LINGUISTICA URALICA LIX 2023 1 https://dx.doi.org/10.3176/lu.2023.1.01

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# THE LIVONIAN JUSSIVE: A CORPUS ANALYSIS*

**Abstract.** Livonian like other Finnic languages has a complex morphological system. Unlike, e.g., Finnish and Estonian, Livonian has not been systematically standardised and thus exhibits vast variability in usage. This article discusses the results of a morphosyntactic corpus analysis of the Livonian jussive mood. The article presents previous research on the Livonian jussive, formal aspects of jussive occurrences in the corpus, and an analysis of arguments of the jussive predicates. Jussive object marking is given more attention due to the ambiguity of case marking in Livonian, namely, nominative and genitive (sometimes even partitive) forms frequently coincide. A possible interpretation of the ambiguous cases is suggested based on their usage and restrictions.

**Keywords:** Livonian language, jussive, hortative, imperative, morphosyntax, corpus linguistics.

## 1. Introduction

At the beginning of the article, an overview of previous research into the forms under discussion is provided. Since the term *jussive* has been introduced into descriptions of Livonian following the example of Estonian linguistics, the background of the introduction of the term *jussive* into Estonian linguistics is also discussed. In the second part of the article, the analysed material is discussed as well the method used for analysis. Afterwards the results of the analysis are given, including the formal aspects of the jussive mood (the usage of the hortative particle *laz*, various categories, like person, number, negation) and the main arguments of the jussive predicates: the subject and object. A more detailed background of the object marking is given and a more detailed analysis of the object marking in the present corpus.

### 1.1. The Livonian jussive

Livonian, similarly to Estonian, has developed a secondary imperative paradigm which is used for expressing indirect commands. Currently, the paradigm is

* Project SRP "Latvian Studies for the Development of a Latvian and European Society" "Multifunctional dictionary of Livonian" No. VPP-LETONIKA-2021/2-0002 (2021.—2024.).
Received 10 February 2021, accepted 22 November 2022, available online 7 March 2023

referred to as the *jussive*.[1] Many of the terms used for Livonian have been introduced following Estonian linguistics — the jussive is no exception. Like in Estonian, these forms were classified as third-person imperatives and, thus, described as a part of the imperative paradigm in earlier grammars and descriptions of Livonian (Sjögren, Wiedemann 1861 : 130; Kettunen 1938 : LX—LXV). The origin of the mood itself is not clear in Livonian or in Estonian. Some researchers propose that it was the third-person imperative forms that have been generalised to the other persons and in this way formed a new paradigm (Hint 1969 : 335; Viitso 2011 : 211), others suggest that it was the other way around and that the jussive was co-opted for the imperative paradigm to convey third-person commands (Erelt, Metslang 2004 : 167—172).

Usage of this third-person imperative in other persons to express a wish, curse, or permission in Estonian has been observed already by Wiedemann (2011 [1875] : 509), still such cases were mostly ignored by linguists up until Hint (1969 : 335) drew attention to them. Rätsep (1971) was the first to carry out a situational analysis and compare the situational structure of the imperatives, indicative, and quotative in Estonian. He proposed an evidentiality-based[2] opposition between the direct indicative and imperative and the indirect or mediated indicative (currently referred to as the quotative) and imperative (currently referred to as the jussive).

Tiit-Rein Viitso (1976 : 157) ultimately suggested that generalised third-person imperatives in Estonian be classified as a separate mood and proposed the term *jussive*, which has been adopted in Estonian linguistics. Both the status of the jussive as a separate mood and the choice of the term itself has been questioned (Erelt 2002), but currently the jussive is a commonly accepted mood in Estonian linguistics (e.g., EKS; EKSM; Metslang, Sepper 2010; EKG I), where the jussive is associated with indirectness of information and directiveness. Following the Estonian example, the term as well as the evidentiality-based opposition has been applied to Livonian as well (Viitso 2008; Kehayov, Metslang, Pajusalu 2012; Pajusalu 2014a).

Prior to the introduction of the term *jussive*, these forms were classified as third-person imperatives (Sjögren, Wiedemann 1861 : 135; Kettunen 1938 : LXV). Occurrences of this form with persons other than third were not addressed except in a proposition by Sjögren and Wiedemann (1861 : 135) that the generalisation of the construction to other persons is a result of the influence of Latvian, namely, the analytical third-person imperative, e.g., *lai iet* 'let [him/her] go' (LVG 491). The constructions themselves were considered to belong to the imperative paradigm. Sivers (2001 : 71—73) also classified jussive forms as a part of the imperative paradigm; however, she included only first- and third-person forms, but left out the second-person jussive forms. It is possible that she did not encounter the second-person jussive forms, which are also not included in Kettunen 1938, which

[1] In general linguistics, the term *jussive* usually is used for third-person imperatives, but can also be used to refer to all non-second-person imperatives (e.g., Dobrushina 2012; Aikhenvald 2010 : 4; Palmer 2001 : 179—180). The term *jussive* is also used in Finnish linguistics (Fin.: *jussiivi*) to refer to third-person imperative forms as well as passive imperatives — passive forms, which are used to convey commands, although unlike in Estonian or Livonian, this has not developed into a full paradigm (cf. ISK; Peltola 2016).

[2] Note that he did not use the term *evidentiality*, as the term was not widespread at the time and instead used terms like *direct imperative* and *mediated imperative*.

she used as a reference; however, the second-person forms are attested in Setälä 1953 (Table 3), which she also used in her dataset. Moseley (2002 : 55) refers to the jussive forms as *subjunctive*. He provides only affirmative and negative third-person forms (and examples) and does not provide any arguments for the choice of term. The term accepted by most is *jussive*, which seems to be the most adequate to date.

The jussive markers (summed up in Table 1) in contemporary[3] Livonian are *-kk̄õ, -k̄õ, -gõ, -g, -õg* in the singular and *-kk̄õd, -k̄õd, -gõd, -õgõd* in the plural (Viitso 2008 : 317). As stated by Laanest (1975 : 154), the original form of the third-person imperative in the Finnic languages is *-ko/-kö*. Only the consonant of the marker has been preserved in Livonian, thus, the original shape is not clear. It has also been suggested that the marker might stem from a suffix which used to mark optative forms (Laanest 1975 : 154; Metslang, Sepper 2010 : 534; EKS 173), which are not present in contemporary Finnic languages.[4] If this were the case, the hypothesis proposed by Erelt and Metslang (2004 : 167—172), that the jussive might have been co-opted for the third-person imperative, might be correct.

*Table 1*

**Paradigm of the Livonian jussive**

| Person | Marker |
|---|---|
| 1—3SG | *-kk̄õ, -k̄õ, -gõ, -g, -õg* |
| 1—3PL | *-kk̄õd, -k̄õd, -gõd, -õgõd* |

The Livonian jussive forms are inflected for number, e.g., *laz vȩtšəg* 'let [me/you/him/her] search', *laz vȩt'šəgəd* 'let [us/you/them] search', but the person can only be distinguished when personal pronouns are used. Another peculiarity is that the Livonian jussive forms are generally used in conjunction with the hortative particle *laz*. Some grammarians (e.g., Kettunen 1938 : LXV) have stated that *laz* is unnecessary and others (Sjögren, Wiedemann, 1861 : 135) have suggested that these constructions have been extended to persons other than third person due to the Latvian influence on Livonian. The influence of Latvian on Livonian is well attested (e.g., Ernštreits, Kļava 2014; Larsson 2001; Wälchli 2001; 2000; Rudzīte 1996; 1994; Matthews 1956) and while the origin and time of the generalisation of this construction is currently unclear, influence of Latvian can certainly not be ruled out at this point. However, this development is not very recent as it is shared by Courland and Salaca Livonian (Sjögren, Wiedemann 1861 : 135; Winkler, Pajusalu : 121—125), and also occurs in Vaivara village in Estonia (Must 1987 : 256). It is also notable that similar constructions — though featuring indicative forms — appear in Latvian, Lithuanian, Estonian, and Russian (EKS 735; LVG 873—874; DLKG 687—688; Dobrushina 2008 : 134—135), which makes this an areal feature, meaning that the best attempt at dating the development would involve researching the older texts of all of these languages. Also, it is very apparent in the analysed material that jussive forms are used in conjunction with the hortative particle *laz* in the vast majority of cases, which indicates that it is an established phenomenon.

