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DEVELOPMENT OF THE MODAL FUNCTION  
OF THE VERB *tulema* 'COME' IN WRITTEN ESTONIAN\*

**Abstract.** The central grammatical function of the verb *tulema* 'come' in Modern Estonian is to express the modality of obligation and necessity; a modal construction related to the verb *tulema* is one of the most essential means of expressing agent-oriented obligation. The article offers an overview how modal constructions of the verb *tulema* appeared and developed in Written Estonian in the 17<sup>th</sup>–20<sup>th</sup> centuries and presents suggestions about possible genesis of the construction.

It is possible to formulate different hypotheses about the development of the modal usage of the verb *tulema*. One possible source of analogy could be detected in the influence of neighbouring Indo-European languages; however, for development of *tulema* construction there probably were not enough examples in the contact languages. One might think that the modal *tulema*-construction could have existed considerably earlier in the spoken language than in its written version. In case we still suppose that written language reflects the development of *tulema*-construction adequately, we could consider the modal *olema*-construction as a possible example.

Keywords: Estonian, agent-oriented modality, modal verbs, neccessive constructions, written language, history of Estonian.

The central grammatical function of the verb *tulema* in contemporary Estonian is to express modalities of obligation and necessity. The *tulema*-verb acquires a modal meaning in the construction, where the *tulema*-verb expresses obligation or necessity in the third person singular, and the modalized situation is presented as a *da*-infinitive construction.<sup>1</sup> The sentence may also have a deontic agent as an optional member, which takes the adessive. For example,

- (1) Mei-1     **tule-b**     *töö*     **lõpeta-da.**<sup>2</sup>  
1PL-ADE   **come-3SG**   *job*   **finish-daINF**  
'We have to finish the job.'

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<sup>1</sup> According to the academic Estonian grammar (EKG 237), an infinitive construction consists of the infinitival form of a verb and the dependents of this verb. Thus, an infinitive construction can be a part of a modal construction.

<sup>2</sup> Here and henceforth in example sentences the *tulema*-verb and the head of the subordinated infinitive construction is in bold type, and the part of the sentence denoting the

A similar modal construction based on the *tulema*-verb can be found also in other Finnic languages (Saukkonen 1965 : 150–155).

The modal construction with the verb *tulema* together with the verb *pidama* 'must' with the same meaning are important means of expressing agent-oriented necessity in Estonian; in some text types it is even the most frequent means (Nurmi 1991 : 735). Against this background it is somewhat unexpected that in the older survived Estonian-language texts the verb *tulema* does not occur in the modal meaning. It serves as a basis for the hypothesis that the data of Old Written Estonian could show the development of the modal use of the verb *tulema* (Habicht 2001 : 273).

The article provides a survey of the appearance and development of the modal *tulema*-construction in written Estonian from the 17<sup>th</sup> to the 20<sup>th</sup> centuries, and assumptions will be made about the possible origin of the construction. The analysis is based on a 5,438-page sample of North Estonian written texts from 1600–1850; the data from the end of the 19<sup>th</sup> century and the 20<sup>th</sup> century come from the Tartu University Corpus of Estonian Literary Language (1890–2000; <http://test.cl.ut.ee/korpused/baaskorpus>).

### 1. Estonian modal *tulema*-construction in the light of construction grammar and grammaticalization theory

In contemporary linguistics the concept of construction grammar covers a number of different research trends. In this article construction grammar means only the classical trend of construction grammar, as represented by Charles Fillmore, Paul Kay, George Lakoff, and Adele Goldberg (see e.g. Goldberg 1995; Fried, Östman 2004; Östman, Fried 2005, Fillmore, Kay, O'Connor 1988; Kay, Fillmore 1997).

A. Goldberg (1995 : 4) in her treatment of argument structure constructions of verbs defines the main term of construction grammar, the construction, as follows: "C is a construction iff<sub>def</sub> C is a form—meaning pair  $\langle F_i, S_i \rangle$  such that some aspect of  $F_i$  or some aspect of  $S_i$  is not strictly predictable from C's component parts or from other previously established constructions." Thus, in construction grammar form and function are regarded as inseparable from each other (Fried, Östman 2004 : 12); the description of a grammatical construction includes at the same time information about the morphosyntactic properties, prosodic and phonetic shape, meaning, and function of the construction (Fried, Östman 2004 : 19–23).

