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VOICE AND MODAL VERBS IN ESTONIAN*

Abstract. The interaction of voice and modal verbs in Estonian confirms the impersonal nature of the basic voice opposition in Estonian and clarifies the constraints on impersonalization. In the voice system of Modern Estonian, active personal constructions contrast primarily with active impersonal constructions and resultative passive constructions. The existence of impersonal forms of most modal elements shows that impersonals are active indefinites, not passives, since modals almost universally resist passivization. The modals that lack impersonal forms are those that express necessity. However, this semantic pattern has a syntactic explanation. Verbs that do not allow a nominative subject do not have impersonal forms in Estonian. Most modals that express necessity do not govern nominative subjects, but instead code their actors as adessive obliques. The general connection between nominative subjects and impersonal forms is reinforced by the behaviour of a subclass of necessity modals that are characteristically used in the negative. Modals of this class, including *tarvitsema* 'need' and *pruukima* 'need', allow nominative subjects in negative contexts, and also have negative impersonal (but not affirmative impersonal) forms.

Keywords: Estonian, impersonals, passives, modal verbs and auxiliaries, control and raising verbs.

1. Introduction

The interaction of voice and modal verbs in Estonian is of general interest because of the way that it confirms the impersonal nature of the basic voice opposition in Estonian and clarifies the constraints on impersonalization. In the voice system of Modern Estonian, active personal constructions contrast primarily with active impersonal constructions and resultative passive constructions. The active impersonal is often regarded as the more basic voice construction in Estonian, and in Finnic generally (Viitso 1998), whereas the periphrastic passive appears to be an innovation based on the participial passives of Indo-European languages (see e.g. Nemvalts 1998).

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Yet the fact that perfect forms of impersonal and passive constructions are both built from the same elements has led to disagreement about whether there are two discrete voice constructions (e.g. Rajandi 1999 [1968]; Pihlak 1993; Torn 2002; 2006), or a more general construction that subsumes the impersonal and passive (e.g. Erelt 1989; Erelt, Kasik, Metslang, Rajandi, Ross, Saari, Tael, Vare 1993 (= EKG II)).

Modal verbs in Estonian are traditionally identified as verbs that express notions of possibility and necessity. There is no exact consensus in the traditional literature about which verbs function as modals, or even what criteria should be applied to define this class. However, these disagreements largely reflect the fact that some authors define the class of modals semantically, while others define them as a syntactic subclass of helping verbs.¹ The apparent conflict between these definitions can be reconciled by using the theoretical distinction between raising and control verbs (Jespersen 1937; Davies, Dubinsky 2004) to divide the class of modals into two subclasses. The first subclass contains modal auxiliaries, which are raising verbs, while the second subclass contains non-auxiliary modal verbs, which are control verbs. Both modal auxiliaries and modal verbs express semantically modal notions, but modal auxiliaries, like other subject raising predicates, are transparent to the subject demands of their complements.

The existence of impersonal forms of most modal elements shows that impersonals are active indefinites, not passives, since modals almost universally resist passivization (see, among others, Aissen, Perlmutter 1983; Burzio 1986; Wurmbrand 2004). The modals that lack impersonal forms are those that express necessity. However, this semantic pattern has a syntactic explanation. Verbs that do not allow a nominative subject do not have impersonal forms in Estonian. Most modals that express necessity do not govern nominative subjects, but instead code their actors as adessive obliques. The one exception is the verb *pidama* 'must', which allows a nominative subject in Estonian, though cognate verbs select an agentive oblique in other Finnic languages (Kehayov, Torn (to appear)). The general connection between nominative subjects and impersonal forms is reinforced by the behaviour of a subclass of necessity modals that are characteristically used in the negative. Modals of this class, including *tarvitsema* 'need' and *pruukima* 'need', allow nominative subjects in negative contexts, and also have negative impersonal (but not affirmative impersonal) forms.

The interaction of voice and modals confirms the impersonal nature of the basic voice opposition in Estonian, and also highlights an important constraint on impersonalization. Previous accounts of voice emphasize the fact that impersonals describe an action performed by an indefinite human agent (Torn 2002; Erelt 2003) and that impersonalization is mainly restricted to verbs that select human agents (Torn 2002; 2006; Blevins 2003). But modals show that the morphosyntactic coding of this agent is also important: only verbs that allow a nominative human subject impersonalize.²

¹ For example, English modals (*can, could, must, might, etc.*) and primary auxiliaries (*be, do, have*) are usually organized into a class of helping verbs (Kaplan 1995).

