

# On the relationship between subject expression and modal meaning in Tver Karelian necessity and possibility constructions

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## Abstract

This article examines the relationship between subject expression and modal meaning in Tver Karelian modal verb constructions expressing necessity or possibility. Under investigation are clauses that include a finite form of *pidiä* ‘must, have to’, *šuaaha* ‘can, may’ or *voija* ‘can, may’. In their Finnish counterparts, *pitää* ‘must, have to’ is a unipersonal verb, which takes a genitive subject, whereas *saada* ‘may, can’ and *voida* ‘can, may’ agree with a nominative subject in person and number. According to previous studies, both the necessity and possibility modals of Karelian can, however, be used with an impersonal pattern where the subject is in an oblique case and shows no agreement with the predicate. The analysis of Tver Karelian modals confirms that *pidiä* invariably takes a subject in the adessive-allative, whereas in possibility constructions, the case marking is more variable and determined by both syntactic and semantic factors. With *šuaaha*, the adessive-allative subject is the default choice when the verb forms a verb chain with the A-infinitive and expresses participant-internal or participant-external (im)possibility or necessity, whereas the nominative is used in clauses that express the verb’s premodal meaning ‘to get’. *Voija* can also take a subject both in the nominative and in the adessive-allative case. Regarding *voija*, however, the role of verbal person marking turned out to be more essential than the case marking of the subject NP. What unites all modals under investigation is that they are very willing to occur in subjectless 3rd person singular clauses, which easily receive a referentially open interpretation in dialectal data.

**Keywords:** modal verb, subject expression, non-canonical subject, zero subject, open reference, Tver Karelian, dialect syntax

## 1 Introduction

### 1.1 Aims of the study

The present study focuses on three core modal verbs in the Karelian language, namely, *pidiä* ‘must, have to’, *šuaaha* ‘can, may’, and *voija* ‘can, may’, all

of which are known across the Finnic languages (Kehayov & Torn-Leesik 2009: 368).<sup>1</sup> Of particular interest is the way in which the subject is expressed in different modal constructions and the connection between the subject expression and the type of modality that the construction denotes. Typically, Karelian modals expressing necessity take a subject in an external local case (1), whereas the verbs expressing possibility may also agree with a nominative subject in person and number (2). Both necessity and possibility modals can form verb chains that include a person-inflected form of a modal verb and an infinitive form of a lexical verb.

(1) Tver Karelian

*Miu-la jo pid'ä-y läht'ie!*  
I-ADE.ALL already have.to-3SG leave.INFA

'I have to go now!' (Virtaranta & Virtaranta 1990: 50)

(2) Tver Karelian

*ke-l'1' ̣ on šano-mma nel'1'äkymmeñ-d'ä vuot-ta, hiän*  
who-ADE.ALL be.3SG say-1PL forty-PART year-PART she.NOM  
*jo voi olla "baba"*  
already can.3SG be.INFA granny.NOM

'If someone is, let's say, 40, she can already be a grandmother.' (Virtaranta & Virtaranta 1990: 168)<sup>2</sup>

The situation exemplified above resembles the modal system in Finnish, a close cognate of Karelian. In Standard Finnish, modals expressing necessity are unipersonal, i. e. they do not inflect for person, number or voice but always appear in the 3rd person singular and take a subject in the genitive. The modals expressing possibility, on the other hand, agree with the nominative subject. However, with regard to Karelian, the situation is more variable. As shown in (3), in Karelian, possibility modals may also take a non-nominative subject.

<sup>1</sup> The forms given are those from the Tver Karelian dictionary (Punžina 1994).

<sup>2</sup> The legato symbol ̣ means that the words are pronounced closely connected.

## (3) Tver Karelian

*Oo, šiu-lda i šil'mä-t viäriššyt't'ä-iš što šiu-l ei voi*  
 ooh you-ABL PTC eye-PL twist-COND.3SG that you-ADE NEG.3SG can.CNG  
*kattšuo!*  
 watch.INFA

‘Ooh, you’d go cross-eyed (if you were to watch); you’re not allowed to watch!’  
 (Virtaranta & Virtaranta 1990: 52)

The aim of this study is to describe the subject expression in necessity and possibility constructions from a functional perspective. In addition to the subjects, I will also address subjectless constructions, which very often receive an open or generic interpretation in their context. A referentially open person construction describes a human experience but leaves the identity of the referent unspecified (e.g. Siewierska 2004: 210; for further details, see § 2.3). In Finnish, the most typical way to express an open reference is to use the open zero construction where the predicate verb invariably appears in the 3rd person singular and which never has an overt subject NP (4). In Karelian, on the other hand, the primary means of open reference is the 2nd person singular clause, which does not include a subject pronoun (5).

## (4) Finnish Savo dialects (North Karelia)

[In her youth, the speaker moved to the United States but returned to Finland after a few years:]

*tännek kum Martovvaara-llep peäs-j niim mikä-s teä-llä o*  
 here when Matrovaara-ALL get-PST.3SG PTC what-CLI here-ADE be.3SG  
*elleek kököttää.*  
 live.INFA squat.INFA

‘When you manage to return to Martovaara, there’s nothing to complain about.’  
 (Lyytikäinen et al. 2013: 465)

## (5) Border Karelian

[An interviewee describes life in the old days:]

*midä enämmär ruavo-i-t, se-n ol-i parempi*  
 what more work-PST-2SG it-GEN be-PST.3SG better

‘The harder you worked, the better.’ (Palander et al. 2017: Impilahti 5129:2)

According to previous studies, referentially open zero constructions strongly favour the modal predicates of necessity and possibility in Finnish (e.g. Hakulinen & Karlsson 1979: 254; Hakulinen et al. 2004: §§ 1352–1356;

Laitinen 2006: 212–214). Similarly, in Karelian, where the 2nd person singular is most often used for open reference, use of the zero construction is also possible with modal predicates (Uusitupa 2017: 88–93, 101–107; In press b). According to Uusitupa (2017: 89–90), the most frequently used verbs in Border Karelian zero constructions are *pitää* ~ *pideä* ‘must, have to’ and *saada* ~ *soaha* ‘can, may’. Overall, the previous findings suggest that the modals form a special verb class with regard to the subject expression and serve as inspiration to find out more about their relationship to the grammatically subjectless zero constructions. The research questions are as follows:

1. How is the subject expressed in Tver Karelian modal constructions?
2. What kind of syntactic and semantic factors determine the subject expression?
3. To what extent is the expression of subject related to the modal meaning of the construction?

Karelian and Finnish are the closest linguistic relatives and the Eastern Finnish dialects in particular resemble Karelian in many respects as they have developed from the same protolanguage, Proto-Karelian. However, compared with Finnish, Karelian has been much less studied and its syntax in particular has been poorly described. Thus, I will apply several conventional concepts from Finnish linguistics and make comparisons between Karelian and Finnish when needed. Theoretically and methodologically, the study represents functional dialect syntax and adopts the view that grammar is shaped in interaction and is most naturally achieved and studied in spoken discourse.