A. Goldberg (1995) described the argument structure constructions of verbs in great detail from the perspective of construction grammar. The main claim of A. Goldberg's monograph could be worded as follows: the constructions of the principal clause types are independent correspondences of form and meaning, the semantic side of which cannot be reduced to the meanings of the words occurring in the sentence. The final interpretation of a specific sentence (construct) is formed as a combination of the meanings of the words in the sentence and the meaning of the syntactic construction (Goldberg 1995 : 9–10).

The modal use of the *tulema*-verb in contemporary Estonian presumes a definite sentence pattern: (AG<sub>ade</sub>) V<sub>3SG</sub> DA (the abbreviation *AG<sub>ade</sub>* denotes agent of modality is underlined. Italics mark the part of the sentence that is analysed as the object of the infinitive construction in contemporary Estonian grammar.

an adessive agent,  $V_{3SG}$  stands for a verb in the third person singular, and  $DA$  is the *da*-infinitive), a modalized situation can be expressed only as an infinitive construction (Rätsep 1978 : 35–39, 188; EKG 182). Thus, the modal meaning of the *tulema*-verb is first and foremost a constructional meaning; the verb can acquire a modal meaning only in a definite syntactic environment (Pajusalu, Tragel, Veismann, Vija 2004 : 30–31), and it is convenient to describe the semantics of the *tulema*-verb in the modal construction by means of the tools and concepts of construction grammar.

Most studies in the vein of construction grammar describe language from the synchronic aspect, discussing only briefly the historical development of a language (e.g. Goldberg 1995 : 132, but see also Leino 2003 : 63–118). Nevertheless, at first sight one cannot see any conflicting circumstance between the language description according to construction grammar and the generally accepted understanding regularities with regard to the historical development of languages and grammaticalization. Michael Israel (1996) analysed the development of the *way*-construction in English, and his treatment fully supports the view that the construction develops in accordance with the previously described principles of the grammaticalization process — changes take place in the course of a long time, the conceptual content of the construction has extended gradually, the original concrete content has been replaced by more abstract content; the form of the construction has become increasingly fossilized; its frequency has increased (see e.g. Heine, Claudi, Hünnemeyer 1991; Heine, Kuteva 2002; Hopper, Traugott 1993; Bybee, Perkins, Pagliuca 1994; Diewald 1997; New Reflections on Grammaticalization 2002).

Construction grammar and grammaticalization theory can be linked also from another aspect by describing the grammaticalization of a lexicon unit as transition of the unit to such an unproductive grammatical construction where it had not occurred previously.

At first lexicon units are grammaticalized only in a certain semantically and grammatically narrowly demarcated environment. Therefore, researchers have claimed that it would more appropriate to speak about the grammaticalization of constructions rather than that of single words and forms (Bybee, Perkins, Pagliuca 1994 : 11; Hopper, Traugott 1993 : 4); the grammaticalization of the construction-related word form is only a side effect of grammaticalization (Lehmann 2002 : 7). The basis for creating a new construction is its similarity to previous constructions (Itkonen 2002 : 418). Therefore, many cases of grammaticalization could be explained not as grammaticalization of the construction but as conventionalization of a new lexicon unit in a previously existing grammatical construction where this specific unit had not occurred previously. It is likely that also the origin of the modal *tulema*-construction could be analysed as integration of a new lexicon unit, the *tulema*-verb, with the unproductive necessary construction  $\langle N_{ade} V^1_{3SG} V^2_{DA} \rangle$  (the abbreviation  $N_{ade}$  denotes an adessive noun,  $V_{3SG}$  stands for a verb in the third person singular, and  $V_{DA}$  is the *da*-infinitive).

## **2. The modal *tulema*-construction in Old Written Estonian**

The material of the old written language revealed 4,929 occurrences of the *tulema*-verb; in 114 cases the verb was used modally (2.3% of all the occurrences of the *tulema*-verb in the old written language). In 108 cases

the *tulema*-verb was almost clearly used modally; there were six more instances where the modal meaning could be regarded primary but an alternative interpretation is possible, too. The modal construction is absent in the oldest texts; the earliest examples date from the last decade of the 17<sup>th</sup> century, e.g.

- (2) Agga et sesamma [=kirikuseaduse] sees sedda üxpeine on sädut/ mis  
keikennamist Kirko Asja on/ ja et mitte korra perrast echk issipeine on  
kirjotut/ *mis* Iutlusse Ammeti monnisuggust Asja Ajamissel **tulle-p**  
*what* **come-3SG**

Kirko Wisi nink kombe echk monne mu issipeinse Luggu polest  
**tähhelepan-na** ... (Kässi-Ramat 1699 : i–ii)  
**pay attention-daINF**

'But that in this ecclesiastical book it is only provided what church matters are, and that it has not been written separately what one needs to pay attention to while taking care of the business of the preacher's profession in connection with the ways and customs of the church or some other peculiar episode ...'