² Traditional Estonian grammars also recognize partitive subjects. But verbs that govern partitive subjects also allow nominative subjects, so they fall under the same generalization.

The morphosyntactic restrictions on impersonals highlight the complementary nature of the subject constraints on voice constructions in Estonian. Passives demote the logical subject of a verb and only apply to verbs of the unergative class, which select a logical subject. In contrast, impersonalization suppresses the syntactic expression of the surface subject and only applies to verbs that govern a surface subject.

2. Modals in Estonian

In order to describe the interaction between modals and voice it is necessary to outline the modal system of Estonian. Given that grammaticalization may be reflected in different ways in different languages, it is not always straightforward to determine which elements function as modals within a given language, or even whether a language contains a syntactic class of modals at all. Nevertheless, modals, as a syntactic class, tend to exhibit the traits listed below:

S e m a n t i c: Modals express notions of possibility and necessity (dynamic/deontic/epistemic).

D i s t r i b u t i o n a l: Modals function as helping verbs that combine with a main verb.

M o r p h o l o g i c a l: Modals may have a distinctive, and often defective, conjugational paradigm.

These characteristics provide a useful guide in approaching the analysis of a language like Estonian.

Previous studies of Estonian modals include Valgma, Remmel 1968; Rätsep 1972; 1978; Uuspõld 1989; EKG II 1993; Erelt 2001; 2003; Tragel 2001. This literature presents different views about which verbs function as modals, or even what criteria should be applied to define this class. However, many of the apparent disagreements reflect the fact that some authors apply the term *modal* to the broad semantic class of verbs that express modality, whereas others reserve *modal* for the syntactic subclass of modal auxiliaries. H. Rätsep, for example, applies syntactic criteria in stating that the verbs *võima* 'may', *pidama* 'must', *näima* 'seem', *paistma* 'seem', *tunduma* 'seem' are considered to be completely modal verbs in Estonian (1972 : 26). His analysis is based on the fact that these verbs demonstrate specific morphosyntactic behaviour that distinguishes them from lexical verbs. M. Erelt similarly suggests that the Estonian modal verbs that have partially lost syntactic independence include *saama* 'can', *võima* 'may', *pidama* 'must, have to', *tohtima* 'be allowed', *näima* 'seem', *paistma* 'seem', *tunduma* 'seem' (2003 : 176).

J. Valgma and N. Remmel (1968 : 114) apply semantic criteria when they include phrasal verbs such as *tarvis olema* 'be necessary, need', *vaja olema* 'be necessary, need'. E. Uuspõld (1989) also uses a semantic approach in classifying modal verbs. While both H. Rätsep and M. Erelt exclude the verbs *tulema*³ 'have to', *tarvitsema* 'need', *pruukima* 'need' and

³ M. Erelt (2003 : 106) considers *tulema* less grammaticalized than the modal verb *võima* as it demonstrates special requirements on the noun and its own form. H. Rätsep (1978 : 38–39) likewise does not include *tulema* among modal verbs at all (the same with *tarvis olema* 'need', *vaja olema* 'need', *tarvis minema* 'need', *vaja*

maksma 'need' from the class of core modals, on the syntactic grounds that these verbs govern an adessive dependent, the more semantic classification of E. Uuspõld (1989) includes these under the class of modals as well.

As a class, modals subcategorize for nonfinite complements. The *da*-infinitive is the most common complement, selected by the modal auxiliaries *saama* and *võima* as well as by the modal verbs *tarvitsema*, *pruukima*, *maksma* and *tulema*. The auxiliary *pidama* is the only modal that takes a *ma*-infinitive. The evidential auxiliaries *näima*, *tunduma* and *paistama* subcategorize for the *vat*-form (or *vat*-infinitive). These complementation patterns are illustrated in (1)–(4) below.

- (1) *Ma võin/saan sulle raha laenata. (võima/saama + da-infinitive)*
'I can lend you money.'
- (2) *Mary peab homseks essee kirjutama. (pidama + ma-infinitive)*
'Mary has to write an essay for tomorrow.'
- (3) *Kanalid oma korrapäraga näisid kindlalt olevat marslaste kätetöö.⁴ (näima + vat-form)*
'The regular canals surely seemed to have been the work of Martians.'
- (4) *Kirjandis tundub/paistab esinevat vigu. (tunduma/paistama + vat-form)*
'The essay seems/appears to contain some mistakes.'