[3] Cf. Pajusalu 2014b (introduction). Unless specified, *Livonian* in this article only refers to Courland Livonian.

[4] Except the very rare and limited use of the Finnish second-person optative (Peltola 2016 : 690).

### 1.2. Negation of the jussive

Finnic languages, including Livonian, negate verbs employing negation auxiliaries. It is interesting to note, that Salaca Livonian, like Estonian, lost the inflection of the negation auxiliary in the indicative (Pajusalu 2014a : 126), while Courland Livonian, similarly to Finnish, kept the inflection of the auxiliary in the indicative (for more: Metslang, Pajusalu, Viitso 2015). Notably, even though the inflection of the negation auxiliary has been lost in the indicative in Estonian, it has been preserved in the imperative mood (Tamm 2015 : 406). It is also important to note that the negated imperative (as well as the jussive) employs double mood marking as mood is marked both on the negation auxiliary as well as on the verb, e.g., *tul-gõ* 'let [one] come' vs *al-gõ tul-gõ* 'let [one] not come'. The negation auxiliary is inflected in all forms (including the imperative and jussive) in Courland Livonian (Metslang, Pajusalu, Viitso 2015). Salaca Livonian, by contrast, has generalised negation particles not only in the indicative (separate for the present and past), but also has one generalised negation particle for the imperative as well (Pajusalu 2014a : 126—128). The negation auxiliaries in Livonian are summed up in Table 2.

*Table 2*

**Negation auxiliaries in Livonian**

<table>
<tr><th rowspan="3">Person</th><th colspan="3">Courland Livonian</th><th colspan="4">Salaca Livonian</th></tr>
<tr><th colspan="2">Indicative</th><th rowspan="2">Imperative</th><th rowspan="2">Jussive</th><th colspan="2">Indicative</th><th rowspan="2">Imperative</th><th rowspan="2">Jussive</th></tr>
<tr><th>Present</th><th>Past</th><th>Present</th><th>Past</th></tr>
<tr><td>1SG</td><td>äb[5]</td><td>iz</td><td>–</td><td rowspan="3">algõ</td><td rowspan="6">ab</td><td rowspan="6">iz</td><td>–</td><td rowspan="6">ala</td></tr>
<tr><td>2SG</td><td>äd</td><td>izt</td><td>alā</td><td rowspan="5">ala[6]</td></tr>
<tr><td>3SG</td><td>äb</td><td>iz</td><td>–</td></tr>
<tr><td>1PL</td><td>äb</td><td>iz</td><td>algõm</td><td rowspan="3">algõd<br>(algõ)[7]</td></tr>
<tr><td>2PL</td><td>ät</td><td>izt</td><td>algid</td></tr>
<tr><td>3PL</td><td>äb</td><td>izt</td><td>–</td></tr>
</table>

As the imperative is inflected for person, the negation auxiliary is also inflected for person, but since the jussive form in contemporary Livonian is inflected only for number, so is the negation auxiliary. Viitso (2008 : 321) refers to the negation auxiliary as the prohibitive verb (Est.: *keeluverb*) and provides its forms: *algõ* 'do not' (singular); *algõd* 'do not'(plural), which coincide with forms provided by Kettunen (1938 : LXV), Sjögren and Wiedemann (1861 : 156—157), on the other hand, propose that the singular version can also be used in the plural.

Unlike affirmative jussive forms, negated jussive forms in Livonian do not use the hortative particle *laz*, even though it is almost always used with affir-

[5] The forms of the negation auxiliary in Courland Livonian are taken from Viitso 2008 : 321.

[6] The forms of the negation auxiliary in Salaca Livonian are taken from Pajusalu 2014a : 128, the person category is not discussed at length; the persons mentioned are 2SG, 2PL, 1PL, 3SG, 3PL; negation of the jussive mood is not specified; however, Pajusalu states that: "The jussive expressing a reported command has been denoted in Salaca Livonian by means of forms that are identical to forms of the 3rd person imperative," which suggests, that the negation auxiliary also coincides with the negation auxiliary of the imperative, which is not inflected.

[7] Mentioned in Sjögren, Wiedemann 1861 : 156—157.

mative jussive forms. It is interesting to note that according to Sjögren and Wiedemann (1861 : 156) and Kettunen (1938 : LXV), the negation auxiliary can also be used in conjunction with the hortative particle *laz*: *las ma algõ vȯlg*[8] 'let me not be'; *las ta algõ vȯlg* 'let him/her not be'; *las mēg algõ võlg* 'let us not be'. Kettunen only mentions it in case of the first-person and third-person singular, and Sjögren and Wiedemann in first- (both Courland and Salaca Livonian) and third-person (only Salaca Livonian) singular and plural. The usage mentioned by Sjögren and Wiedemann and Kettunen might be a result of Livonian-Latvian language contacts, as the hortative particle *lai* 'let', is used both in affirmative predicates, e.g., *lai iet* 'let [one] go', and in negated predicates, e.g., *lai neiet* 'let [one] not go', as the hortative particle is the only marker of an indirect imperative in Latvian. Such cases in Livonian, on the other hand, constitute triple marking: the particle *laz*, the jussive marking of the negation auxiliary, and the jussive marker of the verb itself. However, there were no such cases in the data used in this article.

## 2. Analysis

### 2.1. Analysed data and analysis

The Livonian Corpus is a part of The Estonian Dialect Corpus, available online (http://www.murre.ut.ee/mkweb/) and is morphologically annotated. The corpus contains 44 248 words; 5511 of which are recordings of Grizelda Kristiņ and Poulīn Kļaviņ and 38 737 from E. N. Setälä's "Näytteitä liivin kielestä", which contains folk tales collected by E. N. Setälä during his expeditions to the Livonian Coast in 1888 and 1912. While there are other Livonian texts available, when this study was conducted this was the only available fully morphologically annotated source, which is the main reason it was selected.

Although it is an easily searchable annotated source of Livonian language, there are some issues with the data. Most of the texts are folk tales, which could potentially influence the way the language is used: in most cases the content is reported, neither the speaker nor the listener actively participates in the conversational situation, which means that direct communication is not represented in the sample. It is also important to note that multiple methods of representing the text are used in the corpus: orthography and phonetic transcription. Examples will be provided in the original form in which they are represented in the corpus.

The corpus search resulted in 476 examples. During the course of the analysis, it turned out that due to analytic marking of negation in Livonian the search returned negated jussive constructions twice, also in some instances the jussive annotation was incorrect and the final number of jussive occurrences was 444. Some identical sentences also appeared in the results, but since the number was not high and there was no way of finding out the reason why these identical sentences appeared, they were kept in the study. The search was completed with the full available context and it was taken into consideration in the analysis. In some cases though, the context was either missing or very scarce.

All of the jussive occurrences were used in the study and morphosyntactic analysis. Initially, the jussive constructions themselves were inspected for the

[8] Kettunen's examples are given in the modern orthography.

presence/absence of the hortative particle *laz*, person, number, and negation. Due to the limitations of the article, verb particles and prefixes are not addressed here. Afterwards, the subject and object of the jussive forms were analysed noting their morphological form and word class, animacy, semantic groups. Since object marking in Finnic languages is a somewhat complex issue — as is Livonian inflection for case (will be discussed in greater detail later), more attention was paid to the object — both semantically and formally. The form of the object was closely inspected identifying the total-partial opposition as well as animacy of the object referent, its semantic group and some constructions.