In the next centuries the modal use is already rather common; one can find such examples in almost all the texts from the 18<sup>th</sup> and the 19<sup>th</sup> centuries. However, the number of modal constructions by comparison with the number of all the occurrences of the *tulema*-verb is still rather small, with the exception of legal acts and texts providing various kinds of practical advice. Such a finding can be regarded as expected because the need to express modal meanings is much lower in narrative texts than in non-fiction texts.

## 2.1. The meaning and functions of the modal *tulema*-construction in the old written language

In modally interpreted sentences the semantics and functions of the *tulema*-verb (or rather those of the related construction) are similar to contemporary language — the *tulema*-construction is used to convey necessity and obligation modality, e.g.

- (3) Osta siis ennesele nisuggust riet, mis saksad nimmetawad: marliks; tee  
sest kotti, kellel pitkus 2 künart ja laius 1¼ künart pohjas on, seält  
**tulle-b** *ta* nenda kitsoke **leika-da,**  
**come-3SG** *3SG* **cut-daINF**

et kotti su laius ei olle ennam kui ½ künart. (Willmann 1782 : 195)

'Buy then the kind of cloth that the Germans call gauze; make a sack from it that is two ells in length and the width from the bottom is 1¼ ells; there you'll have to cut it so narrow that the opening of the sack will not exceed ½ ells.'

- (4) *Seddasimmas-t* *seädus-t* **tulle-b** ka selle tallomehhe jures **täita,**  
*this-PRT* *law-PRT* **come-3SG** **apply+daINF**

kes kulutanud, et koggodussest tahhab wäljaminna. (Seäduste-täitmis-  
tükkid 1845 : 10)

'This law must be applied also to the farmer who has said that he wishes to leave the congregation.'

Usually the agent of obligation is not expressed in the sentence; modal obligation / necessity is directed at the generic person (5), or the agent becomes clear from the context (6), e.g.

- (5) Kui üks kerbne arwab, et keik koggematta mailma sees on sündind, siis  
*se tulle-b mitte pahhaks- pan-na...* (Willmann 1782 : 34)  
*it come-3SG NEG disapprove-daINF*

'If a fly thinks that everything has happened in the world by chance, then one should not disapprove of it...'

- (6) Oli Westen äratunnud, et lugu nendega nenda, siis teadis tema kaa,  
*mis tul-i-Ø teh-a.* (Toomas Westen 1844 : 18)  
*what come-IMPF-3SG do-daINF*

'Once Westen had realized the situation they were in, then he also knew what had to be done.'

It is difficult to assess whether necessity/obligation expressed by means of the *tulema*-construction is of the same degree of intensity as nowadays. On the basis of only a few examples one might assume that the *tulema*-construction could be interpreted somewhat softer than now. In two instances the *tulema*-construction expressed a promise rather than an obligation, e.g.

- (7) Wimaks läksid [prouad ja preilid] temmaga tantsima, siis olli kärra öige  
lahti, sest *se tulle-b kül arwa-da*  
*it come-3SG imagine-daINF*

kuida temma [joobnud talupoeg] teistega on tantsind. (Willmann 1782 : 62)  
'Eventually [married women and young ladies] went to dance with him; all hell broke loose then because one might imagine how he [drunken peasant] was dancing with the others.'

In one case the *tulema*- and *pidama*-constructions were used side by side, whereas one gets the impression that the *pidama*-construction adds intensity to the obligation:

- (8) *Mis tulle-b teh-a, ja mis pea-d tegge-ma,*  
*what come-3SG do-daINF and what must-2SG do-maINF*

kui innimesed sind ehk parremaks ehk pahhemaks peawad, kui sa ei olle? (Masing 1824 : 35)

'What one has to do and what have you to do if people regard you better or worse than you are?'

Because in contemporary Estonian the *pidama*- and *tulema*-constructions are almost synonymous,<sup>3</sup> this intensifying use leads us to the idea that even in the 19<sup>th</sup> century obligation expressed by the *tulema*-verb was perceived more weakly than in the contemporary language.

From the perspective of the development of the modal construction such examples are of special interest where the meaning of the *tulema*-verb allows multiple interpretations. However, the sample had few such examples, and in all these cases the modal interpretation seems to be primary.