The paper is organised as follows: First, I will introduce the language variety in question (§ 1.2). Second, I will clarify some basic notions that will be discussed in the article, particularly relating to (non-)canonical subjects, modality and referentially open interpretation (§ 2). Third, I will introduce the data (§ 3). I will then discuss grammatical relations in *pidiä*, *šuaaha* and *voija* constructions. § 4 discusses the relationship between subject marking and modality and § 5 focuses on subjectless constructions, which may receive either a referentially open or an anaphoric interpretation in their context. Finally, § 6 summarises the main conclusions.



**Map 1.** Karelian enclaves in Central Russia<sup>3</sup>

## 1.2 Tver Karelian: Finnic enclave in Inner Russia

Karelian is a Finnic language whose closest relatives are Ludian, Veps and Finnish. Nowadays, Karelian is mainly spoken in Russia and to some extent in Finland although the number of speakers in both countries has rapidly decreased over the last 80 years. At present, the estimated number of Karelian speakers in Finland is approx. 5,000–11,000 and in Russia approx. 25,000 (Karjalainen et al. 2013: 2; Sarhimaa 2016: 3). According to the traditional classification, Karelian is divided in two: Karelian Proper, comprising North

<sup>3</sup> The copyright of the map is owned by the University of Eastern Finland, but the author of this article has the right to use it in research papers.

and South Karelian dialects, and Livvi Karelian. All dialects are spoken in Russia in the Republic of Karelia, and in addition, South Karelian is spoken in language enclaves in Central Russia. These enclaves include Valdai, Tikhvin and Tver Karelian (Map 1). Tver Karelian can be further divided in three: Vesjegonsk, Tolmači and Djorža Karelian, of which the two first mentioned are the focus of this study.

The roots of Tver Karelian originate in events that took place in the early 17th century. In the Treaty of Stolbovo in 1617, Russia was forced to cede the county of Käkisalmi to Sweden. This included, inter alia, the areas of Finnish North Karelia and Border Karelia, whose populations spoke Karelian. The cession of territory triggered the migration of Karelians from Käkisalmi to Russia. Some Karelians settled in Olonets Karelia, some walked north to the White Sea coast, but most of them found new domiciles in the Tver region, where new Karelian enclaves started developing based on the South Karelian dialects. (For more detailed information on the history of Tver Karelian, see also Uusitupa et al. 2017: 68–70; Koivisto 2018: 59–62, 70.) Although the Karelian enclaves have a shared history with the South Karelian that is spoken on the Finnish-Russian border, they have developed Karelian varieties of their own due to their close proximity to Russian for 400 years.

## 2 Central notions

### 2.1 Canonical and non-canonical subjects

In recent decades, the grammatical expression of subject has attracted growing interest in both Finnish linguistics and in cross-linguistic studies. Of particular interest have been the so-called non-canonical subjects and their relationship to canonical ones (e. g. Aikhenvald et al. 2001; Narrog 2010; Holvoet 2015; Helasvuo & Huumo 2015; Seržant 2015). In nominative-accusative marking languages, canonical case marking means that the agentive nominal element of transitive clauses and the subjects of intransitive clauses are marked with the nominative and patientive element of transitive clauses with the accusative (Holvoet & Nau 2014: 3). Also, in Finnic, the prototypical subject is marked with the nominative and the verb agrees with it in person (1st, 2nd or 3rd) and number (singular or plural).<sup>4</sup>

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<sup>4</sup> The number opposition can, however, be neutralized in the 3rd person both in Karelian and in Finnish. This means that singular verb forms can be used with both singular and plural subject

## (6) Standard Finnish

*Te riko-i-tte ikkuna-n.*  
 you.2PL.NOM break-PST-2PL window-GEN

‘You broke the window.’ (Hakulinen et al. 2004: § 891)

However, there are also clause types in which the properties of canonical subject appear to be spread over several nominal elements. One example of this is the existential clause, where the semantic first argument of the verb does not trigger the agreement but appears either in the nominative or in the partitive, depending equally on its own features and the polarity (example 7; Helasvuo & Huomo 2015). Another example are different kinds of experiencer constructions, including the necessity construction, where the verb invariably appears in the 3rd person singular and the subject is typically marked with the oblique case (example 8; Laitinen 1992; Sarhimaa 1992; Hakulinen et al. 2004: §§ 910, 920).

## (7) Standard Finnish

*Stellä pitä-isi olla kahvi-a ja kekse-j-ä ~*  
 there have.to-COND.3SG be.INFA coffee-PART and biscuit-PL-PART  
*kahvitilaisuus.*  
 coffee.service.NOM

‘There should be coffee and biscuits ~ coffee service.’ (Hakulinen et al. 2004: § 920)

## (8) Standard Finnish

*Minu-n on sääli hän-tä.*  
 I-GEN have.3SG pity.NOM he-PART

‘I feel sorry for him.’ (Hakulinen et al. 2004: § 906)

As seen from (8), the subject of the experiencer construction is often marked with genitive in Standard Finnish although in this specific example the adessive would also be suitable (*Minu-lla* I-ADE *on sääli häntä* ‘I feel sorry for him’). Also, other Finnic languages make use of the genitive, external local cases and the dative (Livonian) to express the recipient, beneficiary, experiencer or possessor. This kind of use of non-canonical subjects in experiencer constructions is not, however, restricted to the Finnic languages

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NPs. (Regarding person marking in Karelian, see Uusitupa et al. 2017: 24–29; in Finnish, see Helasvuo & Laitinen 2006.)

but has proven to be an areal feature of several genetically non-related languages spoken in the Eastern Circum-Baltic area (Koptjevskaja-Tamm & Wälchli 2001; Seržant 2015; Lindström 2015: 165–166). In the Baltic languages, dative-like meanings are expressed with the dative and Russian uses either the dative or the adessive-like prepositional phrase *u* + the genitive ‘at somebody’ to express the experiencer (Seržant 2015: 326–327). Compared with languages spoken in Western Europe, the difference is clear although not clear-cut: while the Eastern Circum-Baltic languages prefer the dative-like marking of experiencers, the languages spoken in the western parts of Europe more often use the agent-like marking (Haspelmath 2001: 61–62). Another parallel between the Russian, Baltic and Finnic languages is that the dative-like experiencer of modal constructions is often optional and can easily be omitted (Hansen 2014: 98–99; see Lindström & Uibo 2017: 319–320 for more detailed structural parallels).

The locative arguments expressing the experiencer or other dative-like meanings have not been recognised as subjects but treated as adverbials in both Finnish (e.g. Hakulinen et al. 2004: § 922) and Karelian grammar (Pyöli 2012: 159; Zaikov 2013: 76–85). In the following sections, however, all the prime nominal arguments of the modal predicates will be called subjects, in spite of their case marking.