2.1. Raising and control

The differences in the classifications above can be reconciled by recognizing a broad class of modals and dividing this class into modal auxiliaries and (non-auxiliary) modal verbs. The difference between modal auxiliaries and modal verbs reflects a more general distinction in verbal argument structure. In constructions containing an infinitival dependent, a higher argument is often construed as the subject of the infinitive verb. The argument and the infinitive can either have a very close syntactic relation, or a looser semantic connection. Constructions in which the argument just identifies the implicit subject of the infinitival are usually termed *control constructions*. This distinction can be illustrated with reference to English verbs. For example, English volitional verbs like *try*, *attempt*, *intend*, etc. are typical control verbs. In sentence (5) the matrix subject *they* is a semantic argument of the verb *intend* and serves as a kind of antecedent that identifies the subject of *travel*.

- (5) *They intend to travel abroad.*

In raising constructions, there is a much tighter bond between the higher argument and the infinitive, and a much looser connection between the higher argument and the matrix verb. For example, in sentence (6) the subject *they* is not really a semantic argument of the verb *tend*, but rather an argument of *travel*. This becomes clearer if one substitutes an infini-

minema 'need'). Moreover, while EKG II (1993), M. Erelt (2003) and E. Uuspõld (1989) give the *ma*-infinitive of *tulema*, H. Rätsep emphasises that there is only a 3rd person singular form and the paradigm of this verb lacks an infinitive.

⁴ <http://opik.obs.ee/osa2/ptk05/box02.html>.

tive that selects an idiosyncratic subject, such as weather verbs like *rain*, as in (7):

(6) *They tend to travel abroad.*

(7) *It tends/seems/appears to rain in September.*

The dummy pronoun *it* is selected by the verb *rain*, not by the verbs *tend/seem/appear*, which are transparent to the subject demands of the infinitival complement. If one substitutes a control verb, which genuinely does take the matrix subject as a semantic argument, the result is unacceptable, as in (8).

(8) ? *It intends/attempts/hopes to rain in September.*

The contrast between agentive control verbs and transparent raising verbs is found in many languages. There are almost always more control verbs than raising verbs, reflecting the fact that many raising verbs derive historically from control verbs which have lost syntactic independence through grammaticalization.

Modal auxiliaries are distinguished mainly by a lack of what H. Rätsep (1972 : 26) and M. Erelt (2003 : 176) term *syntactic independence*. In Estonian, the syntactically dependent modal auxiliaries are those elements which are used together with a main verb in the infinitive form (Rätsep 1972 : 27) and which do not impose any constraints on the argument that controls the dependent infinitive. In more theoretical terms, a modal auxiliary is just a raising verb that expresses a modal notion such as necessity, possibility or evidentiality.⁵

Table 1

Modal auxiliaries and modal verbs in Estonian		
Meaning	Modal Auxiliary (raising)	Modal Verb (control)
necessity	<i>pidama</i>	<i>tulema, maksma, tarvitsema, pruukima</i>
possibility	<i>võima, (saama)</i>	<i>tohtima</i>
evidential	<i>näima, paistma, tunduma</i> ⁶	

2.2. Modal verbs

Modal verbs pattern closely with control verbs in theoretical accounts (summarized in Davies, Dubinsky 2004). Like canonical control verbs, modal verbs either select a nominative subject that controls the infinitive, or else allow an oblique controller (which is not regarded as a subject in traditional Estonian grammar). The nominative pattern is illustrated by the possibility verb *tohtima* 'be allowed to' in (9).

⁵ Although evidentiality can be regarded semantically as a type of epistemic possibility, evidentials are distinguished in this article because evidential meanings are carried by a distinct class of verbs and are not just a sense of more general possibility modals.

⁶ These are also classified as modal verbs in traditional Estonian grammar (Rätsep 1972; 1978; Uuspõld 1989; EKG II 1993; Erelt 2003). The treatment of these verbs as modals falls under the broad notion of modals as expressing subjectivity in the sense of Lyons 1977.

- (9) "Aga kõigepealt tuleb muinsuskaitseeksperdiis ära oodata — kas me tohime ja kui palju tohime sellest hoonest lammutada," sõnas Saar.⁷

'But first we have to wait until the cultural heritage conservation expert's opinion comes through, to tell us whether and to what extent we are allowed to demolish that building,' Mr Saar said.'