<sup>3</sup> By comparison it is worth mentioning that in contemporary Finnish the deontic force of the *tulla*-construction is clearly weaker than that of the *pidama*-construction (Kangasniemi 1992 : 100).

In the case of one example the possibility of multiple interpretations is totally accidental. In the sentence (9) the *da*-infinitive construction is subordinated to the *tulema*-verb, and the construction is likely to carry the meaning of general necessity.

- (9) senni kui Jummal neile wimaks ühte Kunningast andis nende Palwede peäle, **tulle-b ühtekokko-arwa-ta** *liggimalt kolmsada ja*  
**come-3SG add up-daINF** *almost three hundred and*  
*nellikümmend Aasta-d.* (Jummala surest Teggudest 1789 : 334)  
*forty year-PRT/PL\_NOM*  
 'until eventually God gave them a king in response to their request, it has to be considered altogether almost 340 years' / 'it took altogether almost 340 years.'

At the same time it is possible to interpret the sentence this way that the meaning of the *tulema*-verb is 'be added up' and the *da*-infinitive construction acts rather in the function of the gerund, cf.

- (10) aega seni, kuni Jumal neile viimaks ühe kuninga andis,  
**tulle-b ühtekokku-arwa-tes** *liggimalt kolmsada ja*  
**come-3SG add up-GER** *almost three hundred and*  
*nellikümmend Aasta-d.* (Jummala surest Teggudest 1789 : 334)  
*forty year-PRT/PL\_NOM*  
 'until eventually God gave them a king in response to their request, it took altogether almost 340 years.'

In four cases one might assume that the *tulema*-verb acts as a future auxiliary in the sentence although the primary interpretation would still be modal, e.g.

- (11) Ja Samuel räkis Rahwa ette ueste keik Kunninga Öigust, ja mis Woimus temmal olleks, ja *mis* temmale keik **tulle-ks-Ø anda**  
*what* **come-CND-3SG give+daINF**  
 ja **maks-ta.** (Jummala surest Teggudest 1789 : 389)  
 and **pay-daINF**  
 'And Samuel told the crowd once again about all the rights of the king and about what kind of power he would enjoy and what should/would be given and paid to him'.

## 2.2. Grammatical structure of the modal *tulema*-constructions in the old written language

In the necessive construction ( $AG_{ADE} V^1_{3SG} V^2_{DA}$ ) of contemporary Estonian the  $V^2_{DA}$  role is performed by a non-finite verb form or a longer verb phrase, to which in turn the object could be subordinated. Thus, in each case  $V^2$  is embedded in the model together with its dependents, which should not be regarded as belonging to the necessive construction itself. Because the old written language includes many examples where the part of the sentence that is regarded as the object of the infinitive construction according to the present interpretation agrees with the *tulema*-verb in number, it is expedient in the future analysis to consider this part of the sentence (henceforth N) as being part of the construction.



- (15) Agga isse on weel *nee-d sure-ma-d süü-d mis*  
*this-PL big-CMP-PL crime-PL that*  
 nenda kui enne sedda, Ullema Kohto holeks **tulle-b anda**  
**come-3SG give+daINF**  
 ja **jätta.** (Jggäüks 1802 : 19)  
 and **leave+daINF**  
 'But the bigger crimes constitute a totally different matter, which, as previously, should be left to the higher court.'

There are only four sentences that do not include N.

Extensive agreement of the plural N is to some extent in conflict with the fact that quite often (25 examples, in addition four ambiguous examples) N is in the partitive and seems to fulfil the function of the object and not the partial subject in the perception of language users. Examples of partitive N are numerous already in the 1739 Bible, e.g.

- (16) *Jummala-t tulle-b wägga karta*  
*God-PRT come-3SG fear+daINF*  
 sures pühhade salajas koggoduses, ja ta on kartusse wäärt keikide jures,  
 kes temma ümber on. (Piibli Ramat 1739 : Ps 89:8)  
 'God is fearsome in the secret council of saints, and he is more feared than anyone else surrounding him.'

The existence of partitive forms, on the one hand, and the agreement of nominative forms, on the other, enables us to assume that the construction could be analysed differently depending on the form of N — the partitive as a prototypical object case suggested the interpretation of the noun phrase as the object; the nominative N, however, was still perceived as the subject and not the total object.

Of the moods the modal *tulema*-construction in the old written language reveals the indicative and six occurrences of the conditional, which softens the categoricalness of obligation, e.g.