### 2.2. Usage of the hortative particle *laz*

Livonian has developed a hortative particle *laz* 'let', which has a similar counterpart in Latvian, e.g., *lai iet* 'let [him/her] go'. The hortative particle *lai* is derived from a Baltic causative-permissive verb *laist* 'let, allow' (Holvoet 2010 : 74—75, Endzelīns 1951 : 892). The Livonian particle *laz* is most likely a cognate of the Estonian particle *las* (Kehayov, Metslang, Pajusalu 2012 : 49). According to Leskinen (1966 : 17), the particle might have been influenced by German *lass* 'let', Latvian *lai* 'let' and Estonian *las* 'let'. The Estonian hortative particle *las* was derived from the second-person singular imperative form of the modal verb *laskma* 'let, allow, make' (Livonian *laskõ* 'let, allow' (Leskinen 1966 : 17)) and, according to Metslang, inherited a causative-permissive meaning (2010 : 546). The verb *laskma* seems to be very similar to the German counterpart *lassen* and even though the particle *las* coincides with the second-person imperative form of the German *lassen* — *laß* — it is thought to be of Finno-Ugric origin (SSA 49; SKES 278; EES[9]). As mentioned earlier, grammarians have stated in the past that *laz* is optional or unnecessary (Kettunen 1938 : LXV). Viitso (2008 : 320), on the other hand, states that the "jussive is used in combination with a modal adverb *laz*", which would suggest that it is obligatory. The current sample of the Livonian jussive seems to indicate the latter to be probable. Out of 411 affirmative sentences, 403 are used with a particle, which makes up 98.1 % of the examples. In 19 of the cases, the particle is skipped and used once for coordinated structures (1).

(1) *siz ta=m' kītən las ta tuog sie*
then 3SG.N=be.3SG say.APP let.HORT 3SG.N bring.JUS.SG this.G.SG[10]
*vįť īm un kliķšəg uks vāldiń*
key.G.SG and lock.JUS.SG door.G.SG open
'Then he[11] told him to bring the key and unlock the door'

It is important to note that not in all cases where multiple jussive predicates are used, *laz* is only used once. If there are multiple jussive predicates and multiple subjects, then the particle can be used once for all the coordinated predicates of one subject and another particle for the predicates of the other subject (2).

[9] https://www.eki.ee/dict/ety/index.cgi?Q=laskma.
[10] The glosses are provided in accordance with Leipzig Glossing Rules 2015.
[11] As Livonian pronouns (also personal) do not mark gender, 'he' is used in translations in order to avoid any kind of confusion by using a variety of pronouns, or marking multiple ones, which would make the translations longer and clumsier and this lack of distinction is not important in the current study. It also should be noted, that the Livonian pronoun *ta* can also refer to inanimate referents and unless it is obvious and important in the context, this distinction will also not be made.

(2) *ta* [–––] *kītiz sie kēńigən laz ta vi̯tāg*
3SG.N say.PST.3SG this.GEN.SG king.DAT.SG let.HORT 3SG.N take.JUS.SG
*pivā+kᵘoda pi̯rand aldəst sie krupā un vi̯tāg*
temple.G.SG floor.G.SG under this.G.SG toad.G.SG and take.JUS.SG
*sie jumāl+lēba sūst ulz un laz se*
this.G.SG altar_bread.G.SG mouth.ELA.SG out and let.HORT this.N.SG
*neitst siegə ji̯rā*
maiden.N.SG eat.JUS.SG PRF
'He said to the king he should take a toad from underneath the temple's floor and take this communion wafer from the mouth and let this maiden eat it'

Also, there are many cases where multiple coordinated jussive predicates are used in a row all in combination with the particle *laz* (3).

(3) *izānd kītən laz tulg miez tā'gižun laz*
lord.N.SG say.APP let.HORT come.JUS.SG man.N.SG back and let.HORT
*āndag sie vārza kien se kēv um*
give.JUS.SG this.G.SG foal.G.SG who.DAT.SG this.N.SG mare.N.SG be.3SG
'The lord told the man to come back and give this foal to the one who has the mare'

Interestingly, 7 different variations of the form of the particle *laz* are used in the corpus: *as, az, la, läz, laz, lаž, las* (Leskinen (1966 : 17) also mentions *läs*). In some cases, multiple variants are reported in the same example. However, since the corpus uses both orthography and phonetic transcription, the variants are not comparable. In the current study, only the presence of the particle is important and not its variation, therefore, the form of the particle will not be addressed in greater detail.

In 8 cases the jussive form has been used without the particle (4), which makes up 1.9 % of the cases of the affirmative sentences. The sample is too small to make any conclusions based on this, but the examples without *laz* in the current data have occurred both in West and East Livonian, thus it does not seem to be regional.

(4) *ta vi̯ib pāikal pī'lə ne munt siz ai'ləgəd*
3SG.N can.3SG in.place stay.INF that.N.PL other.N.PL then run.JUS.PL
'He can stay there, let the other ones run'

It is also interesting, that in one case all the jussive predicates are without the particle (5) and in two cases both predicates with and without the particle were used in the same sentence (6). In one case the jussive predicate without the particle was used in combination with a second-person imperative predicate and clearly was not a reported but a third-person instruction (7).

(5) *ta pa̋liz sʲedā kuŕŕə ku täm' tapāb ma̋'zə kapīńtəg*
3SG.N ask.PST.3SG this.P.SG devil.P.SG when 3SG.G. kill.3SG down hack.JUS.SG
*täm' pienəks un pistāg täm' lejā täm' serk*
3SG.G small.TRSL.SG and shove.JUS.SG 3SG.G body.G/N.SG 3SG.G shirt.G.SG
*si'zzəl un paŋgə täm' übīz sa̋lga pa̋lə*
inside and put.JUS.SG 3SG.G horse.G.SG back.G.SG on_top
'He asked the devil to hack him into small pieces and put his body into his shirt and put [it] onto his horse's back'

(6) *siz ta läkkə tar'rə sie tamm jūrə sie*
then 3SG.N go.JUS.SG garden.ILL.SG this.G.SG oak.G.SG to this.G.SG
*sovāks laz ta ra'bbəg ül' sie tamm siz ta*
stick.INST.SG let.HORT 3SG.N hit.JUS.SG over this.G.SG oak.G.SG then 3SG.N
*sab sǟ'lt ā'rnəd ē'tʲəbəks un siz täm' lībəd*
get.3SG out clothes.G/N.PL dress.PPRP.TRSL and then 3SG.DAT will.3PL
*ü'bbist laz ta brou'tšəg lātəl tagā*
horse.N.PL let.HORT 3SG.N ride.JUS.SG church.ADE/ALL behind
'Then he should go to the garden to the oak, hit the oak with this stick, then he will have clothes to get dressed and then he will have horses so he could go behind the church'

(7) *ku tēg lǟ'tə kᵘodai siz tä'ddən um' sūr kiɨk siz*
when 2PL.N go.2PL home then 2PL.DAT be.3SG big.N.SG rooster.N.SG then
*tapāgid se kiɨk mǟ'zə un puol süö*
kill.IMP.2PL this.N.SG rooster.N.SG down and half.G/N.SG eat.IMP.2SG
*ī'ž jɐ̄rā un puol süögə jɐ̄mānd*
yourself PRF and half.G/N.SG eat.JUS.SG lady.N.SG
'When you arrive home, you will have a big rooster, then kill this rooster and eat half of it yourself and let the lady eat half'

It is possible that the presence of *laz* might be influenced by the function of the jussive predicate, but in order to make this statement, more such examples need to be found and investigated. Nevertheless, the fact that the particle *laz* is used in 98.1 % of the occurrences in the current sample, does not support the claim that it is optional. In some cases, one particle is used for coordinated jussive predicates and in other cases coordinated jussive predicates referring to the same subject are all used in combination with *laz*. This shows that the particle is losing its semantic meaning and is in process of desemantisation and at the same time grammaticalisation[12] and doubles the jussive marking. The fact that there are some examples without the particle, which do not seem regional, suggests that there might be some kind of a difference in meaning between the two constructions.[13] The possibility of a difference in meaning is also supported by the fact, that all of the occurrences without *laz* were in third-person, although this can be explained by the low frequency of other person forms in the corpus.

[12] It is also important to note, that the particle *laz*, though rarely, occurs in the same corpus with indicative as well (e.g. *laz ta sīeb* (HORT 3SG.N eat.3SG) 'let him eat'). These examples could be the influence of Latvian, since the construction with the hortative particle *lai* in Latvian is used with the indicative mood, e.g., *lai iet* (HORT go.3SG) 'let him/her go', and by the time the texts were recorded all of the speakers were already bilingual, but in order to make that statement, more research needs to be done. Also, usage of *laz* with indicative forms especially if the functions coincide might imply that the particle might be gaining more independent grammatical meaning.