The necessity modals *tulema*,⁸ *tarvitsema*, *pruukima*, and *maksma* illustrate the pattern with an oblique controller. In the affirmative, these verbs follow a distinctive constructional pattern where the actor is in the adessive and the verb takes the 3rd person singular form. This is illustrated in (10) and (11), where each of the verbs takes an adessive oblique and occurs in the 3rd person singular.

- (10) *Meil tuleb muru ära niita.*

'We have to mow the lawn.'

- (11) *Sul pruugib/tarvitseb ainult see raamat läbi lugeda.*

'You just need to read this book through.'

The noun in the adessive, which expresses the logical subject of the nonfinite complement, must usually have the feature [+animate] (Rätsep 1978; EKG II 1993 : 19—20).⁹

The verbs *tarvitsema* and *pruukima* also show an interesting interaction between case and polarity. In the affirmative, both require the adessive on the actor nominal. However, *tarvitsema* and *pruukima*, like *maksma*, are most commonly used in the negative. In negative contexts *tarvitsema* and *pruukima* usually occur with a nominative dependent.¹⁰

- (12) *Sa ei tarvitse/ei pruugi seda raamatut lugeda.*

'You needn't read this book.'

In short, modal verbs show the characteristic behaviour of control verbs. They select nonfinite complements and also determine the form of the dependent that controls the subject of the infinitival complement.

⁷ <http://www.kuulutaja.ee/index.php?&PID=news&ID=2448>.

⁸ K. Pajusalu, I. Trigel, A. Veismann, M. Vija (2004 : 30—31) note that the modal function of *tulema* is based first and foremost on a constructional pattern, i.e. it functions as a modal only in certain syntactic environments.

⁹ However, E. Uuspõld (1989 : 475) gives examples of the sentences where the adessive noun is marked for the feature [–animate]:

Nahkadel tuleb kaks päeva liguneda.

Istutatud puudel tuleb saastunud õhus kasvada.

E. Uuspõld suggests that the use of an inanimate substantive seems to depend on the semantics of the predicate: acceptable cases are sentences that describe processes, unacceptable cases contain states (1989 : 475).

¹⁰ Although E. Uuspõld states that the noun in the nominative is also possible in affirmative questions as the sentences below (1989 : 474), the native speakers consulted for this paper considered the adessive more acceptable and frequent.

Kas sa tarvitsed/pruugid teda karta?

'Need you be afraid of him?'

Sa tarvitsed/ pruugid ainult vihjata ja su soov täidetakse.

'You just need to hint and your wish will be fulfilled.'

2.3. Modal auxiliaries

In contrast, modal auxiliaries pattern with raising verbs in not imposing any special demands on their subject. Instead, modal auxiliaries just preserve the subject demands of their infinitival complements. Thus the necessity auxiliary *pidama* and the possibility auxiliary *võima* do not select an agentive subject, govern a particular subject case, or exclude the occurrence of a subject. Each of these properties is determined by the infinitival complement.

(13) *Äikese eel võib õues kiiresti hämarduda.*

'It may get dark fast before a thunderstorm.'

(14) *Pidusaalis pidi enne hämarduma, kui Mart julges Kadri tantsima kutsuda.*

'It had to get dark in the dancing hall before Mart dared to ask Kadri for a dance.'

(15) *Peeter võis kohtuda Kaamoga.*

'Peter may have met Kaamo.'

(16) *Peeter peab kohtuma Jaaniga.* (Rätsep 1978 : 36)

'Peeter must/has to meet Jaan.'

The verbs *näima*, *paistma* and *tunduma* also fall into the class of modal auxiliaries.

The split between modal auxiliaries and modal verbs in Table 1 isolates the basic division between syntactic and semantic characterizations of modals.

3. Voice in Estonian

As noted in the introduction, the voice system of Modern Estonian contrasts active personal constructions with active impersonal constructions and resultative passive constructions. Although there is a certain amount of formal and functional overlap between passive and impersonal constructions in Estonian, these constructions have distinctive properties and interpretations. Impersonals can be formed from nearly any verb, irrespective of valence or argument structure, provided that the subject may be construed as human (Torn 2002).¹¹ The impersonal voice is deeply integrated into the verbal system of Estonian, as reflected in the fact that there are impersonal forms corresponding to each personal paradigm. Passive constructions are, in contrast, much more restricted. The most widely accepted passive construction is the resultative passive, formed with the *tud*-participle of a transitive verb along with either the auxiliary *olema* 'be' or *saama* 'become'. The contrast between impersonals and the two types of resultative passive constructions are summarized by M. Erelt (2003):