## 2.2 The personal and impersonal modal patterns in Finnic languages

Modality is commonly divided into dynamic, deontic and epistemic modalities. Dynamic modality involves internal capacities and needs on the one hand and possibility and necessity originating in external conditions on the other, while deontic modality refers to obligation or permission originating in an intentional agent or social norms (e.g. Nuyts 2014: § 3.3.1; Hakulinen et al. 2004: § 1554). In this paper, my focus will mainly be on these two types, which are also referred to as *non-epistemic modality* to distinguish them from the third type, epistemic modality, which involves the speaker’s estimation “of the chances or the likelihood that the state of affairs expressed in the clause applies in the world” (Nuyts 2014: § 3.3.1). Alternatively, the category of non-epistemic modality can be divided into participant-internal and participant-external modalities. According to van der Auwera & Plungian (1998: 80–81), the former involves the participant’s internal capacities and needs and the latter encompasses the possibilities and necessities originating from the external conditions – including the obligations and permissions originating from the speaker or a third



party. Consequently, deontic modality is redefined as a subdomain or special case of participant-external modality (van der Auwera & Plungian 1998: 81; see Kehayov 2017: 18–51 for a broader historical review).

Both epistemic and non-epistemic modalities can be expressed in a variety of morphological, syntactic and lexical means, for example, morphological moods, modal verbs and modal adverbs. Here, I concentrate on constructions containing a finite form of *pidiä* ‘must, have to’, *šuaaha* ‘can, may’ or *voija* ‘can, may’ and their meaning and syntactic relations. Modals can often express more than one kind of modality (e.g. Besters-Dilger et al. 2009: 169; Narrog 2010: 72–73; Hansen 2014: 94–100), and the Karelian core modals are no exception. Although the context usually helps to make the decision between different modalities (for example, between participant-internal and participant-external), as will be seen below, sometimes, several readings may be equally possible.

Finnic modal verbs can be used in two different patterns: 1) in a personal modal pattern, the modal verb agrees with the nominative subject in person and number, and 2) in an impersonal modal pattern, the modal verb is in the default form of the 3rd person singular and the subject is either in the genitive (or dative in the case of Livonian) or in the external local case (Kehayov & Torn-Leesik 2009: 366). In both patterns, the modal may form a verb chain with the infinitive form of the lexical verb:

(9) Standard Finnish

*Sinä*    *voi-t*    *nukkua*.  
you.NOM can-2SG sleep.INFA

‘You can sleep.’ (Kehayov & Torn-Leesik 2009: 366)

(10) Standard Finnish

*Sinu-n*    *täyty-y*    *nukkua*.  
you.GEN must-3SG sleep.INFA

‘You have to sleep.’ (Kehayov & Torn-Leesik 2009: 367)

As seen above, in Standard Finnish, meaning goes hand in hand with syntax: while modals expressing possibility agree with the subject, modals expressing necessity always appear in the 3rd person singular and take a subject with genitive marking (Hakulinen et al. 2004: §920). Thus, the set of necessity verbs in Finnish can be formally defined. Also, in other Finnic languages, there appears to be a connection between meaning and syntax. Kehayov &

Torn-Leesik (2009) have studied modal verbs in standard varieties of seven Finnic languages and discovered that apart from Estonian, the necessity verb *pitää* (Standard Finnish form as representative of all the Finnic languages) is used with the impersonal pattern in all of them.<sup>5</sup> At the same time, the use of possibility verbs with the impersonal pattern is clearly limited to the Eastern Finnic languages (Kehayov & Torn-Leesik 2009: 391).

As expected, however, the spoken varieties show greater variation than the written varieties. As noted by Kehayov & Torn-Leesik (2009: 367), the usage of personal and impersonal modal patterns varies between the different Finnic languages and also within the different dialects of the same language (for comparisons with Germanic languages, see Hansen 2014: 112). Interestingly, Kehayov & Torn-Leesik (2009: 390–391) propose that in the Karelian dialects, modal verbs expressing possibility are also used with the impersonal pattern. In Finnish dialects, on the other hand, the usage of local cases (adessive and allative) together with the genitive in necessity constructions has been reported in the Kainuu, North Ostrobothnian and South-Eastern dialects, all of them representing the Eastern and Northern Finnish dialects (Räsänen 1972: 301–304; Laitinen 1992: 112–113; Rähälä 2012: 55–58).

In Karelian, the case most often used with the non-canonical subject is adessive, which represents one of the six old local cases reconstructed for Proto-Finnic (Laakso 2001: 196–197). All six cases still exist in contemporary Finnish, but in Karelian, the number of cases has decreased because of different merging processes. In Tver Karelian – and other Karelian Proper – the allative has merged with the adessive and the new adessive-allative case is marked with *-l ~ -(l)la* and has both locative (adessive) and lative (allative) uses (Genetz 1880: 191; Zaikov 2013: 96–98; see also Oranen 2019: 208–209).

(11) Valdai Karelian

*miu-la pidä-y paiśśa tei-l'ü*  
 I-ADE.ALL have.to-3SG talk.INFA you.PL-ADE.ALL

‘I have to talk to you.’ (Palmeos 1962: 33)

Many researchers have highlighted the fact that the subject marking in Eastern Finnic modal constructions resembles the subject marking in Russian (e.g. Kettunen 1943: 195, 351; Ojajärvi 1950: 98; Sarhimaa 1992; 1999; Oranen

<sup>5</sup> The languages taken into account are Estonian, Livonian, Votic, Finnish, Ingrian, Karelian and Veps.

2019), where several modal predicates (e.g. *možno* ‘may’, *nado* ‘be necessary, should’, *nel’zja* ‘be impossible, may not’; Wade 1992: 336–339) occur with the dative:

(12) Russian

*Nam možno rabotat’.*  
we.DAT possible work.INF

‘It is possible for us to work.’ (Besters-Dilger et al. 2009: 172)

On the other hand, Russian also has modal expressions which require the nominative marking, such as the deadjectival *dolžen* ‘obliged to’, which shows subject agreement with respect to gender and number (13). The *dolžen* construction is also borrowed into Karelian, where it involves the nominative subject and the meaning of deontic necessity, similar to the source language (Sarhimaa 1999: 118–120).

(13) Russian

*Horoshii načal’nik dolžen vsyo znat’.*  
good leader.NOM obliged.NEC everything.ACC know.INF

‘A good leader should know everything.’ (Sarhimaa 1999: 119)

(14) Karelian

*Hüvä načal’nikka dolžen kaikki tiedeä.*  
good leader.NOM obliged.NEC all.NOM know.INFA

‘A good leader should know everything.’ (Sarhimaa 1999: 118)

In spite of the obvious significance of the Russian influence and the fact that modal markers appear to be borrowed easily from one language to another (e.g. van der Auwera et al. 2005: 260–261; Kehayov & Torn-Leesik 2009: 388–392), the contacts between Russian and Tver Karelian are not discussed in more detail in this article.

### 2.3 Open reference

As already exemplified in § 1.1, person constructions can also be used in a way in which the identity of the subject is left unspecified and the construction merely denotes a human experience in a given situation. The literature calls these constructions referentially impersonal (e.g. Malchukov & Ogawa 2011: 27–29, 44), or referentially open, which emphasises that although

the construction describes a situation in a generalized way, it is possible for speakers to use it when they are clearly talking about themselves or justifying their own opinions (e.g. Hakulinen et al. 2004: §§ 1347–1365; Varjo & Suomalainen 2018: 335–337). Impersonal or open references can be expressed in different languages using different grammatical means lexically, pronominally or syntactically. In Karelian and Finnish, the unspecified human subject is typically expressed in verb inflection. In Finnish, the most studied means of open reference is the open zero construction (4). In Karelian, on the other hand, the most frequently used means of open reference are the 2nd person singular (5) and the 3rd person plural (15), which structurally – and, in referentially open cases, also semantically – coincides with the passive construction (e.g. Genetz 1880: 212; 1884: 169).<sup>6</sup> Neither the open 2nd person singular nor the 3rd person plural construction include a subject pronoun.