- (17) kül ta siis saaks kuulda, kui Poas tedda seält leiaks, *mis temma-l*  
*what 3SG-ADE*  
**tulle-ks-Ø teh-a.** (Jummala surest Teggudest 1789 : 347)  
**come-CND-3SG do-daINF**  
 'it is sure she will then hear, if Boas found her there, what she should do.'

As expected, the *tulema*-verb in necessary constructions is mostly in the present. However, some texts from the second half of the 18<sup>th</sup> century and the 19<sup>th</sup> century reveal also some past uses (six examples), e.g.

- (18) Nüüd **tull-i-Ø** kaa weel külmema maale  
**come-IMPF-3SG**  
**min-na...** (Toomas Westen 1844 : 10)  
**go-daINF**  
 'Now one had also go to a cold country...'

The analysed material includes five constructions where the *tulema*-verb is in the negative form. Negation of modality can take two forms: it is possible to negate the main verb (e.g. *You mustn't pay the fine*) or the modal verb (e.g. *You don't have to pay the fine*) (Brinton 2000 : 148).



The negation of the *pidama*-construction means the negation of the modal verb in contemporary Estonian; in the case of the *tulema*-verb one can negate both the infinitive construction that carries the content of the proposition (19) and the *tulema*-verb (20) (see 3.1 for a more detailed discussion):

- (19) **Ei tule-Ø arva-ta,**  
**NEG come-3SG think-daINF**  
 nagu asuksid remondijaoskonnas lentsalgad, kes iga äparduse puhul kohale tõttavad. (AJA1970\ol0016)  
 'as if there were flying squads at the repairs department that will rush to the scene in the case of each problem.'

- (20) "Juhul kui suudame ettevõtted piisavalt hästi ette valmistada,  
**ei tule-Ø järgmise privatiseerimislaonega ettevõtte-i-d**  
**NEG come-3SG enterprise-PL-PRT**  
 majandusministeeriumi bilanssi enam uuesti **tagasi- võtta,"**  
**return+daINF**

lisas ta. (AJA1990\ap0342)

'"In case we can prepare the enterprises well enough, it won't be necessary to return the enterprises to the balance of the ministry of economy during the next wave of privatization", he added.'

Examples of negative constructions in the old written language show that the infinitive construction is in the scope of negation, e.g.

- (21) Siiski **ei tulle-Ø temma väljaspiddise-d kannatamise-d**  
**NEG come-3SG his outward-PL suffering-PL**  
 ühtegi **arwa-ta** temma hinge-kannatamise wasto, mis temma,  
**regard-daINF**

se pühha ja öige, piddi tundma pattustega ühhes-kous ellades. (Jutlused 1844 : 144)

'Nevertheless one should regard his outward sufferings as nothing in comparison with his spiritual sufferings that he had to go through while living together with the sinners.'

In one case (altogether in connection with three constructions) *tulema* occurs in a very complicated construction as a non-finite dependent of the *arvama*-verb; the *tulema*-verb acting as the head of the *vat*-construction:

- (22) Isse Assi on se/ *mis* Kirk-issanda-t issiernaste Asjade sees/...  
*what* church father-PL

targaste arwa-wat **tulle-wa** teiseti **teh-a/**  
 think-3PL **come-vatINF** differently **do-daINF**

**erra-** echk **körwa-panna/...** (Kässi-Ramat 1699 : iii—iv)  
**away** or **aside put-daINF**

'It's a different matter what church fathers in the case of special cases ... wisely think that should be done differently or put away or aside...'

It is interesting that such a highly complicated use occurred in the 17<sup>th</sup> century, in the same text that contains the earliest examples of modal constructions of the sample.

### 3. Modal *tulema*-construction in the 20<sup>th</sup>-century written language

The Tartu Corpus of Literary Estonian had altogether 11,489 occurrences of the *tulema*-verb, of which 2,888 occurrences were modal (25.1% of all uses of the *tulema*-verb in the corpus). Because in some cases the *tulema*-verb was used in the same sentence as a head of a number of successively coordinated infinitive constructions, the total number of necessary constructions including the *tulema*-verb was even higher (altogether 3,313 necessary constructions). The necessary use of the *tulema*-verb is much more frequent in medial language than in fiction. Considering the content of the texts, it is understandable.