"Resultative (stative) passive clauses have a subject and express a state into which the subject's referent (object of action) has entered as a result of the action, e.g. *Uksed olid avatud* 'The doors were open' [---] Passivity is morphologically indicated by the *tud*-participle of a transitive verb. However, in that case the latter is not part of the impersonal form of the verb but act

¹¹ See also Peegel 1958.

as the predicative. That it [the preverbal argument] is the subject and not the object is proved by the agreement of the *olema*-verb and a different paradigm of tense forms in comparison with the impersonal passive [---] To express the state that is achieved by a certain point of time, the *saama*-verb 'become' is used also for the stative passive in place of the *olema*-verb 'be', e.g. *Laud saab varsti kaetud* 'The table will have been laid soon', *Tööd saavad tehtud* 'The jobs will have been completed'" (Erelt 2003 : 103).

The preceding passage identifies some of the key differences between impersonal and passive constructions. Given their 'indefinite human agent' interpretation, impersonals are unnatural and usually unacceptable, if formed from verbs, such as *haukuma* 'to bark', which denote an action not normally performed by a human subject (Torn 2002). On the other hand, impersonals may be freely 'derived from intransitives' and even from unaccusative verbs (Torn 2002; Blevins 2003). As stressed in the Relational Grammar literature (Perlmutter, Postal 1983), unaccusatives such as *olema* 'be', *jääma* 'remain', *saabuma* 'arrive', *kaaluma* 'weigh', etc., universally lack passive counterparts. However each of these verbs has a full impersonal paradigm in Estonian.

3.1. The interaction of voice and modals

Voice constructions show a similar contrast in their interactions with modals. As a class, modals have impersonal forms when they can be construed as referring to an implicit human actor. But, again as in other languages, there are no passive forms of modals in Estonian.¹² Consider first the modal auxiliaries *võima*, *pidama*, *näima*, *tunduma* and *paistma*. Each of these verbs, apart from *pidama*, has synthetic impersonal forms in *-dakse/-takse* and *-di/-ti* and impersonal participles in *-dud/-tud*. Some examples are given below.

- (17) *Siit v õ i d i lähenev vaenlase laevastik avastada mitu tundi enne selle päralejõudmist. Tornni kolm ülemist palkidest vahelagedega korrust olid määratud vahiteenistuseks ja vaenlase tõrjumiseks. Kahte alumist võlvitud korrust v õ i d i kasutada nii eluruumidena kui ka tulistuspunktidena.*¹³
'From here, an approaching enemy fleet could be discovered hours before its arrival. The three upper storeys of the tower, with inserted log ceilings, were intended for lookout duty and would also serve to repel the enemy. The two lower storeys, with arched ceilings, could have served both as living quarters and as battle stations.'
- (18) *Teda huvitas ainult luukere seisund ja ta märkas midagi, mis talle põrmugi ei meeldinud. Säärehuud olid pikuti lõhestatud ja seda o l i v õ i d u d teha ainult selleks, et luuüdi kätte saada.*¹⁴
'He was only interested in the state of the skeleton and noticed something that he did not like at all. The tibia had been split lengthwise, something that could only have been done to get the marrow.'

¹² As S. Wurmbrand notes: "Modal constructions display two basic properties with respect to passive. First, passive of modal verbs is impossible [---] Second, the main predicate can be passivized." (1999 : 603).

¹³ <http://www.muuseum.haapsalu.ee/index.php?lk=10801>.

¹⁴ http://www.lap.ttu.ee/erki/failid/raamatud/robert_e_howard_-_draakoni_tund.html.

- (19) *Täiesti mõistmatu on, kuidas s a a d a k s e teha libeduse tõrjet nn. ohtlikes kohtades.*¹⁵
 'It is quite incomprehensible how they can apply antiskid treatment in the so-called dangerous spots.'
- (20) *"Nüüdseks on palju põnevam see, et naisekehast n ä i d a k s e t ü - d i n u d o l e v a t. Ilmuvad reklaamid, kus on järjest enam paljaid mehi," leiab Eesti Naisuurimise ja Teabekeskuses (ENUT) töötav Marion Pajumets.*¹⁶
 'What is much more interesting now is that people seem to be fed up with the female body. You see advertisements with more and more naked men, said Marion Pajumets of the Estonian Women's Studies and Resource Centre.'
- (21) *ei ole bioloogia ja keemia küsimustes minus asja, aga ma millegi pärast kahtlustan, et ka seal on selliseid "kallutatuvusi" [---] lihtinimesele teadmatutes asjades t u n d u t a k s e s o g a a j a v a t.*¹⁷
 'I am no dab hand at chemistry and biology but something still makes me wonder whether there are really no such "biases" [---] in matters opaque to the layman one appears to be muddying the waters.'