## (15) Tver Karelian

[How cradles were made in the old days]

*ehnen luaji-t't'-i-h ka, pet'äjä-t mečä-štä šua-t-i-h.*  
 before make-PASS-PST-PERS PCT pine-NOM.PL forest-ELA get-PASS-PST-PERS  
*da pet'äjä-t ki- kisso-tt-i-h. da kätkyö-kši i*  
 and pine-NOM.PL pull-PASS-PST-PERS and cradle-TRANSL PCT  
*plet'i-t't'-i-h.*  
 knot-PASS-PST-PERS

‘In the old days, (the cradle) was made (in the following way): the wood was taken from the forest and shingles were split from the wood and formed into a cradle.’ [FNSA 104:2a]

The open zero construction behaves syntactically like a 3rd person singular clause but does not take a subject NP, which would be the case in a specific person construction (e.g. Laitinen 2006). In Karelian and Finnish, a 3rd person clause can also contain an anaphoric zero subject, which refers to somebody mentioned in a preceding context (see example 19 in § 4.1). In most cases, the reference can be resolved through contextual or discourse-pragmatic information, but sometimes the open and anaphoric readings are not clearly distinguishable, as will be shown in § 5.

<sup>6</sup> In Karelian the passive form has replaced the 3rd person plural form.

### 3 Data

I have collected the data from dialect interviews (approx. 16 hours) that were conducted in the Tver region, mainly in the 1960s, by Pertti and Helmi Virtaranta. The recordings have been partially transcribed by the Virtarantas themselves and partially by a research assistant at the University of Eastern Finland in 2019 and 2020. I have also supplemented the missing parts of the transcriptions and modified the already existing manuscripts when needed. Approximately 45,000 words of transcribed speech have been previously published in a language sample collection (Virtaranta & Virtaranta 1990).

From a functional perspective, the question of subject expression is intrinsically linked to semantics and reference. Thus, not only have I gathered the relevant verbs from the transcriptions, I have also listened to the tapes and compiled a corpus of relevant modal clauses within their context. The data comprise a total of 1,071 instances of *pidiä*, *šuaaha* and *vojja* clauses that will be studied in §§ 4–5.

I have also collected two types of clauses that are not included in the following analysis and frequency numbers but which are worth mentioning. First, I have not considered existential clauses, such as (16), which starts with the locative NP and includes a subject with partitive marking. In the data, existential clauses almost invariably include a finite form of *pidiä* ‘need’ without an infinitive complement (see also Saukkonen 1965: 116–121; Sarhimaa 1999: 106–107).<sup>7</sup>

(16) *äijägö hengie pid’äy olla?*

*nuota-lla vähemi-ä kuuž kahekšan hengi-e pid’ä-u. vähemmän*  
 seine-ADE less-PART six eight person-PART have.to-3SG less

*ei.*

NEG.3SG

‘How many men are needed (when fishing with a seine net)? (With a seine net) at least six to eight men are needed; less (men than this) is not enough.’  
 [FNSA 103:2a]

Second, *pidiä* clauses expressing ‘to hold’ will be disregarded in the following analysis. The Finnic modal *pitää* ‘must, have to’ has been grammaticalized

<sup>7</sup> It is worth noticing, however, that the border between existential clauses and other *pidiä* clauses without an infinitive complement (see example 19 in § 4.1) is not clear-cut and the definition of existential clause in Karelian would definitely deserve a study of its own.

from a verb meaning ‘to grab or hold onto (something)’ (Saukkonen 1965: 113; Laitinen 1992: 137–138). This lexical verb is still in use in both Karelian and Finnish, but as demonstrated in (17), the premodal *pidiä* agrees with the subject and clearly differs from the unipersonal modal verb in both meaning and form.

- (17) *mie niin pi-i-n čol-i-a vuot-ta kymmehen, vain a*  
 I.NOM so keep-PST-1SG bee-PL-PART year-PART ten PTC but  
*siid'ä hyl'gä-i-n i, rube-i-n oštamah met'-t'ä.*  
 then quit-PST-1SG and start-PST-1SG buy.INFMA honey-PART  
 ‘I kept honeybee colonies for ten years but then quit and started buying honey.’  
 [FNSA 8903:1b]

## 4 The subject marking in *pidiä*, *šua* and *voja* constructions

### 4.1 *Pidiä* ‘must, have to’

The data include a total of 630 *pidiä* clauses with modal meaning. The dominating pattern is clearly to omit the subject: 495 instances (79%) out of the 630 occur without an explicit subject argument. Furthermore, if the subject is expressed, the marking is straightforward: 99% of the subjects are in the adessive-allative, which is in line with previous studies on Tver Karelian necessity constructions (Sarhimaa 1999; Oranen 2019: 216–217). As shown in Table 1, the data also include one nominative subject. The results confirm that Tver Karelian *pidiä* ‘must, have to’ is used merely with an impersonal modal pattern, which also explains why the passive inflection is not relevant.

The *pidiä* constructions can be further divided in two according to their syntax: 1) constructions with an infinitive complement (18)<sup>8</sup> and 2) constructions with a nominal (19) or zero complement (20).<sup>9</sup> Although it appears that *pidiä* constructions with an infinitive complement occur somewhat more often with the zero subject (84% of 493) than constructions with a nominal or zero complement (60% of 137), without statistical analysis

<sup>8</sup> Karelian has three infinitives, A, E and MA (traditionally called the 1st, 2nd and 3rd). Unlike Finnish, in Karelian the A-infinitive has only the lative form.

<sup>9</sup> For a more detailed classification of Karelian *pidiä* constructions, see Sarhimaa (1999: 104–111).

**Table 1.** Subject marking in *pidiä* constructions

	<i>pidiä</i> ‘must, have to’ + INF	<i>pidiä</i> ‘need’ (+ NP)	Total
<b>Subject expressed</b>			
ADE-ALL subject	79	55	134
NOM subject	1	0	1
<b>Subjectless clauses</b>			
Open or anaphoric zero subject	413	82	495
<b>Total</b>	<b>493</b>	<b>137</b>	<b>630</b>

it is impossible to state anything conclusive about the connection between the subject expression and the construction’s complement structure.