It appears that the proportion of modal examples among all the uses of the *tulema*-verb increased to a considerable degree in the first half of the 20<sup>th</sup> century and in the mid-century. While in the last decade of the 19<sup>th</sup> century the necessary uses of the *tulema*-verb in the media texts accounted only for 14.6 per cent of all the used, by the 1930s this indicator had already reached 42 per cent. In the media texts of the 1950s the proportion of the modal use of the *tulema*-verb is even 71.1 per cent (probably due to the imperative content of the media texts in the early years of Soviet occupation); in later media texts the proportion of necessary uses of the *tulema*-verb remained in the range 45–60%.

#### 3.1. Semantics and functions of the modal *tulema*-construction in the Tartu University Corpus of Literary Estonian

In the 20<sup>th</sup>-century literary language the *tulema*-construction was used to convey participant-internal necessity (23), participant-external non-deontic necessity (24), and deontic obligation (25) e.g.

- (23) ... ent oma teades mu-l just *aru* *puudus-t*  
 1SG-ADE reason+GEN lack-PRT

**kannata-da p-ole- tulnud,**  
**suffer-daINF NEG-come+PF+3SG**

ainult mälu, see, jah, pole tugev... (ILU1930\nov0014)

'... but as far as I'm aware I haven't suffered from lack of reason, only memory, yes, that's not good...'

- (24) Videovend ise vahel naeris, et  
*tema aparaati tule-b vedruga üles- keera-ta*  
*his device+PRT come-3SG wound up-daINF*  
 nagu grammofoni, või väitis selle olevat lampvastuvõtja. (ILU1990\ilu0043)  
 'The video guy used to laugh at times that his device should be wound up like a gramophone, or he claimed it to be a valve radio.'

- (25) Küll aga  
**tule-b** tei-l küsimata **püüda** *toota* *kaupu,*  
**come-3SG** 2PL-ADE **try+daINF** *produce+daINF* *good+PL+PRT*  
 millel oleks minekut ja mis võiks sealt mõned kaubad välja lüüa.  
 (AJA1990\ap0311)

'In fact, you'll have to try to produce without asking goods that would be successful and that could knock out some goods from there.'

The context often does not show unambiguously which kind of modality is meant, e.g.

- (26) *Säärane pikk jutlus tul-i-Ø valmis- mõtel-da,*  
*such long sermon come-IMPF-3SG think up-daINF*  
**kirja- pan-na ja pähe- õppi-da.** (ILU1980\stkt0035)  
**put down-daINF and learn by heart-daINF**  
 'Such a long sermon had to be thought up, put down, and learned by heart.'

It seems that the commonest function of the necessive *tulema*-verb is to express participant-external necessity.

Typically, the agent of obligation is not represented in the sentence; it could be inferred from the context (27) or can be a generic person (28), e.g.

- (27) "Kas sa hoolitsed mu ema eest!" kisendas ta üle laua treenerile, katkudes peast salkudena juukseid; mis tulid liiga kergesti ära, liiga kergesti lahkusid rumalad juuksed targast peast, võib-olla  
**ole-ks-Ø- tulnud süü-a vitamiine...** (ILU1990\ilu0069)  
**come-CND-3SG+PRET eat-daINF vitamin+PL+PRT**  
 "'Will you take care of my mother!'", he shouted to the coach over the table, pulling his hair in tufts, which came off too easily, too easily the stupid hair left the wise head; perhaps he should have eaten vitamins...'

- (28) Kui päris uhhaad tahetakse, siis  
**tule-b ikka kala ka pan-na.** (AJA1970\ed0040)  
**come-3SG fish+PRT put-daINF**  
 'If you want to have real fish soup, then you should add some fish, too.'

In the case of the negative modal *tulema*-construction it is possible to follow the semantic change in the construction. In the old written language the negative necessive constructions of the *tulema*-verb had an infinitive construction in the scope of negation that extended the *tulema*-verb; most corpus examples from the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century had the same semantics, e.g.

- (29) *Hobuse-i-d ei tule-Ø ööseks wälja- jätta.* (AJA1900\aja0090)  
*horse-PL-PRT NEG come-3SG leave outside-daINF*  
 'Horses should not be left outside at night.'

There are also a few ambiguous sentences (30), and there are also a few sentences where the *tulema*-verb is in the scope of negation (31), e.g.

- (30) "*Korralikku saatmis-t*" **ei tule-Ø seeläbi mitte toeta-da,**  
*regular+PRT dispatch-PRT NEG come-3SG support-daINF*  
 waid meie rääkisime nim. kirjawastuses ühe kaastöölise priilehest, mille käima-aega meie sellele pikendame, kellest näeme, et ta oma töotust ära ei unusta. (AJA1890\pos0710)  
 "'Regular dispatches" should not be supported through this, but in this reply we touched upon the free copy of a contributor, the subscription of which we will renew, of whom we can see that he will not forget his promise.'