Although present forms in *-dakse/-takse* appear to be the most frequent forms, modals have full impersonal paradigms, including preterite forms in *-di/-ti* and participles in *-dud/-tud*.

3.1.1. Syntactic constraints on passivization

Corresponding to an active personal sentence such as (22a), one can form the present impersonal in (22b) and the perfect impersonal in (22c). However, this is no corresponding passive construction because no modals have passive forms in Estonian.

- (22) a. *Nad võivad teda üllatada.*
 'They may surprise her.'
 b. *Teda võidakse üllatada.*
 'One may surprise her.'
 c. *Teda on võidud üllatada.*
 'One may have surprised her.'
 d. **Ta on võidud nende poolt üllatada.*
 'She may have been surprised by them.'

As in other languages, modals may occur with passive complements as well as with active complements. These possibilities are illustrated by the examples in (23):

- (23) a. *võima + [olla + nud-participle] or [da-infinitive of main verb]*
Ta võis olla jooksnud terve tee.
 'He may have been running all the way.'

¹⁵ <http://portaal.laanemaa.ee/article/articleview/1780/1/1>.

¹⁶ P. Tali, *Võtad riided seljas, saad kuulsaks!* — Eesti Päevaleht 25.01.2003; http://www.epl.ee/artikkel_226061.html.

¹⁷ <http://forum.planet.ee/printthread.php?t=48480>.

Ta võis joosta terve tee.
 'He may have run all the way.'

- b. *võima* + [*olla* + *tud*-participle (with *poolt*)]
Ta võis olla sõprade poolt petetud.
 'He may have been deceived by his friends.'
- c. *pidama* + [*olema* + *nud*-participle] or [*ma*-infinitive of main verb]
Ta peab olema homseks raamatu läbi lugenud.
 'He has to read the book by tomorrow.'
Ta peab raamatu homseks läbi lugema.
 'He has to read the book by tomorrow.'
- d. *pidama* + [*olema* + *tud*-participle (with *poolt*)]
Ta pidi olema võimude poolt taga otsitud.
 'He is said to be wanted by the authorities.'
- e. *näima* + [*olevat* + *nud*-participle] or [*vat*-form of main verb]
Ta näib olevat jooksnud pika maa.
 'He seems/appears to have run a long way.'
Ta näib jooksvat.
 'He appears to be running.'
- f. *näima* + [*olevat* + *tud*-participle (with *poolt*)]
Ta näib olevat naabrite poolt vihatud.
 'He seems to be hated by his neighbours.'

The forms of the modal verbs in (23) are all personal active forms. The voice contrast in (23) is located in the nonfinite complements. Whereas (23a), (23c) and (23e) have active complements, (23b), (23d) and (23f) have passive complements. Example (23d) is of particular interest. Although *pidama* itself has no passive (or impersonal) forms, it may freely occur with a passive complement in (23d). The clear distinction between the voice features of active *pidi* in (d) and the voice features of its passive complement *olema taga otsitud* highlights a general contrast, which is sometimes obscured by descriptions that treat modals as forming parts of complex predicates (Rätsep 1972) or serial verbs (EKG II 1993).

Voice may also vary within a verb phrase containing a modal, just as in a verb phrase containing a more agentive verb such as *proovima* 'try' in (24).

- (24) a. *proovima* + [*da*-inf of main verb]
Ta proovib joosta.
 'He tries to run.'
- b. *proovima* + [*olla* + *tud*-participle (with *poolt*)]
Ta proovib olla sõprade poolt armastatud.
 'He tries to be loved by his friends.'