- (18) *mei-lä pidiä-u perti nostua*  
 we-ADE.ALL have.to-3SG house.NOM build.INFA  
 ‘We have to build a new house.’ [FNSA 104:1a]
- (19) *Kun äijä pidiä-u karbalu-o, niin hiän jo sielä jo*  
 when much need-3SG cranberry-PART PTC he.NOM anymore there anymore  
*niin jo ei kodi-h tule, magua-u yö-löi-dä.*  
 PTC anymore NEG.3SG home-ILL come.CNG lie-3SG night-PL-PART  
 ‘When  $\emptyset$  needs lots of cranberries, he won’t come home at night but sleeps (in the forest).’ (Virtaranta & Virtaranta 1990: 246)
- (20) *mie niin ole-n bohattu miu-la ei piä*  
 I.NOM so be-1SG rich.NOM I-ADE.ALL NEG.3SG need.CNG  
 ‘I’m (already) so rich that I don’t need (gold).’ [FNSA 86:1a]

Example (19) illustrates anaphoric usage: the subordinated *pidiä* clause contains an anaphoric zero ( $\emptyset$ ) and the subject *hiän* ‘he’ is only mentioned in the following main clause (regarding the anaphoric zero, see Hakulinen & Laitinen 2008). If *pidiä* ‘must, have to’ does not form a verb chain with an infinitive but takes an object NP, the overall meaning of a clause can often be translated as ‘need something’, generated either by internal needs or circumstantial constraints. This also holds true for clauses such as (20), where the NP object is not explicitly expressed but is possible to interpret

from the context. Constructions with a nominal complement may also involve a locative element, which expresses the need to get somewhere:

- (21) *a miu-la pid'ü-iž buabo-l luo*  
 PTC I-ADE.ALL have.to-COND.3SG granny-GEN to

‘I need get to my granny’s.’ (Virtaranta & Virtaranta 1990: 70)

Example (22) illustrates the only occurrence of the *pidiä* construction with the nominative case marking (*nuori muččo* young.NOM wife.NOM). However, the occurrence is the exception that makes the rule: in *pidiä* constructions the default choice is the adessive-allative marking and (22) is only a sporadic exception. Such cases are always included in spontaneous speech to some extent.

- (22) [The mother-in-law brings a pail of milk from the barn and puts it on the table.]

*nuori muččo tiašem pid'ü-u šuaha kăžipaikka i*  
 young.NOM wife.NOM again have.to-3SG take.INFA towel.NOM and  
*kattia*  
 cover.INFA

‘Yet again, the young wife has to take a towel and cover the pail of milk with it.’ [FNSA 8902:1ab]

#### 4.2 Šuaha ‘can, may’

*Šuaha* ‘can, may’ construction occurs in the data 247 times (Table 2). If the subject is expressed with an NP, it is case-marked either by the nominative or the adessive-allative. However, most often, the subject is marked merely in the finite verb with the morphological person ending. In Table 2, this class contains 1st and 2nd person singular clauses and 1st and 3rd person plural clauses that do not include a subject NP.<sup>10</sup> From the subjectless clauses, two thirds are syntactically 3rd person singular zero subject clauses (see § 5) and one third are passive clauses.

Just like the *pidiä* constructions in the previous section, *šuaha* constructions can also be divided into subgroups according to their complements: 1) constructions with an infinitive complement (23), 2) constructions with a zero complement (24) and 3) constructions with a

<sup>10</sup> 2PL clauses without a pronoun subject would also belong to this group but there are none in the data.



**Table 2.** Subject marking in *šuaħa* constructions

	<i>šuaħa</i> + INF 'can, may'	<i>šuaħa</i> 'can, may'	<i>šuaħa</i> (+ NP) 'get, have'	Total
<b>Subject expressed</b>				
ADE-ALL subject	19	5	0	24
NOM subject	6	2	29	37
subject marked in verbal person ending	1	1	66	68
<b>Subjectless clauses</b>				
open or anaphoric	41	15	21	77
zero subject				
passive clauses	0	0	41	41
Total	67	23	157	247

nominal or zero complement expressing 'to get' (25). With regard to the relationship between subject marking and the overall meaning of the construction, there appears to be a division whereby *šuaħa* expressing 'to get' favours nominative subjects, whereas *šuaħa* grammaticalized to the modal domain 'can, may' most often takes a subject in the adessive-allative, regardless of whether or not the construction contains an infinitive complement. It is also worth noting that all the *šuaħa* clauses in the passive are semantically premodal (see Example 15 in § 2.3).

- (23) *miu-l ei šia-nun muistia*  
 I-ADE.ALL NEG.3SG can-PST.PTCP remember.INFA  
 'I couldn't remember.' [FNSA 88:2a]

- (24) [The speaker's mother forbade her and other young people from visiting a monastery.]

*Nuorie ei voi namast'erih laškie! Jo namast'erih pid'äy männä, hin ei pie gul'aimah duumaija. Gul'avuo ei pie duumaija.*

'Young people are not allowed to go to the monastery. You are not allowed to go to the monastery without a valid reason. You shouldn't go wandering around there.'

*A t'ei-l'ä ei šua, ei šua ei šua,*  
PCT YOU.PL-ADE.ALL NEG.3SG can.CNG NEG.3SG can.CNG NEG.3SG can.CNG

'You are not allowed, not allowed, not allowed.'

*nuoret oletta, ei pie läht'ie namast'erih, ei pie ei pie.*

'(because) you are young, you have no need to go to the monastery.'  
[FNSA 3195:1b]

- (25) *talve-n aloh izänd'ä šua-u d'eng-i-a*  
winter-GEN over.PP farmer.NOM get-3SG money-PL-PART

'During the winter, the farmer earns money (through handicrafts).'

[FNSA 8903:1ab]

As shown above, Tver Karelian *šuaha* can express both (im)possibility (23) and necessity (24). It is also used to express both participant-internal (23) and participant-external (24) modalities. This is a clear difference compared to (modern) Finnish, where *saada* 'may, can' mainly expresses deontic modality and *voida* 'can, may' is more often used to express the participant's internal capacities (Flint 1980: 83; Kangasniemi 1992: 315–316; Hakulinen et al. 2004: § 1569). Another thing to note from (23–24) is that, typically, *šuaha* clauses expressing a modal meaning are negative. According to previous studies, Estonian *saama* (Tragel & Habicht 2012: 1396) and Border Karelian *saada* ~ *soaha* (Uusitupa 2017: 167–170) also favour negative polarity. However, the explanation for this might not be solely the modal itself; the discourse setting may also play a role: for example, a dialect interview might be a situation that serves as a good basis for expressions of participant-internal impossibilities (Uusitupa 2017: 101).

Table 2 clearly shows that the nominative marking is centred on constructions with a nominal or zero complement expressing 'to get'. However, the data also include six occurrences of the infinitive complement where the subject is expressed both with the nominative subject and with the verbal person marking. One of them includes a lative form of the A-infinitive

(26), which is the default infinitival form with Karelian modals. Example (26) is vague between the participant-internal, ‘I didn’t know how to tie’, and the deontic, ‘I was not allowed to tie’, reading. In the remaining five occurrences of nominative marking, the predicate includes *šuaħa* and the lative form of the MA-infinitive. These clauses express circumstantial possibility external to the participant: it is not just that I could eat swede pie, but I had the opportunity to do so (27).

