomalais-Ugrilaisen Seuran Toimituksia, 250.) Helsinki: Suomalais-Ugrilainen Seura.
- Viitso, Tiit-Rein and Valts Ernštreits (2012) Līvõkīel-ēstikīel-leţkīel sõnārōntõz. Tartu, Rīga: Tartu Ülikool, Latviešu valodas aģentūra.
- VKS = Grünberg, Silja, ed. (2013) Vadja keele sõnaraamat. Teine, täiendatud ja parandatud trükk. Tallinn: Eesti Keele Sihtasutus.
- Vääri, Eduard (1974a) Algupärased tuletussufiksid liivi keeles. Väitekiri filoloogiadoktori teadusliku kraadi taotlemiseks. Tartu Riiklik Ülikool.
- Vääri, Eduard (1974b) "Frekventatiivse ning retsiprookse *l*-liitega verbid ja algupäraste liidetega adverbid liivi keeles". (TRÜ toimetised, 323.) Töid eesti keele filoloogia alalt 4, 35–108.
- Vääri, Eduard (1975) "Liivi verbisufiksid -b- ja -g-". (TRÜ Toimetised, 344.) Fenno-Ugristica 1, 371-379.
- Vääri, Eduard (1976) "Liivi verbisufiks -ikš-". (TRÜ Toimetised, 382.) Fenno-*Ugristica* 2, 67–91.
- Vääri, Eduard (1980a) "Liivi verbisufiksid -nd- ja -ž-". (TRÜ Toimetised, 517.) Fenno-Ugristica 6, 146-161.
- Vääri, Eduard (1980b) "Liivi verbisufiksid -n- + t-". (TRÜ Toimetised, 550.) Fenno-Ugristica 7, 97-110.
- Vääri, Eduard (1981) "Liivi verbisufiks (vokaal) + -tt-". (TRÜ Toimetised, 566.) Fenno-Ugristica 8, 119-141.
- Vääri, Eduard (1982) "Liivi verbisufiks $-r + \dot{t}$ -". (TRÜ Toimetised, 611.) Fenno-*Ugristica* 9, 99–115.
- Vääri, Eduard (1983) "Liivi verbisufiksid -m- + t-". (TRÜ Toimetised, 643.) Fenno-*Ugristica* 10, 72–78.
- Vääri, Eduard (1984) "Liivi verbisufiks -s (š) + t-". (TRÜ Toimetised, 673.) Fenno-*Ugristica* 11, 93–113.
- Vääri, Eduard (1985) "Liivi verbisufiksid -s (š) + t-". (TRÜ Toimetised, 690.) Fenno-Ugristica 12, 159-181.
- Vääri, Eduard (1986) "Liivi verbisufiks -l + t- (d)-". (TRÜ Toimetised, 728.) Fenno-Ugristica 13, 134-145.
- Vääri, Eduard (1987) "Liivi verbisufiksid -p- + t-, -k + t-, -v + t-". (TRÜ Toimetised, 776.) Fenno-Ugristica 14, 119–135.

Zajceva, Marija Ivanovna (1978) Suffiksal'noe glagol'noe slovoobrazovanie v vepsskom jazyke. Leningrad: Nauka.

Zajceva, Nina (2003) Vepsän kelen grammatik: teoretine openduzkirj 5.–9. klassoile. Petroskoi: Periodika.

Kokkuvõte. Santra Jantunen: Piir produktiivsuse ja mitteproduktiivsuse vahel – kas liivi keele frekventatiivverbid on derivatiivsed või leksikaliseerunud? Artikkel vaatleb läänemeresoome keeltes produktiivset verbituletuse osa, frekventatiivseid *l*-tuletisi liivi keeles, kuidas nad esinevad ja on moodustatud. Uurimus põhineb andmetel 15 *l*-liitega verbi kohta. Artiklis jälgitakse, kuidas vormiliselt frekventatiivsed verbid on liivi keeles moodustatud ning kas need on frekventatiivid ka tähenduse poolest. Oluliseks kriteeriumiks verbi määratlemisel tuletisena on selle tuletusaluse olemasolu; artiklis püütakse selgitada, kas liivi *l*-liitelistel verbidel on alustüvi. Lisaks on artikli eesmärgiks uurida, kas frekventatiivide tuletamine on veel produktiivne liivi keeles ja millisel määral on frekventatiivsed *l*-tuletised leksikaliseerunud. Samuti on arvesse võetud teisi läänemeresoome keeli, uurides liivi *l*-tuletisega verbide tuletusaluseid ja levikut.

Märksõnad: liivi keel, läänemeresoome keeled, verbituletus, frekventatiivid, produktiivsus, leksikaliseerumine

Kubbõvõttõks. Santra Jantunen: Produktīvit ja äbproduktīvit vaili rubīž: või līvõ kīel frekventatīvtīemizsõnād ātõ derivatīvizt agā sõnāviļļō lānõd? Kēra tuņšlõb mūši vāldamiersūomõ kēļši produktīvizt tīemizsõnātultõks jaggõ, īžkiz frekventatīvidi *l*-tultõkši līvõ kīelsõ, nänt jeddõtulmizt kui ne ātõ vīţõd. Tuņšlõks alīzõks ātõ tietõd iļ 15 *l*-tīedõksõks tīemizsõnā. Kēras vaṇţlõb, kui frekventatīvõd tīemizsõnād formõd ātõ līvõ kīels vīţõd ja või ne ātõ frekventatīvõd ka tāntõks pūolst. Tīemizsõnā vizāks tīemizõks um tādzi täm tultõks alīz volmi; kēra kōļõb klīerõ või līvõ *l*-tultõksõks tīemizsõnādõn um alīztõv. Vel sõb tuņšlõd kēras se, või frekventatīvõd tultimi um līvõ kīels vel produktīv ja kui ātõ frekventatīvõd tultõkst sõnāviļļõ lānõd. Nei īž um vaṇţõltõd mūḍi vāldamiersuomõ kēļi, tuņšlõs līvõ *l*-tīedõksõks tīemizsõnād tīedõksalīži ja laigtõkst pands tādõl mūḍi vāldamiersūomõ kēļi.