[13] It is possible that the form without the particle has been used as a pure third-person imperative and the particle has been used in order to convey jussive meanings. This would be consistent with the fact that Kettunen (1938 : LXIV) provides examples with *laz* for the first and third persons but not the second person and states that the particle is unnecessary. In the current sample, the use of jussive constructions does occur in second person, though marginally frequently.

### 2.3. Negation

In the current sample 33 out or 444 examples were negated, which makes up 7.4 %. The negation particle *algə* 'let not' does not vary in shape and is not inflected for number (examples 8, 9). Almost all of the negated jussive predicates are in third person, most of them singular and 5 of them plural, in one case it was used in second-person singular (10). None of them uses the plural negation auxiliary and the subject referents seem to be transparent in number: none of them are collective nouns or pronouns, although in case of (9), it is possible that a numeral construction can affect the lack of inflection for number.

(8) *se sui'ž akūb på̲lam algə laskəg täm' må̲'*
this.N.SG wolf.N.SG start.3SG ask.SUP NEG.JUS shoot.JUS.SG 3SG.G down
'This wolf started asking not to shoot it'

(9) *izändəd a'dt amād pa̲lanəd* [–––] *algə ne kakš*
lord.N.PL be.3PL all.N.PL ask.APP NEG.JUS that.N.PL two.N.SG
*vel'l'ə tapägəd tä̲nda må̲'*
brother.N.PL kill.JUS.PL 3SG.P down
'All of the lords have asked that the two brothers not kill him'

(10) *nänt vitsädəks ma kierəb sin'nən sū vi'zzə*
this.G.PL twig.INST.PL 1SG.N twist.2SG 2SG.DAT mouth.G/N.SG shut
*un sie puńń ma panūb tagā algə sa*
and this.G.SG plug.G.SG 1SG.N put.1SG behind neg.JUS 2SG.N
*vuig nei' jen'n siedə un sittə*
can.JUS.SG as much eat.INF and shit.INF
'With these twigs I will tie your mouth shut and I will put this plug behind so you can't eat and shit as much'

The negated jussive forms were not very frequent thus it cannot be claimed for certain, that the negative auxiliary is not inflected for number in Livonian. Still, all the previous grammars (Sjögren, Wiedemann 1861 : 156; Kettunen 1938 : LXV; Viitso 2008 : 321) have stated that it is, while the current sample shows otherwise, which raises the need for further research.

### 2.4. Person and number

As mentioned previously, the type of texts of this sample of Livonian might influence the occurrence of first- and second-person forms, since the events are predominantly reported in folk tales and neither the speaker nor the listener are actively involved in the plot. This does not exclude the possibility that jussive constructions are predominantly used in stories and other types of reporting, but also cannot confirm it.

Many linguists associate the term *jussive* predominantly with third-person imperatives[14] but can also refer to all non-second-person imperatives (e.g., Dobrushina 2012; Aikhenvald 2010 : 4, 17; Palmer 2001 : 179—180). While the Livonian jussive paradigm has all of the person forms, at least in the current dataset it shows a strong tendency to be used in the third person as 434 of the 444 examples (which makes up 97.7 %) are in

[14] For a more detailed overview of the terms used for non-second-person imperatives see Aikhenvald 2010 § 2.2. The term can also be used to refer to a clause type (e.g., Pak, Portner, Zanuttini 2004).

the third person; most of those occurrences are singular. This is consistent with the genre of the texts — folk tales, as the participants of the conversation are not involved in the plot, but instead report events about those not involved in the communication situation. The frequency of person and number occurrences is shown in Table 3:

*Table 3*

**Frequency of number and person occurrences**

| Person | Singular | Plural | Total |
|---|---|---|---|
| 1 | 2 (0.5 %) | 2 (0.5 %) | 4 (0.9 %) |
| 2 | 6 (1.4 %) | 0 (0.0 %) | 6 (1.4 %) |
| 3 | 378 (85.1 %) | 56 (12.6 %) | 434 (97.7 %) |
| Total | 386 (86.9 %)[15] | 58 (13.1 %) | 444 (100 %) |

As is apparent from the table, third-person singular and plural (11), (12) occurrences are by far the most frequent. There are also some examples of the first-person and second-person singular (13), (14). The only person not represented in current sample is second-person plural, which could be so due to the type of texts used for the dataset. It is interesting to note that though both first- and second-person forms are rare, the second-person singular forms are more frequent, than the first-person forms.

(11) *se saŕt um' ki'zzən laz vi̯tāg tǟnda ka pǟlə*
this.N.SG cripple.N.SG be.3SG ask.APP let.HORT take.JUS.SG 3SG.P also onboard
'This cripple has asked to take him onboard too'

(12) *ni mǟ̆'ŕšjālga kītiz laz tuogəd pitkād*
now groomsman.N.SG say.PST.3SG let.HORT bring.JUS.3PL long.G/N.PL
*lōdad tu'bbə*
table.G/N.PL inside
'Now the groomsman told [them] to bring the long tables inside'

(13) *sa kītist laz ma vakt'əg aitā ukstā*
2SG.N say.PST.2SG let.HORT 1SG.N watch.JUS.SG granary.G.SG door.P.SG
'You told me to watch the granary door'

(14) *ta tǟ̆'b laz sa täm'mən sie umār āndag*
3SG.N want.3SG let.HORT 2SG.N 3SG.DAT this.G.SG apple.G.SG give.JUS.SG
'She wants you to give her the apple'

Interestingly, though the jussive is inflected for number in Livonian, the number of the subject[16] does not always coincide with the number of the predicate (15). In some cases, several different forms of the jussive are used with the same subject within the same clause (16).

(15) *se kēńig pand laz ra'bbəgid na'glə un ne*
this.N.SG king.N.SG order.APP let.HORT hammer.JUS.SG nail.P.SG and 3PL.N
*ka las sidāg k$^{j}$eud jūrə*
also let.HORT tie.JUS.SG rope.G.SG to
'The king ordered them to hammer the nail and attach the rope to it'

[15] In two cases, it was impossible to tell which person it is from the context, but based on the rest of data they were classified as third-person singular forms.
[16] The subject will be discussed later in this article.

(16) *sis ti'esə+mi'ed ā't kītənəd l a z v ị t ā g jegā+ükš*
then judge.N.PL be.3PL say.APP let.HORT take.JUS.SG everyone.N.SG
*ǖ'd kᵘet'ʹ un l a z l ä k k ə d ulzə*
one.G.SG bag.G.SG and let.HORT go.JUS.PL out
'Then the judges told everyone to take one bag and go outside'

The latter example could be explained by the fact that the subject referent is morphologically singular but refers to a group and thus can be viewed as both singular and plural. Note that the number of the predicate also varies in other texts (also with other forms) as can be seen in examples (17) and (18).

(17) *Amād ädāgizt väggõ jarā ja jūokšizt jegāikš*
all.N.PL become_scared.PST.3PL very PRF and run.PST.PL everyone.N.SG
*eṇtš kūožõ* (Stalte 1936)
own.G.SG place.ILL.SG
'Everyone got very scared and everyone ran to their places'

(18) *Ja sugīz, ku ta vald sānd ja tāgiž*
and happen.PST.3SG that 3SG.N power.N/G.SG get.APPSG and back
*tund, paṇ kutsõm entš pālkalizt, kīend*
come.APPST order.PST.3SG invite.SUP.INE own.G.SG servant.G/N.SG who.G.PL
*kädd ta rā vȯḷ andõn, laz tieudõ,*
to 3SG.N money.G/N.SG be.PST.3SG give.APPSG HORT know.INF
*mis jegaikš vȯḷ kōpikšõn*[17]
what.N/G/P.SG everyone.N.SG be.3SG earn.APPSG
'And so it happened, that after he got power and came back, he ordered his servants to be invited, to whom he gave money so he would get to know what they had earned'

This could indicate a confusion of number in the third person, which could be attributed to Latvian influence, since Latvian (as well as Lithuanian) does not distinguish between singular and plural in the third person (Kalnača 2014 : 84; LVG 516) in any of the moods, e.g., *iet* '[he/she/they] go'; *lai iet* 'let [him/her/them] go'. It is also notable that the Estonian jussive is also not inflected for number, while Finnish third-person imperatives (sometimes also referred to as jussives[18]) are.