- (26) *mie e-n šuan-nun händ’i-ä šolmie*  
 I.NOM NEG-1SG can-PST.PTCP tail-PART tie.INFA

‘I couldn’t tie the horse’s tail.’ [FNSA 3195:1b]

- (27) *i šiid’ä luaji-tt-i-h luapot’t’i-e vanha-t*  
 and then make-PASS-PST-PERS birch.bark.shoe-PART old-NOM.PL  
*uko-t a nytten ei piet’ä i viel’ä mie*  
 man-NOM.PL but now NEG.3SG use.PASS.CNG but even I.NOM  
*ša-i-n luapot’t’i-e pid’ämäh äijän.*  
 can-PST-1SG birch.bark.shoe-PART wear.INFMA much

‘Old men made birch bark shoes. Nobody wears them anymore, but I managed to wear them a lot.’ [FNSA 103:2b]

Usage of the MA-infinitive with *saada* has been previously discussed by Saukkonen (1966), who explored the history of lative infinitives in the Finnic languages, and Trigel & Habicht (2012), who studied the grammaticalization of the Estonian *saama* ‘to get’. Saukkonen (1966: 5–7) relates the usage of the MA-infinitive to the verb’s older, premodal meaning ‘to get’ and to the construction *saada* + locative, expressing motion ‘to get somewhere’ or ‘to come somewhere’, which has further developed to express the future in some Finnic languages (e.g. Estonian and Livvi Karelian). Trigel & Habicht (2012: 1377–1378, 1399–1404) name two meanings for the Estonian *saama* + the MA-infinitive construction in the modern language: 1) it expresses success despite obstacles or hardship (*saime liikuma* get.PST.1PL move.INFMA ‘we managed to get going’) and 2) the future (*saab korraldama* get.3SG organise.INFMA ‘will organise’), the first one preceding the latter both morphosyntactically and semantically.

Based on the data, *šuaħa* + the MA-infinitive has not developed to express the future in Tver Karelian but the meaning ‘to succeed’ is clearly involved in it. All occurrences express an action that the speaker (or the speaker-inclusive group) managed to carry out in the past but that is not possible to carry

out in the present for circumstantial reasons. In addition, the premodal meaning ‘getting in touch with’ is easy to connect with all the occurrences. It seems reasonable to conclude that the variation in the infinitive complement is due to the polysemy of the verb: *šua* is not only a modal expressing participant-internal and participant-external possibilities and necessities or a transitive verb ‘to get (hold of)’; it is also used in more specifically defined constructions with specific meaning and form, from which the *šua* + the MA-infinitive construction ‘to succeed’ serve as one example.<sup>11</sup>

### 4.3 *Voija* ‘can, may’

The data include a total of 194 *voija* clauses, from which the vast majority, 149 (77%), include a zero subject (Table 3). If the *voija* clause has a subject, it is predominantly case-marked with the nominative, although both the adessive-allative marking and the verbal marking are also used. In Table 3, the “subject marked in verbal person ending” class contains 1st and 2nd person singular clauses and 3rd person plural clauses that do not include a subject NP.<sup>12</sup> Although Karelian *voija* has normal person, number and voice inflection, the passive form *voijah* is only used in the 3rd person plural form in the data (30). Typically, the finite form of *voija* forms a verb chain with the A-infinitive.

As seen below, Tver Karelian *voija* can be inflected based on two different stems, *voi-* or *voič(č)e-*.<sup>13</sup> The *voič(č)e-* forms contain the same morphological element as Tver Karelian reflexive verbs (e.g. *pesieččie* ‘wash oneself’), although in the finite forms of *voija*, the *-č(č)e-* does not carry a reflexive meaning but is merely a morphological element which has combined with the monosyllabic verb stem (Koivisto 1995: 66, 81–91).<sup>14</sup>

Table 3 shows that the finite forms based on the *voi-* stem are over three times more common than the *voič(č)e-* forms. If the *voija* clause contains a subject NP, it is most often marked with the nominative. The subject can be

<sup>11</sup> It is good to remember that the data only reveal some of the possible usages and contexts of the modals.

<sup>12</sup> Also, 1PL and 2PL clauses without a pronoun subject would belong to this group but there are none in the data.

<sup>13</sup> The parentheses in the affix *-č(č)e-* mean that the element is subject to quantitative gradation.

<sup>14</sup> Evidence that we are not talking about two different lexemes is that *voič(č)e-* clauses are always affirmative and almost invariably inflected in the present tense and the indicative mood. Furthermore, I have not encountered an infinitive form *\*voiččie*, either in the data or in Karelian dictionaries.

**Table 3.** Subject marking in *voija* constructions

	<i>voi-</i> (+ INF)	<i>voič(č)e-</i> (+ INF)	Total
<b>Subject expressed</b>			
ADE-ALL subject	6	3	9
NOM subject	11	14	25
subject marked in verbal person ending	10	1	11
<b>Subjectless clauses</b>			
open or anaphoric zero subject	125	24	149
Total	152	42	194

expressed either with the subject NP and the verbal person ending together (28–30) or only with a verbal marker (31).

- (28) *roju-t voi-ja-h ul'et't'ie pois,*  
bee.colony-NOM.PL can-PASS-PERS fly.away.INFA away  
'Bee colonies can fly away.' [FNSA 8903:1b]
- (29) *A to kun on ägie kiugua niin hiän voiččo-u palua,*  
and PTC when be.3SG hot.NOM stove.NOM then it.NOM can-3SG burn.INFA  
'When the stove is too hot, the pan can burn.' (Virtaranta & Virtaranta 1990: 288)
- (30) *mie voiče-n t'äl'ä istuo i viikombaze-n, puu-šša*  
I.NOM can-1SG here sit.INFA even longer-GEN tree-INE  
'I can sit in this tree longer (than the others can wait me under the three).'
- (31) *a e-n, e-n tiijä, e-n voi šanuo*  
PCT NEG-1SG NEG-1SG know.CNG NEG-1SG can.CNG say.INFA  
'I don't know (what he did), I really can't say.' [FNSA 3186:1a]

However, the adessive-allative subject is also occasionally used with both stems:

- (32) *da i Iivana-lla jo t'ä-š kyl'ä-ššä ei voi-nun*  
 PTC and Iivana-ADE.ALL already this-INE village-INE NEG.3SG can-PST.PTCP  
*el'ü.*

live.INFA

‘And Iivana couldn’t live in that village anymore.’ [FNSA 86:1b]

- (33) *Val'aiči-i-n hyviin, što miu-la voičči-iš luad'ie nii-d'ä*  
 roll-PST-1SG well that I-ADE.ALL can-COND.3SG make.INFA they-PART  
*šaraž-i-e*

ball-PL-PART

‘I rolled the dough well so I could shape it into balls.’ (Virtaranta & Virtaranta 1990: 310)

Based on the data, both *voi-* and *voič(č)e-* forms are fine for participant-external (28–29) as well as participant-internal (im)possibility (30–31). A clause may also enable both interpretations to take place simultaneously, as in (33). However, deontic usage appears to be exclusively restricted to *voi-* forms (32) but this is an issue that should be studied more closely in bigger data.