3.1.2. Summary

In short, all modals expressing possibility and evidentiality seem to have impersonal forms, but no modals have passive forms. The modal auxiliary *võima*, 'can, may, be able' and modal verbs *saama* 'can, be able' have impersonal paradigms, as illustrated by the present forms *võidakse* and

saadakse. Other, less grammaticalized expressions of possibility, such as *oskama* 'can, be able', *suutma* 'be able' and *tohtima* 'be allowed' also have impersonal forms, such as *osatakse*, *suudetakse* and *tohitakse*. The subclass of possibility auxiliaries that express evidentiality also have impersonal forms. Thus the verbs *näima*, *paistma* and *tunduma* 'seem' have the present impersonal forms *näidakse*, *paistetakse* and *tundutakse*. None of these types of verbs would normally be expected to have passives in any language, and in Estonian these modal verbs and auxiliaries may not occur in the resultative passive construction.

3.2. Morphosyntactic constraints on impersonalization

The modal auxiliary *pidama* 'must' is often singled out as defective because it lacks impersonal forms. But the same appears to be true of all necessity modals in Estonian, whether verbs or auxiliaries. Modal verbs such as *tulema*¹⁸ 'have to' and *maksma* 'need', also lack impersonal forms, as do *tarvitsema* and *pruukima* when they are used affirmatively. The reason that *pidama* is treated separately is that there is a good syntactic explanation for the behaviour of the semantic class of modals that express necessity. Nearly all necessity modals code their agentive dependent as an adessive oblique, not as a structural (nominative or partitive) subject. Yet impersonalization applies only to verbs that both select a human actor and also code the actor as a nominative subject. Hence the observation that the modal verbs *tulema* and *maksma* *pruukima* and *tarvitsema* lack impersonal forms can be attributed to the fact that they lack a nominative subject that can be suppressed by impersonalization. The same syntactic explanation accounts for the fact that modal verbs that are characteristically used in the negative, such as *tarvitsema* and *pruukima* 'need' lack affirmative impersonal forms, but have the impersonal forms *ei tarvitseta* and *ei pruugita* 'one need not', as in (25) and (26).

(25) *Elamisloa andmisel on aga igasugu keerulisi variante. Näiteks e i t a r v i t s e t a Su elamisloale lisada märget, mis lubaks lisaks olemisele ka töötada.*¹⁹

'There are, however, all sorts of tricky possibilities connected to the issue of a residence permit. For instance, they might omit to add a note to the permit that would allow you not just to reside but also to work.'

(26) *Briti peaminister Tony Blair ütles, et Iraagist e i p r u u g i t a massihävitusrelvi leida, kuid see ei tähenda tema arvates, nagu poleks Saddam Hussein endast maailmale ohtu kujutanud, vahendab BBC.*²⁰

'The British PM Tony Blair said that even if WMD are not found in Iraq, this does not mean, in his opinion, that Saddam Hussein never constituted a threat to the world, reported the BBC.'

The negative impersonals are acceptable in (25) and (26) because *tarvitsema* and *pruukima* allow a nominative subject in negative contexts. The interaction of voice with modals and negation is outlined in Table 2.

¹⁸ **Tullakse minna* (Rajandi 1999 : 87) 'One has to go'.

¹⁹ <http://trip.ee/node/6550>.

²⁰ http://www.postimees.ee/060704/online_uudised/138660.php.

The interaction of voice and modals

	subject raising	subject control	impersonal
necessity (affirmative)	<i>pidama</i>	<i>tulema, maksma, tarvitsema, pruukima</i>	<i>*peetakse, *tullakse, *makstakse, *tarvitsetakse, *pruugitakse</i>
necessity (negative)		<i>ei tarvitse, ei pruugi</i>	<i>ei tarvitseta, ei pruugita</i>
possibility	<i>võima, tohtima, saama</i>		<i>võidakse, tohitakse, saadakse</i>
evidential	<i>näima, paistma, tunduma</i>		<i>näidakse, paistetakse, tundutakse</i>

The sole exception to this syntactic account is *pidama*, which patterned with other necessity modals historically but has subsequently grammaticalized into a modal auxiliary that permits a nominative subject. Because this development has not led to the innovation of impersonal forms, *pidama* is classed as defective in traditional Estonian grammar. Nevertheless, the sense of the missing impersonal forms of *pidama* can be expressed periphrastically, by combining a 3sg form, such as present *peab*, with the impersonal infinitive, which is formally a supine (*ma*-infinitive) form based on the impersonal stem. Thus the example *peab tehtama* 'one has to do' takes the place of the unacceptable **peetakse tegema*.