(19) *se kēńig pand laz ra'bbəgid na'glə un*
this.N.SG king.N.SG order.APP let.HORT hammer.JUS.SG nail.P.SG and
*ne ka las sidāg kʲeud jūrə*
3PL.N also let.HORT tie.JUS.SG rope.G.SG to
'The king ordered them to hammer the nail and attach the rope to it'

(20) *sis ti'esə+mi'ed ā't kītənəd l a z v ị t ā g jegā+ükš*
then judge.N.PL be.3PL say.APP let.HORT take.JUS.SG everyone.N.SG
*ǖ'd kᵘet'ʹ un l a z l ä k k ə d ulzə*
one.G.SG bag.G.SG and let.HORT go.JUS.PL out
'Then the judges told everyone to take one bag and go outside'

The Estonian example of number neutralisation in third-person imperative and jussive forms, and some of the Livonian examples with inconsistent number in the subject and jussive forms could potentially also be caused by the seman-

[17] New Testament, translated by Stalte.
[18] Peltola 2016; ISK § 1734.

tics of indirect commands. When conveying a command towards an addressee or oneself (alone or together with the addressee) the number opposition is more transparent compared to commands to a third party. When an indirect command is conveyed to a specific known third party or reported, the number is still transparent, but once the command is conveyed to s o m e o n e (an unspecified third party) the number is semantically less transparent and thus could become less distinctive and cause confusion or even neutralisation altogether, which seems to be the case in Estonian. Optative uses might also encourage the neutralisation of the number category as there is no intended addressee in the case of optative use. It is also interesting to note that Finnish jussive[19] uses also exhibit number neutralisation (Peltola 2016 : 689).

### 2.5. Subject

Second-person imperatives universally tend not to have an overt subject (Aikhenvald 2010 § 2.3), as the subject of the command generally coincides with the addressee of the utterance and there is direct contact between the addresser and the addressee. The subject of a jussive predicate generally does not coincide with the addressee of the utterance and in most cases, there is no direct contact between the addresser and the addressee of the command.

Based on the current dataset, the Livonian jussive can be used in any person, but formally it is only conjugated for number and not for person, thus making an overt subject the only means to mark the person.[20] As was shown in the previous section, in 86.9 % of the occurrences, the jussive is used in the third-person singular, which means, that unlike in the second-person imperative, the addressee of the command is not immediately transparent and there is a higher need to show it overtly. The frequency of occurrences of an overt subject are illustrated in Table 4.

*Table 4*

**Frequency of occurrences of an overt subject**

| Person | Singular | Plural | Total |
|---|---|---|---|
| 1 | 2/2 (100 %) | 2/2 (100 %) | 4/4 (100 %) |
| 2 | 6/6 (100 %) | 0/0 (0 %) | 6/6 (100 %) |
| 3 | 206/377 (54.5 %) | 34/56 (60.7 %) | 240/433 (55.4 %) |
| Total | 214/385 (55.6 %) | 36/58 (62.1 %) | 250/444 (56.3 %) |

The most prototypical addressee of an imperative predicate is the second-person singular and thus it makes sense that it is the least marked formally: both person/number marking of the verb form as well as an overt subject of the imperative predicate (Aikhenvald 2010 § 2.1.1). As expected, the most prototypical form of the Livonian jussive is third-person singular, which is

[19] Finnish does not have a dedicated jussive mood. In Finnish linguistics the term *jussive* is applied based on a set of meanings rather than a particular form (ISK § 1734; Peltola 2016 : 688).

[20] As Livonian is a morphologically rich language, the syntactic relations of elements are marked morphologically as well as syntactically. This means that participants are frequently skipped in utterances if the context is sufficient. In almost all of the cases where the subject was not overtly mentioned (with the exception of 2 cases where the context was very limited) it was easy to identify the intended subject.

also confirmed by overt subject marking. The frequency of the other than third-person forms is marginal, thus it is not conclusive; however, it is very clear that when the form is other than third person, the subject is always overt. Also, in the third-person singular the subject was less frequently overt than in the third-person plural.

Subjects of the first and second person are marked using corresponding pronouns and the subject of the third-person jussive predicates is expressed in a variety of ways.

### 2.6. Object

#### 2.6.1. Total and partial object

It is characteristic of the Finnic languages to distinguish between total and partial objects (see, e.g., Lees 2003; 2015; Tveite 2004 for Livonian) and Livonian is no exception. Finnic languages mark partial objects with the partitive case and total objects with either the nominative or genitive. (17), (18). It is common to refer to the partial object as a *partitive object* and to the total object as an *accusative object* (e.g., Lees 2003; 2015; Tveite 2004; Bjarnadóttir, de Smit 2013). This terminology is also preferred by Tveite in his study of the object in Livonian (2004), which is very useful for studying semantics of the object, but less illuminating when it comes to the usage of specific forms and their combinations.

(21) Finnish: *koira vetää pulkkaa* (ISK)
dog.N.SG pull.3SG sled.P.SG
'The dog is pulling the sled'

Estonian: *Jüri luges raamatut* (Metslang 2017 : 266)
Jüri.N.SG read.PST.3SG book.P.SG
'Jüri was reading a book'

(22) Finnish: *tilasin taksin* (ISK)
order.PST.1SG taxi.GEN.SG
'I ordered a taxi'

Estonian: *ta kirjutas sellest raamatu* (Metslang 2017 : 268)
3SG.N write.PST.3SG this.ELA.SG book.G.SG
'He wrote a book about this'

The form of the total object in the Finnic languages is determined by the number of the object noun, but it is also determined by the verb form with which it is used, e.g., a singular total object of an indicative verb is usually in the genitive case, as in (22) above, if the objects were in the plural, the nominative would be used (as in (23), from Estonian). A total object of an imperative predicate in Estonian or Finnish is in the nominative (24), but in the genitive in Livonian, e.g., (25).[21]

[21] As a reviewer of this article kindly noted, the object of the second-person imperative can also be marked in the genitive in Kven: *kirjo*(*i*)*ta* (write.IMP.SG) *preivin* (letter.G.SG) *faarile* (father.ALL.SG)! 'Write a letter to the father!' (Söderholm 2014 : 225), and Meänkieli: *osta* (buy.2SG.IMP) *hyän* (good.G.SG) *hevosen* (horse.G.SG) 'buy a good horse' (Wande 1978 : 85). Kven, Meänkieli, and Livonian have all been exposed to prolonged and intense contacts with Indo-European languages, which do not distinguish between total and partial object nor have

(23) Estonian: *ostsin* *saapad* (Metslang 2017 : 267)
buy.PST.1SG boot.N.PL
'[I] bought boots'

(24) Estonian: *vii* *laps* *lasteaeda*! (Metslang 2017 : 271)
take.IMP.2SG child.N.SG kindergarten.ILL.SG
'Take the child to the kindergarten!'

(25) Livonian: *ānda* *min'nən* *sie* *piškīz* *lind*![22]
give.IMP.2SG 1SG.DAT this.G.SG small.G.SG bird.G.SG
'Give me this small bird!'

In Finnish, the form of the object of predicates in the jussive is determined in the same way as in declarative clauses not as in imperative clauses (Peltola 2016 : 689). According to Metslang 2017 : 271—272, the total object of the jussive (as well as the imperative) is in the nominative, although it is also noted, that the nominative might also be preferred in commands in general, with the exception of commands expressed with the indicative. According to Lees (2015 : 245) both South and North Estonian jussive objects are mainly in the partitive up until the beginning of the 20th century when nominative objects become almost as frequent as partitive objects, with no instances of genitive objects. The fact that Livonian differs from other Finnic languages in total object marking as well as differences in object marking of jussive predicates in Finnish and Estonian raises a question about the object marking of the jussive mood in Livonian.

The complexity of studying the object in Livonian stems from the fact that in many cases due to the language changes, the formal difference between the nominative and genitive (sometimes even the partitive) is absent (see Table 5). While there are homonymous forms in every language, it is more pronounced in Livonian than any other Finnic language, which among other issues complicates the analysis of the formal aspect of the object. Tveite in his comprehensive study of the Livonian object (2004) discusses the semantic aspects of the Livonian object and verbs in great detail. The formal aspects and the influence of verb forms other than negation are not at the focus of his study. It is commonly known though, that the choice of the object case of a total object is greatly influenced by the verb form in the Finnic languages:[23] the genitive is used for singular objects with indicative predicates and the nominative for plural objects of indicative predicates, and all total objects of the imperative, impersonal, and some other verb forms.