In addition to the semantics, the syntax also explains the distribution of different stems. Most often both *voi-* and *voič(č)e-* forms occur in the 3rd person singular. In Karelian and in Finnish the bare verb stem *voi* (can.3SG) is also the finite form of the 3rd person singular in the indicative (unmarked) mood. However, in the data, the *voi-* form is rarely used in this role but mainly occurs in the connegative form, as in (31). Instead, in affirmative clauses, the 3rd person singular forms are more often inflected in alternative ways as *voi-t*, *voiččo-u* or *voi-bi*. As shown in (34), in Tver Karelian the person ending *-t* is not only used for the 2nd person singular but also for the 3rd person singular (Genetz 1880: 214; Zaikov 2000: 55–56; for further details, see Uusitupa In press a).

- (34) *N'i voi-d-go miu-la häne-nke kizata?*  
 PCT can-3SG-CLI I-ADE.ALL he-COM play.INFA

‘May I at least play with him?’ (Virtaranta & Virtaranta 1990: 94)

Using a *-t* ending for both the 2nd and 3rd person singulars is a special feature of Karelian Proper and involves five monosyllabic verbs: *nai-* ‘marry’, *pui-* ‘thresh’, *ui-* ‘swim’, *käy-* ‘walk’, and *voi-* ‘can’. What this means is that the 2nd and 3rd person singular forms of these verbs are identical in affirmative

**Table 4.** The proportions of zero subject clauses in different constructions

	Zero subject clauses		Others		Total	
<i>pidiä</i> + INF 'must, have to'	413	(84 %)	80	(16 %)	493	(100 %)
<i>pidiä</i> (+ NP) 'need'	82	(60 %)	55	(40 %)	137	(100 %)
<i>šuaha</i> + INF 'can, may'	41	(61 %)	26	(39 %)	67	(100 %)
<i>šuaha</i> 'can, may'	15	(65 %)	8	(35 %)	23	(100 %)
<i>šuaha</i> (+ NP) 'get'	21	(13 %)	136	(85 %)	157	(100 %)
<i>voi-</i> (+ INF) 'can, may'	125	(82 %)	27	(18 %)	152	(100 %)
<i>voič(č)e-</i> (+ INF) 'can, may'	24	(57 %)	18	(43 %)	42	(100 %)
Total	721	(67 %)	350	(34 %)	1,071	(100 %)

clauses and, in subjectless and referentially open clauses, no distinction can be made between the 2nd and 3rd persons. This makes them of special interest in the next section.

## 5 Referentially open constructions

A total of two thirds (67%) of the modal constructions under investigation are 3rd person singular clauses that contain a zero subject. However, the differences between the different constructions are notable: while over 80% of *pidiä* + INF 'must, have to' and *voi-* (+ INF) 'can, may' constructions contain a zero subject, only 13% of *šuaha* (+ NP) 'to get' constructions contain it. The vast majority of the zero subject clauses can be defined as referentially open, i. e. they denote that the agent is human but non-specific. In Table 4, it is worth noting that the "zero subject clauses" category only contains the 3rd person singular (referentially open and anaphoric) clauses. The referentially open 2nd person singular and passive clauses, instead, belong to the "others" group.

The difference between open and anaphoric interpretations is not always clear-cut and the open zero clause can also be referentially more or less open. The clearest cases are those that describe typical or habitual behaviour, such as (35), which expresses that ‘in the old days, there were no trains so in order to get somewhere, you had to walk’. Example (36), instead, is open to various interpretations. On the one hand, it is explicit advice to a specific person and, on the other hand, it expresses a general duty concerning a married wife. Syntactically, (36) also demonstrates that the infinitive complement can both precede and follow the modal, although the latter order is the unmarked one.

- (35) *a pojezda-t ei kävel'-d'~ eulun hei-d'ä.*  
 and train-NOM.PL NEG.3SG walk-PST.PTCP be.NEG.PAST they-PART  
*jalgaz-ii pid'~ aštuo.*  
 foot-PL.INSTR have.to.PST walk.INFA

‘There were no trains. You had to walk.’ [FNSA 86:1a]

- (36) *a konže kuin jygie on eländä ni vain tiatolla da miämolla šanou nuori muččo,*  
*što vet voušo on jygie miula el'ia, što ka näin on ašie da – minže riat?*  
*Nu tiatto da miämo šano-ta-h ”tirpia pid'ü-u.”*  
 PCT father.NOM and mother.NOM say-PASS-PERS tolerate.INF have.to-3SG

‘When life as a married wife is hard, the girl only dares to confide in her parents. Her father’s and mother’s advice is “you just have to put up with it”.’ [FNSA 8902:ab]

Although the vast majority of *pidiä* clauses do not include a subject and although the subject pronoun is very rarely used in open 2nd person singular constructions in Karelian in any case (see example 5 in § 1.1), the data contain four referentially open *pidiä* clauses with the subject pronoun *šiula* you.ADE. In (37), the speaker uses several 2nd person singular forms to describe how to make an omelette. However, the advice is not (merely) directed at the recipient but is interpreted in general: following these steps, it is possible for anyone to prepare the dish.



- (37) *Ota-t jäičč-i-ä no konža ota-t kuingi, konž ota-t*  
 take-2SG egg-PL-PART well when take-2SG how when take-2SG  
*nel'l'ä jäičč-i-ä konža viiži, konža eñemmän myt'ys šiu-la*  
 four egg-PL-PART when five when more what.kind you-ADE.ALL  
*pid'ä-u, myt'ys on rieht'il'ä.*  
 have.to-3SG what.kind be.3SG pan.NOM

‘You use eggs – the number varies, sometimes you use four, sometimes five, sometimes even more – depending on how many you need and the size of the pan.’ (Virtaranta & Virtaranta 1990: 280)

In contrast to *pidiä*, which always occurs in the 3rd person singular, *šuaha* and *voija* can be inflected in person and number and their referentially open occurrences represent both 2nd and 3rd person singular clauses.<sup>15</sup> With regard to *šuaha* ‘can, may’, there appears to be an interesting division of work between the two persons: while open 3rd person singular constructions with a zero subject are most often negative and contain a verb chain (38), open 2nd person singular constructions are always affirmative and express the premodal meaning ‘to get’ (39). This division also explains why only 13% of *šuaha* (+ NP) ‘to get’ constructions contain a zero subject (see Table 4).

- (38) *a muu-ll\_ aigu-a šua tuoh-ta ei šua*  
 and other-ADE.ALL time-PART get.3SG birch.bark-PART NEG.3SG can.CNG  
*šuaha*  
 get.INFA

‘At any other time of year, you cannot take birch bark from trees.’  
 [FNSA 104:1a]

- (39) *kuin enžimäze-n lapše-n šia-t, nin pid'ä-y miatka-lla*  
 when first-GEN child-GEN get-2SG PCT have.to-3SG mother.in.law-ADE.ALL  
*tuuva jalganuora*  
 bring.INFA string.NOM

‘When you have your first child, (you) must bring some string for your mother-in-law (so she can rock the cradle with her foot while doing something else with her hands).’ [FNSA 88:2b]

The third modal under investigation, *voija* ‘can, may’, stands out from the others in its morphology because, as presented in § 4.3, the opposition between the 2nd and 3rd person singular is neutralized in its paradigm and the marker

<sup>15</sup> With regard to *šuaha*, the data also include referentially open passive clauses (see Table 2 in § 4.2).