- (31) *Abi anda ei tule-Ø*  
*abi+PRT give+daINF NEG come-3SG*  
talle mitte ainult õnnetuste kordadel, waid ka haiguse ja tööpuuduse ajal ja wanul päiwil. (AJA1900\aja0188)  
'Help should be rendered to him not only on the occasions of accidents but also during illness and unemployment and in one's old age.'

In the corpus of the 1930s most of the negated *tulema*-constructions can be regarded as ambiguous, e.g.

- (32) *Õhtu tuleb korraldada!*  
*Sellest ei tule-Ø loobu-da!* (ILU1930\nov0016)  
*NEG come-3SG give up-daINF*  
'The evening has to be organized! You shouldn't give it up!'

In the 1950s negation of the modal verb was already more frequent, e.g.

- (33) *Küsi, kas ei saaks õpilaste arstlikku järelevaatust korraldada nii,*  
*et õpilas-te-l ei tule-ks-Ø ooda-ta ambulantsides*  
*pupil-PL-ADE NEG come-CND-3SG wait-daINF*  
kaua järjekorras. (AJA1950\rh0234)

'It was asked whether the medical check-up of pupils could be organized so that the pupils would not have to queue long at the outpatient clinics'.

In the 1950s there are also many ambiguous sentences (34); negation of the infinitive construction is represented by a single construction (35), e.g.

- (34) *Colder ütles, et "abi" ei tule-Ø anda,*  
*aid+PRT NEG come-3SG give+daINF*  
kui abi taotlev maa ei loobu "natsionaliseerimise edasisest programmist... (AJA1950\rh0294)  
'Colder said that no 'aid' should be provided if the applicant country did not stop "the further programme of nationalization...'

- (35) *Seejuures ei tohi lubada maa varjamist, harimiskõlblikku maad ei tohi luge*  
*geda sooks, rabaks või liivaluiteks,*  
*soodustusi ei tule-Ø anda majandeile,*  
*concession+PL+PRT NEG come-3SG give+daINF*  
kellel nende saamiseks ei ole õigust. (AJA1950\rh0274)  
'At this one should not allow the concealment of land; arable land should not be classified as swamp, bog, or sand dunes; no concessions should be made to those farms than are not entitled to them'.

By the end of the 20<sup>th</sup> century the negation of the necessary verb is clearly predominant, e.g.

- (36) *SEAL tegelikult korraldusi jaga-da ei tule-Ø,*  
*order+PL+PRT distribute-daINF NEG come-3SG*  
kõik vanad olijad ja rollid ammu jaotatud ... (ILU1990\ilu0009)  
'Actually, you don't have to give orders there; all of them are old hands, and the roles were assigned long ago...'

- (37) *Pudeli pani ta klaasi kõrvale, et juhul kui janu suurem on,*  
*ei tule-ks-Ø kaugelt otsi-da*  
*NEG come-CND-3SG look for-daINF*

ja lisaküsimusega *põhitegevus-t* **katkesta-da**. (ILU1980\stkt0053)  
*main activity-PRT stop-daINF*

'He placed the bottle next to the glass; in case the thirst is stonger, you wouldn't have to walk far to fetch it and to stop the main activity by additional questions.'

The corpus material of the last decades of the 20<sup>th</sup> century did not reveal any more such sentences where the *tulema*-verb refers unambiguously to the fact that there is an infinitive construction in the scope of negation; however, one could find some ambiguous sentences, e.g.

(38) Ja *uus* *kirjastusi*  
*new+PL+PRT publishing house+PL+PRT*  
**ei tule-Ø organiseeri-da** ülalt, need peavad tekkima ise  
NEG come-3SG organize-daINF

vastavalt kultuuri vajadusele. (AJA 1990\ee1446)

'And new publishing houses should not be organized from top; they must come into existence in response to the need of culture.'

Thus, the semantics of negative *tulema*-constructions has undergone a gradual change in the 20<sup>th</sup> century, in the course of which the scope of negation in the construction shifted from the infinitive construction to the modal *tulema*-verb.