Kettunen (1938 : XLI) observed that in Livonian, the genitive is used for marking objects also in cases where the nominative would be used in other Finnic languages. He gave examples of imperative (confirmed by the current corpus, e.g., (25)) and debitive (26) constructions.

(26) *um* *võtāmõst* *sie* *õbīz* (Kettunen 1938 : XLI)
be.3SG take.DEB this.G.SG horse.G.SG
'[One] has to take this horse'

differential total object marking. It seems that all these Finnic languages might have simplified their total object marking but did not lose the total-partial opposition. Note that Latvian lost its total-partial object opposition relatively recently (most likely due to German influence).

[22] This example is also from the Corpus of the Livonian language.

[23] See EKS I 271—275; ISK § 934.

*Table 5*

**Nominative, genitive, and partitive forms in Livonian**[24]

| Nominative | Genitive | Partitive | Translation |
|---|---|---|---|
| *pā̆va* | *pā̆va* | *päuvõ* | 'day, sun' |
| *torī* | *torī* | *torī* | 'pipe' |
| *ruzū* | *ruzū* | *ruzū* | 'rubble' |
| *nǭgõ* | *nǭgõ* | *nǭgõ* | 'skin' |
| *nīem* | *nīem* | *nīemõ* | 'cow' |
| *pȯis* | *pȯis* | *pȯisõ* | 'boy' |

Lees (2015 § 7) has studied the Finnic objects of the imperative-jussive taking into account the differential total-partial object marking as well as the formal case of the object. Lees, however, only specified the partitive marking and genitive marking of pronouns, and other cases — nouns in the nominative, genitive, or with unclear marking (nominative-genitive) — were all placed in a combined category termed the accusative. Interestingly, Lees (2015 : 230) proposes that the plural nominative and genitive forms, which always coincide, can be considered to be genitive.

In this article, the opposition of the total and partial object is taken into account as well as the actual forms used. In cases where the actual form is unclear, the term *nominative-genitive* (similarly to Lees 2003; 2015) is used. The object forms are classified by, case, number and animacy, word class (noun or pronoun[25]) and whether the object is total or partial. Although distinguishing between the nominative, genitive (27) (and sometimes even partitive) in Livonian is not always possible, the forms of pronouns (28) or adjectives (29) can help with this distinction.[26]

(27) *r$^{i}$e'bbi kītən las su'$^{i}$ž pistāg eńtš tabār*
fox.N.SG say.APP let.HORT wolf.N.SG put.JUS.SG own.G.SG tail.G/N.SG
*si'ezə oukə*
inside hole.ILL.SG
'The fox told the wolf to put its tail into the hole'

(28) *se umārz+pū um' kītən las k$^{u}$oŕŕəg*
this.N.SG appletree.N.SG be.3SG say.APP let.HORT gather.JUS.SG
*ne umārd jǭrā*
this.N.PL apple.N.PL PRF
'This apple tree has said to gather those apples'

(29) *pǭis kītiz laz ta tuogə roudiz*
boy.N.SG say.PST.3SG let.HORT 3SG.N bring.JUS.SG iron(ADJ).G.SG
*vīrba un sūr pā̆giń kieta*
rod.G.SG and big.G/N.SG a_lot rope.P.SG
'The boy said let him bring an iron rod and a lot of rope'

[24] Forms are taken from LELS.

[25] The pronoun *mis* 'what, which' appears twice in the position of an object, but is not considered, since its form is homonymous in the nominative, genitive, and partitive, thus making the distinction between the total and partial object impossible.

[26] This solution is not perfect, as case agreement in Livonian is not always predictable, but with the lack of other formal markers it is used in this case as an indicator of form. Also, it is worth noting that an object like *sie zā̆ig+jou'd* 'this (G.SG) sawdust (N/G.PL)' also appears, which might be a mistake, an indication of confusion of the number opposition, or grammaticalisation of the pronoun. This case is not analysed separately.

Out of the 444 sentences, 183 were intransitive and in 36 sentences the object was omitted (contextual). An overt object was present in 225 cases, out of which 47 were subordinate clauses, infinitives, adverbs, and other constructions. These constructions are not addressed in this study and need to be studied separately. In this case, the objects inflected for case are in focus and will be discussed in greater detail. In almost all of the sentences[27] only one overt object was used. The general frequency of total and partial objects is shown in Table 6.

*Table 6*

**Frequency of total and partial objects**

| | Total object | | | Partial object | | |
|---|---|---|---|---|---|---|
| | Sg | Pl | Total | Sg | Pl | Total |
| Cases | 108 | 17 | 125 | 40 | 14 | 54 |
| Percentage | 60.3 % | 9.5 % | 69.8 % | 22.3 % | 7.8 % | 30.2 % |

As is apparent in the table, the singular objects are significantly more frequent than the plural objects just as the total objects are more frequent than the partial objects. The total-partial object opposition is proportionally much more expressed in the singular (total objects are almost 3 times more frequent than partial objects in the singular), while the difference in frequency of total and partial objects in the plural is much smaller. Since personal pronouns in Livonian as well as in other Finnic languages tend to be partial even where a total object could be expected (Sjögren, Wiedemann 1861 : 241; Tveite 2004 : 38; Lees 2015 : 231; Metslang 2017 : 272—273), they are discussed separately.

Pronouns occurred as objects 66 times in total. Unlike nouns, the pronouns generally lack the formal ambiguity and the forms are clearly distinguishable. In the present corpus, pronominal referents of total objects are always marked with the genitive (30) and partial objects, like nouns, in the partitive (31). The total-partial opposition of pronouns is presented in Table 7.

(30) *kītəbəd läz set tuog sie ulz*
say.3PL let.HORT only bring.JUS.SG this.G.SG out
'[they] tell [her] to bring it out'

(31) *Ants ka um' pallən las vēl'əg tānda ka*
Ants.N.SG also be.PST.3SG ask.APP let.HORT allow.JUS.SG 3SG.P too
'Ants also asked for permission (~ asked to allow him too)'

*Table 7*

**Total-partial opposition in pronouns**

| | Sg | Pl | Total |
|---|---|---|---|
| Total object | 29 (44.0 %) | 2 (3.0 %) | 31 (47.0 %) |
| Partial object | 28 (42.5 %) | 7 (10.6 %) | 35 (53.1 %) |

Although total objects are more frequent in general, the partial pronominal objects in the singular are just as frequent as total objects and even more frequent in the plural making partial pronominal objects more frequent than total pronominal objects. This confirms that it is also the case in Livonian that pronominal objects tend to be partial more frequently than nominal

[27] Two objects appear in one sentence, see example 31.

objects. The comparison of total-partial object opposition between nouns and pronouns is illustrated in Table 8.

*Table 8*

**Total-partial opposition in noun and pronoun objects**

| | | Sg | Pl | Total |
|---|---|---|---|---|
| Total object | Nouns | 79 (44.1 %) | 15 (8.4 %) | 94 (52.5 %) |
| | Pronouns | 29 (16.2 %) | 2 (1.1 %) | 31 (17.3 %) |
| Partial object | Nouns | 12 (6.7 %) | 7 (3.9 %) | 19 (10.6 %) |
| | Pronouns | 28 (15.6 %) | 7 (3.9 %) | 35 (19.6 %) |
| Total | | 148 (82.7 %) | 31 (17.3 %) | 179 (100 %) |

The data clearly indicate a stronger tendency of pronouns to occur as partial objects compared to nouns. In spite of this tendency, unlike in Estonian, where personal pronouns are rarely used as total objects (Metslang 2017 : 272—273), in Livonian the total-partial opposition is still clearly expressed in pronouns as well as nouns. This opposition might be supported by the neutralisation of personal pronouns and determiners, like *ta* ~ *tämā* ~ *se* 'he/she/it, this, that'.[28] It is important to note though that in this corpus first-person pronouns did not occur as objects, second-person pronouns occurred only as partial objects, and this opposition is only apparent for third-person pronouns, which also act as determiners.