-*t* is used for both persons. This particularly affects referentially open *voija* clauses because they invariably occur without a subject pronoun (see § 2.3). In my previous studies on Karelian open person constructions (Uusitupa 2017; In press b), I have classified the referentially open *voit* clauses as 2nd person singular clauses. In this paper, however, examples such as (40) are classified as referentially open zero subject (3rd person) clauses. There are two main reasons for this, the first one relating to the argument structure and the second one to the frequency. First, the verb form *voit* may take the adessive-allative subject in Tver Karelian, as already shown in (34). Moreover, from six *voi* clauses with adessive-allative marking in the data, three clauses are affirmative and all of them contain the modal in *voit* form. Second, in affirmative zero subject clauses, too, *voit* is far more frequently used than *voi*: from 125 *voi*-clauses with a zero subject, 83 are affirmative and of these 83 clauses, 79 are *voit* (+ INF) clauses, all of them referentially open. Meanwhile, the finite form *voi* occurs only twice in affirmative clauses in the whole data, once with the open zero subject (41) and once with the nominative subject (2).<sup>16</sup> Consequently, it seems that instead of *voi*, *voit* is the default 3rd person singular form of *voija* in Tver Karelian and coincides with the negative *ei voi* (42) in affirmative clauses (see also Palmeos 1962: 54, who compares the usage of Valdai Karelian *voit* with the Russian *možno* ‘can, may’).

- (40) *stroiča-n jäl'geh jo voi-t i l'ehəkše-h männü, jo*  
 Stroičča-GEN after already can-3SG also cut.branch-ILL go-INFA already  
*i, i vašša-lla voi-t uuve-l kyl'bi-e*  
 and whisk-ADE.ALL can-3SG new-ADE.ALL bath-INFA

‘After Whit Sunday, you can already go into the forest, make sauna whisks and bathe with them.’ [FNSA 3195:1b]

- (41) [A speaker ends a long description of a wedding feast and asks a rhetorical question.]

*viel mid'ä täš šanuo voi suad'bo-i-st?*  
 still what here say.INFA can.3SG wedding-PL-ELA

‘What else can you say about weddings?’ [FNSA 87:1a]

<sup>16</sup> In the remaining three affirmative zero subject clauses, *voija* is inflected once with the 3rd person marker *-bi* (*voibi*), once in the conditional mood (*voiš*) and once in the potential mood (*voinnou-go* can.3SG.POT-CLI). These occurrences will be studied in greater detail in a forthcoming paper (Uusitupa In press a).

- (42) *häne-t't' ei voi kiugua-da luad'ie*  
 he-ABE NEG.3SG can.CNG stove-PART make.INFA

‘Without him (a famous mason) you cannot build a stove.’ (Virtaranta & Virtaranta 1990: 340)

The variation of different 3rd person singular forms of *voija* will be studied more closely in a forthcoming paper (Uusitupa In press a).

## 6 Conclusion

This article has studied the subject expression in Tver Karelian *pidiä*, *šuaaha* and *voija* constructions and its relationship to the modal meaning, on the one hand, and to the referentially open interpretation, on the other. What unites all the modals under investigation is that they may all have unipersonal usage and they may take a non-canonical subject with adessive-allative case marking. However, according to the analysis, the subject marking is influenced by various syntactic and semantic factors and, interestingly, it turned out that the modal constructions in spoken discourse most often do not include an explicit subject at all but a zero subject, which may receive either an open or an anaphoric interpretation in the context.

The results confirm that the Tver Karelian *pidiä* ‘must, have to’ is always used with an impersonal modal pattern and that it invariably takes a subject in the adessive-allative. This holds true for both *pidiä* constructions with an infinitive complement and for *pidiä* constructions with a nominal or zero complement. In this respect, *pidiä* differs from the modals expressing (primarily) possibility, which usually take a nominative subject if they take one at all, although both *šuaaha* ‘can, may’ and *voija* ‘can, may’ are also used with an impersonal modal pattern. As for *šuaaha*, the subject marking appears to go hand in hand with the overall meaning of the utterance: when the construction expresses ‘to get’, the subject is marked with the nominative, and when the construction denotes participant-internal or participant-external modality, the subject is marked with the adessive-allative. In addition, *šuaaha* + the MA-infinitive construction expressing ‘to manage’ or ‘to succeed’ also agrees with the nominative subject that represents the construction’s meaning at the midway point between the verb’s premodal and modal usages.

As presented in § 5, 67% of all constructions under investigation contain a zero subject. The vast majority of them are referentially open, which means that they do not refer to any specific individual but describe a situation in

a more generalized way. According to previous studies (Uusitupa 2017; In press b), the most common means of open reference in Karelian is the 2nd person singular clause, which does not contain a subject pronoun, and the 3rd person singular zero subject clause is mainly used with modal predicates. This makes the modal verb *voija* ‘can, may’ particularly interesting because in Tver Karelian, its 2nd and 3rd person singular forms coincide (*voit*) and it is impossible to make a difference between the two persons in subjectless clauses. According to the analysis, the default 3rd person singular form of *voija* in affirmative clauses is *voit* instead of *voi*, which is almost exclusively used as a connegative form (*ei voi*). The results further suggest that the finite forms of *voija* based on the stems *voi-* and *voič(č)e-* are not completely synonymous but are used to express partly different types of modality. This is, however, an issue that still requires more empirical analysis in the future.

The analysis further revealed that there is an interesting connection between the subject expression and the modal meaning in referentially open *šua* clauses: whereas all referentially open 2nd person singular clauses are affirmative, occur without an infinitive complement and express the premodal meaning ‘to get’, referentially open 3rd person singular zero subject clauses are almost exclusively negative, form a verb chain with an infinitive complement and express participant-internal or participant-external impossibility. This division of work is probably related to the previous findings on open person constructions, which state that the open zero construction usually expresses processes such as changes of state, emotions, perceptions, experiences and receptions, whereas the open 2nd person singular construction is more freely used with agentive verbs, both in contemporary Finnish (e. g. Laitinen 2006: 213; Varjo & Suomalainen 2018: 345–347) and in the border dialects of Karelian and Finnish (Uusitupa 2017: 85–97). The findings from different sources suggest that the open zero construction is more grammaticalized to the modal domain than the open 2nd person singular construction.

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## Abbreviations

1, 2, 3	first, second, third person
ABE	abessive
ABL	ablative
ACC	accusative
ADE	adessive
ADE.ALL	adessive-allative
ALL	allative
CLI	clitic
CNG	connegative
COM	comitative
COND	conditional mood
DAT	dative
ELA	elative
GEN	genitive
INF	infinitive
INFA	A-infinitive
INFMA	MA-infinitive
ILL	illative
INE	inessive
INSTR	instructive
NEC	necessity predicate
NEG	negation verb
NOM	nominative
PART	partitive
PASS	passive
PERS	person marker
PL	plural
PP	postposition
PST	past tense
PTC	particle
PTCP	participle
SG	singular
TRANSL	translative

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