(27) *Ei õhka vastu täpset ettekujutust, mis see peab olema, mis seal peab juhtuma, mis seal p e a b t e h t a m a.*²¹

'It doesn't give off an exact sense of what it is to be, what's to happen, what's to be done.'

Other verbs, such as *tulema*, *tarvitsema*, *pruukima* and *maksma* do not have periphrastic alternatives because, as noted earlier, they govern *da*-infinitives, not *ma*-infinitives. Thus, for example, **tuleb pestama* is unacceptable because *tulema* governs an infinitive form in *-da*, not in *-ma*. However, given that these verbs all select [+animate] adessive dependents (cf. Rätsep 1972), a characteristic impersonal interpretation can be expressed by 3sg forms, such as *tuleb*, *tarvitseb*, *pruugib* and *maksab*.

The behaviour of modal auxiliaries such as *pidama* and *võima* also clarifies a couple of final points. Since these verbs are raising verbs and inherit the subject demands of their nonfinite complements, they do not themselves select a nominative subject but are compatible with the nominative subject selected by their complement. So a verb need not govern the nominative but must only be compatible with a nominative subject to impersonalize. The fact that necessity modals do not govern a nominative subject also accounts for the fact that they cannot function as dependent infinitives (cf. Rätsep 1972 : 27; 1978 : 41). These restrictions fall under the same morphosyntactic generalization if the nominative subject that is suppressed in impersonal constructions is controlled in infinitival constructions. Hence if a verb does not impersonalize for lack of a nominative subject, it will also lack a controllable infinitival subject.

²¹ <http://www.maaleht.ee/?page=&grupp=artikkel&artikkel=1399>.

4. Conclusion

The above treatment of voice and modals in Estonian supports three general conclusions. The first is that apparent differences between previous treatments of the modal system can be reconciled by distinguishing modal auxiliaries, which are a subclass of raising verbs, from non-auxiliary modal verbs, which are control verbs. Second, the existence of impersonal forms of modal verbs in Estonian confirms that impersonals are active indefinites, not passives. The third conclusion is that the lack of impersonal forms of necessity modals reflects a general morphosyntactic constraint on impersonalization. Impersonalization applies to verbs that not only select a human actor but may code that actor as a nominative subject. Constructions that code actors in other ways, for example as adessives, do not impersonalize, even though they meet the semantic requirements of impersonalization.

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РЕЕЛИ ТОРН-ЛЕЕСИК (Тарту)

ЗАЛОГ И МОДАЛЬНЫЕ ГЛАГОЛЫ В ЭСТОНСКОМ ЯЗЫКЕ

Взаимосвязи залога и модальных глаголов в эстонском языке подтверждают безличный характер основной оппозиции залога и объясняют ограничения при образовании имперсонала. В залоговой системе эстонского языка личные конструкции актива противопоставляются в основном безличным конструкциям актива и конструкциям пассива состояния. Безличная конструкция актива обычно считается основным залогом в эстонском языке и в прибалтийско-финских языках вообще, в то же время перифрастический пассив представляется новшеством и базируется как бы на причастных конструкциях пассива индоевропейских языков.

Наличие у большинства модальных глаголов безличных форм подтверждает, что в отношении имперсонала следует говорить об индефинитных конструкциях актива, а не о пассиве. Модальные глаголы, у которых безличные формы отсутствуют, выражают необходимость. Такое семантическое разделение объясняется и синтаксически. Глаголы, при которых отсутствует номинативный субъект, не имеют безличных форм. Большинство модальных глаголов, выражающих необходимость, не допускают в предложении наличие номинативного субъекта, а кодируют субъект своего действия формой адессива. Связь между номинативным субъектом и имперсоналом подчеркивают выражающие необходимость модальные глаголы, которые обычно используются в отрицательной речи. Модальные глаголы, которые относятся к этому классу, например, *tarvitsema* и *pruukima*, допускают употребление номинативного субъекта в отрицательном предложении и имеют формы безличного отрицания.

Таким образом, взаимосвязи залога и модальности не только подтверждают безличность основной оппозиции залога, но и проливают свет на существенное ограничение в образовании имперсонала. Имеющиеся исследования залога указывают, что безличные формы описывают действие, осуществляемое действующим лицом (агенсиом) и что эти формы, как правило, можно образовать от глаголов, которые требуют человека-действителя. В то же время модальные глаголы показывают, что важно и морфосинтаксическое кодирование такого агенса: только глаголы, допускающие номинативное действующее лицо, можно использовать в безличных формах.