Lees (2015, chapter 7) has studied imperative and jussive objects in translations of religious texts into Livonian, and while the type of texts is different, it is still possible to compare the results of Lees' study and the current study. The results of Lees' analysis are summed up in Table 9. The partitive column in the table shows both pronouns and nouns; the genitive-accusative column shows only pronouns and the accusative only nouns.

*Table 9*

**Case distribution of objects of imperative verbs in the Gospel of St. Matthew in Livonian (Lees 2015 : 241, Table 7.9)**

| | All objects | | | | Noun objects | |
|---|---|---|---|---|---|---|
| | Partitive | Gen-Acc | Accusative | Total | Partitive | Total |
| East 1863 | 33 (37 %) | 23 (26 %) | 34 (38 %) | 90 | 18 (35 %) | 52 |
| West 1863 | 31 (33 %) | 15 (16 %) | 48 (51 %) | 94 | 20 (30 %) | 68 |
| 1942 | 39 (45 %) | 11 (13 %) | 36 (42 %) | 86 | 28 (44 %) | 64 |

Although total objects are consistently more frequent than partitive objects (as is the case in the current study), partitive objects appear more frequently in Lees' corpus. The relative frequency of partitive objects is higher in the most recent sources compared to older sources. The most striking difference between the results of Lees' study and the present study is found in the analysis of the noun objects. Only 10.6 % of the noun objects in the current corpus are partial, while Lees' corpus showed the proportion of partial noun objects to be from 30 % to 44 %. The current corpus shows that the correlation of number and total-partial opposition might be important in object marking, but it is not addressed by Lees, thus the two datasets cannot be cross-referenced in this respect.

[28] For a review of demonstratives in Livonian see Tomingas 2018 : 244—246.

### 2.6.2. Total object marking

Previously the total-partial opposition in object marking was discussed. This section will focus on total object marking. Marking partial objects in Finnic languages (including Livonian) is uncontroversial and the partitive is always used for that purpose, total object marking, on the other hand, is a different matter. In other Finnic languages, the total object of imperatives[29] is marked with the nominative and according to Lees (2015 : 241), the genitive appears only occasionally and exclusively in older texts. In Livonian, however, the total object is marked with the genitive not only in indicative clauses, but also with imperatives.

In the current study, objects inflected for case appeared in 179 sentences, 125 of which are total objects (cf. Table 6). Since pronouns in the position of a total object are consistently and unambiguously marked with the genitive, only the marking of nouns is discussed here. Of the 125 total objects, 94 are nouns (cf. Table 8). The noun objects are classified by number, case marking, and animacy. The results of the analysis are shown in Table 10.

*Table 10*

**Marking of total object**

| | N | G/N | G | Total |
|---|---|---|---|---|
| Animate (Sg) | 1 (1.1 %) | 8 (8.5 %) | 14 (14.9 %) | 23 (24.5 %) |
| Inanimate (Sg) | 6 (6.4 %) | 19 (20.2 %) | 31 (33.0 %) | 56 (59.6 %) |
| Total (Sg) | 7 (7.4 %) | 27 (28.7 %) | 45 (47.9 %) | 79 (84.0 %) |
| | | | | |
| Animate (Pl) | 0 (0.0 %) | 2 (2.1 %) | 2 (2.1 %) | 4 (4.3 %) |
| Inanimate (Pl) | 6 (6.4 %) | 5 (5.3 %) | 0 (0.0 %) | 11 (11.7 %) |
| Total (Pl) | 6 (6.4 %) | 7 (7.4 %) | 2 (2.1 %) | 15 (16.0 %) |
| | | | | |
| Total per case | 13 (13.8 %) | 34 (36.2 %) | 47 (50.0 %) | 94 (100 %) |
| | | | | |
| Total animate | 27 (28.8 %) | Total inanimate | 67 (70.6 %) | |

As noted before, singular objects are in general significantly more frequent than plural ones (82.7 % vs 17.3 %), which — though not by much — is even more pronounced if we consider only total noun objects (84.0 % vs 16.0 %). It is also notable that even taking into account the neutralisation of nominative and genitive marking, clearly marked genitive objects make up 50.0 %, thus being the most frequent total object marking of jussive objects in the current corpus. In 36.2 % of cases, the ambiguous nominative-genitive marking is used. The least frequent is nominative marking, which makes up only 13.8 % of cases. It is important to note that almost all of these cases are used with inanimate objects. Furthermore, all cases except for one (32), which showed singular nominative marking, were used with numeral phrases (including the only animate object): (33), (34).

(32) *se kēzar um' lā̄'nd un kītən laz ta*
this.N.SG emperor.N.SG be.3SG go.APP and say.APP let.HORT 3SG.N

[29] In Estonian, jussive objects are also marked as nominatives (Metslang 2017 : 271); note that for Finnish this holds true only for non-third-person imperatives. The object of the Finnish *jussive* or third-person imperative uses the same object marking as declaratives (Peltola 2016 : 689).

*ar'təg se nīn jerā*
destroy.JUS.SG this.N.SG castle.N.SG PRF
'The emperor has told him to destroy this castle'

(33) *pᵘɟis* [–––] *kītəb per+īmi'en las ta paŋgə kakš*
boy.N.SG say.3SG master.DAT.SG let.HORT 3SG.N put.JUS.SG two.N.SG
*ɟibīst rattəd jɟ'ddə*
horse.P.SG horse_cart.G.PL in_front_of
'The boy tells the master to put two horses in front of the cart'

(34) *las se rikāz perī+miez maksāg täm'mən vīž*
let.HORT this.N.SG rich.N.SG master.N.SG pay.JUS.SG 3SG.DAT five.N.SG
*rubīl't jū'rə vel*
rouble.P.SG on_top more
'Let this rich master pay him 5 more roubles'

In all cases of nominative object marking in the plural, the case is marked with the determiner *ne* 'these, those', e.g., (35).

(35) *se umārz+pū um' kītən las kᵘoŕŕəg ne*
this.N.SG appletree.N.SG be.3SG say.APP let.HORT gather.JUS.SG this.N.PL
*umārd jɟrā*
apple.N.PL PRF
'The apple tree said to gather the apples'

Based on the data, it seems, that nominative marking is not used for object marking if the referent is animate, with the exception of numeral phrases, in which case the nominative marking is determined by the usage of the numeral.[30] It also seems that nominative object marking in singular objects is used almost exclusively with numeral phrases (6 out of 7 cases) and in all cases of plural nominative marking the determiner *ne* 'these, those' was used. In order to better understand the choice of an object case, the referents have been classified into rough semantic groups. The overview of the classification and correlations of semantic groups and object cases is summarised in Table 11. Some of the semantic groups of referents not represented in previous examples are shown in examples (36)—(39) (the number of the example is indicated in the parentheses).

(36) *jumāl ju küll ne kutsəgəd*
god.G/N.SG INTJ INTJ 3PL.N invite.JUS.PL.
'Let them definitely invite God'

(37) *siz laz ta tapāg sie laps sie kiw'*
then let.HORT 3SG.N kill.JUS.SG this.G.SG child.G.SG this.G.SG stone.G.SG

[30] This is also supported by the fact, that no pronouns appear in the nominative, although pronouns tend to be used more frequently as partial objects. Due to the limitations of this study, the effect of verbs could not be investigated, and this subject still requires further investigation. In this study, numeral phrases are considered to be phrases, where the numerals determine the number of referents (that is numerals beginning with 2). If a phrase contains the numeral *ikš* 'one', it acts like a determiner and agrees with the object case. There were 9 cases like this and they all used genitive marking, e.g., *ī'd sigā* 'one (g.sg) pig'. Other singular measurement units like *puol* 'half'and *si'ek* 'peck (measurement unit)' fell under an ambiguous nominative-genitive marking category, although in one case *si'ek* was also used with a determiner: *ī'd si'ek* 'one (g.sg) peck' in which case it clearly used genitive marking.

*pə̈l mə̄̈'zə*
on down
'Then let him kill this child on top of this stone'

(38) *mūdə maksə algə tə̄̈'gə ku ikš kɨrd las*
other.P.SG payment.P.SG NEG.JUS want.JUS.SG than one time let.HORT
*tə̈nda nu'o+butšīńtəg*
3SG.P kiss.JUS.SG
'Let him not want a reward other than one kiss (~to be kissed once)'

(39) *ta = m' no+kēratən nänt rə̄̈ntəd sil'lə laz ta*
3.SG.N=be.3SG write.APP that.G.PL letter.G.PL into let.HORT 3SG.N
*āndag suolə un revolmar*
give.JUS.SG salt.P.SG and revolver.N/G.SG
'He wrote in those letters for him to give salt and a revolver'

*Table 11*

**Correlation of object cases and semantic groups of object referents**

| Semantic group | N/G | G | N | P | Total |
|---|---|---|---|---|---|
| Human | 4 | 6 (33) | 0 | 1 | 11 |
| Animal | 5 | 10 (3) | 0 | 2 | 17 |
| Mythical creature | 1 (32) | 0 | 0 | 1 | 2 |
| Object | 19 (23) | 26 (25) | 6 (24) | 8 (15) | 59 |
| Amount | 2 (7) | 2 | 0 | 0 | 4 |
| Abstract object | 3 | 0 | 0 | 5 (34) | 8 |
| Material | 0 | 3 | 1 | 2 (35) | 6 |
| Numeral | 0 | 0 | 6 (29) | 0 | 6 |
| Total: | 34 | 47 | 13 | 19 | 113 |

Looking at the distribution of the semantic groups it becomes clear, that nominative usage is the most restricted, while other marking: genitive, ambiguous nominative-genitive, and partitive are used with less restrictions. Based on the homonymous form of the plural nominative and genitive forms, and the fact that there are no pronominal objects of imperative predicates marked in the nominative in the translation of the New Testament (all are marked in the genitive) Lees (2015 : 230) suggested that the ambiguous plural objects of imperative predicates could be considered to be marked in the genitive. The results of this study also indicate that it is plausible; however, it also seems applicable to the singular objects. The ambiguous nominative-genitive marking occurs in 36.2 % of the cases. Animate referents make up 29.7 % of these cases, which is congruent with the genitive marking (animate objects, make up 31.2 % of the cases). In total, animate referents make up 28.8 % of the objects (with only one animate referent in the nominative). Also, lack of restriction, the semantic similarity of referents (cf. Table 11) as well as the frequency of the referents — marked either as genitive or ambiguously — further supports this suggestion.

## 3. Conclusions

After inspecting the 444 jussive occurrences in the corpus it turned out that the hortative particle *laz* has been used with most of the affirmative predicates (98.1 %). The particle was sometimes skipped in coordinated structures and kept in others, which shows that the particle is losing its independent

meaning and is in the process of grammaticalisation. In cases where the particle is used with every single predicate in coordinated structures, it acts as a morphological marker, rather than a syntactic marker which would modify the entire clause. The particle was not used in 8 cases in total and thus broader conclusions could not be drawn, due to the low frequency of such occurrences.

Previous researchers suggested that the Livonian negation auxiliary is inflected for number (Viitso 2008 : 321; Kettunen 1938 : LXV; Sjögren, Wiedemann 1861 : 156—157). 33 jussive predicates were negated in the present corpus, and neither inflection nor other kinds of variation occurred in the current corpus.

Jussive predicates most frequently occurred in third person (97.7 %) and most of them in singular (86.9 % of all of the occurrences). Forms in other persons were rare and second-person plural was not represented in the corpus at all. Interestingly second-person singular forms were more frequent than first-person forms. It is important to note that due to the type of texts used, the usage of persons might be affected, as most of the events described were reported and the interactions of the speaker and listener were not represented in the current corpus. A study of spontaneous language use might return different results. In some cases, the number of the jussive predicate and the number of the subject referent was incongruent. This might be caused by a difference in the semantic and morphological number of subject referents, but could also indicate confusion regarding number in third-person jussive predicates — or even just be mistakes.

Subject referents were overt in all non-third-person predicates and were more frequently overt in the plural (62.1 %) than in the singular (55.6 %), which as well as the frequency of the forms, shows that the most prototypical form of the Livonian jussive is the third-person singular.

Since the case marking in the nominative and genitive (and sometimes even the partitive) is frequently the same, the object marking was inspected in greater detail. Total objects were more frequent than partitive ones (69.8 % to 30.2 %) and partial objects were proportionally more frequent in the plural than in the singular.

Since the pronouns in the Finnic languages are known to tend towards partial marking, they were inspected separately from nouns. Partial marking of pronoun objects was more frequent in general (53.1 % compared to 47.0 % of total pronoun objects). In the singular, the total-partial opposition was represented almost with the same frequency, but in the plural, partial pronoun objects were represented more frequently (which was also the case when it comes to nouns). Total noun objects were the most frequent (52.5 %). Other types of objects were less frequent: total pronoun objects occurred in 17.3 %, partial noun objects in 10.6 %, and partial pronoun objects in 19.6 % of cases. It must be noted that total object marking was only used with third-person pronouns, which are also used as determiners and first- and second-person pronouns only occurred as partial objects.

The most frequent marking of the total noun object was genitive, making up 50.0 % of all of the cases. Relatively frequent were also the ambiguous genitive-nominative marking, which made up 36.2 % of the cases. The least frequent total object marking was nominative, which made up 13.8 % of the cases. Almost all of the nominative marking in the singular was used with numeral phrases. The analysis of the object referents showed that genitive and ambiguous marking were the least restricted and were used with various

animate and inanimate referents. The nominative seems to be the most restricted and was used either with numeral phrases or inanimate referents.

The semantic and case marking distribution of the objects shows that the genitive case is used the most frequently to mark a total object with the least number of restrictions. The lack of restrictions and distribution of semantic groups of referents in genitive and ambiguous marking make them very similar (also similar to the referents with partitive marking), which makes it seem plausible that ambiguous marking could be interpreted as genitive marking, as it is the most prototypical marking, thus, making the special case marking unnecessary. In this respect, Livonian is very different form Estonian and Finnish and it is apparent that total objects of commands are not prototypically marked with the nominative in Livonian.

This study could not definitively show the difference (or lack thereof) between the jussive constructions with the hortative particle *laz* and those without it, and this requires further research. Also, the inflection for number of the negation auxiliary was not attested in the present corpus, although due to the low frequency of the form, the lack of inflection is not definitive. The number of jussive predicate and subject referents was not always congruent, but due to the low frequency of plural forms, the possibility of number confusion in jussive predicates requires further research. While it is obvious that the jussive is used with other persons than the third, the frequency was very low and larger generalisations cannot be made, thus requiring further research, especially in conversational situations, which include active participation of the speaker and the listener.

**Acknowledgements.** The publication costs of this article were covered by the Estonian Academy of Sciences.

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**Abbreviations**

1, 2, 3 — persons, ADJ — adjective, ALL — allative, APP — active past participle, DAT — dative, ELA — elative, G — genitive, HORT — hortative, ILL — illative, IMP — imperative, INST — instrumental, JUS — jussive, N — nominative, NEG — negation auxiliary, P — partitive, PL — plural, PRF — perfective particle, PST — past, PPRP — passive present participle, SG — singular, TRSL — translative.

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**ЮССИВ В ЛИВСКОМ ЯЗЫКЕ: КОРПУСНЫЙ АНАЛИЗ**

В статье представлены результаты корпусного морфосинтаксического анализа юссива в ливском языке. Поскольку в ливском языке номинатив и генитив (а иногда и партитив) часто совпадают, больше анализировались формы дополнения при юссиве. При толковании этих падежных форм учитывались условия использования дополнения.

*MILDA DAILIDĖNAITĖ* (Tartu)

**LIIVI KEELE JUSSIIV: KORPUSEPÕHINE ANALÜÜS**

Artiklis esitatakse liivi keele jussiivi korpusepõhise morfosüntaktilise analüüsi tulemused. Et liivi keeles langevad nominatiiv ja genitiiv tihti kokku (vahel ka partitiiv), on rohkem analüüsitud jussiiviga kasutatud sihitise vorme. Sihitiskäänete tõlgendamisel on lähtutud nende kasutamise piirangutest (või piirangute puudumisest).