### 3.2. Grammatical structure of modal *tulema*-constructions in the Tartu University Corpus of Literary Estonian

In the corpus material the agent of modality was explicitly expressed in almost every fifth modal *tulema*-construction (i.e. about twice as frequently as in the texts of the old written language). The past century did not witness any big changes in the frequency of expressing the agent.

In case the agent is explicitly expressed in the sentence, it usually takes the adessive, e.g.

(39) Eriti **tule-b** **pinguta-da** nen-de-l töökollektiivi-de-l,  
**come-3SG labour-daINF this-PL-ADE labour collective-PL-ADE**

kus jaanuaris-veebuaris oli toodangu maht mullusest madalam.

(AJA 1980\stat0003)

'Those labour collectives have to put in much more effort where the production volume was in January and February lower than in the past year.'

At the end of the 19<sup>th</sup> century and at the beginning of the 20<sup>th</sup> century the agent was occasionally conveyed by the construction with the adposition *poolt*, e.g.

(40) Nendele kirikuõpetajatele, kes 30 aastat ametit on pidanud,  
**tule-b** kihelkonna poolt paiuki-t **maks-ta** ja nimelt  
**come-3SG parish+GEN from pension-PRT pay-daINF**

pool palka, s. o. tuhat rubla aastas, ilma korterita. (AJA 1900\aja0094)

'Those ministers who have served thirty years have to be provided by the parish and namely half of their salary, that is, a thousand roubles per year without lodgings.'

There are also a few examples where the sentence is ambiguous regarding the fact whether the adessive adverbial functions as the agent in the sentence or only expresses the place of action, e.g.

- (41) Üheksandal viisaastakul **tule-b** Tatarimaa-l **toota**  
**come-3SG** Tatarstan-ADE **produce+daINF**  
*vähemalt 500 miljoni-t tonni nafta-t.* (AJA1970\rh0038)  
*at least 500 million-PRT ton+PRT oil-PRT*

'During the next five years Tatarstan will have to produce at least five hundred million tons of oil.' / 'During the next five years at least five hundred million tons of oil has to be produced in Tatarstan.'

According to the academic Estonian grammar (EKG 53), the nominal part of the sentence N that was analysed as the object of the non-finite construction occurred in the construction in about 75% of cases, which is much less frequent than in texts of the old written language. As expected, the nominal part of speech was most frequent as the noun phrase; there were also over a hundred examples of the dependent with a clausal structure. The number of nominative and partitive noun phrases was almost equal. The nominal part of the sentence was expressed as a quantifier phrase in 3.4% of the constructions.

The *tulema*-verb occurs in the construction mostly in the indicative or the conditional; the other moods were used in single cases. The conditional was more frequent than in the old written language, about twelve per cent of the *tulema*-constructions, but the frequency of the conditional did not change much during the 20<sup>th</sup> century. For example,

- (42) Peaasi, et poja-l või tütrel-l oma isa pärast  
son-ADE daughter-ADE  
**ei tule-ks-Ø häbene-da.** (ILU1960\ilu0010)  
**NEG come-CND-3SG be ashamed-daINF**

'The main thing is that the son or the daughter shouldn't be ashamed of their father.'

As before, the predominant tense in the *tulema*-construction is the present, and the commonest past tense is the imperfect (about 18% of the constructions), e.g.

- (43) Esialgu ei olnud kerge, üksnes esimese aasta jooksul  
**tul-i-Ø vaheta-da**  
**come-IMPF-3SG change-daINF**  
*kaheksa elamiskohta.* (AJA1970\nh0106)  
*eight place of residence+PRT*

'In the beginning it wasn't easy; during the first year alone we had to change the place of residence eight times.'

The past tenses were used in fiction, where since the 1930s the proportion of the imperfect has constantly been higher than 35%. It could be explained by the fact that fiction often describes past events.

The negative *tulema* is very rare in the necessive construction; only about two per cent of the constructions were negative. Before the 1930s negative constructions were somewhat more frequent (4–5% of all the constructions). Rare use of the construction could be explained by its ambiguity (see also 3.1).

The corpus includes agreeing examples of only those *tulema*-constructions where the nominal part of the sentence is a noun phrase in the nominative plural (44), or where the conjunctive of the relative clause *mis/kes* refers to a plural noun phrase (45).

(44) Läbirääkimistel selgusid need wiisid ja põhijooned,

kuidas **tule-wad moodusta-da**  
**come-3PL form-daINF**

*seltskondliku-d komitee-d.* (AJA1930\waba017)  
*social-PL committee-PL*

'The talks resulted in the ways and principal features how social committees should be set up.'

(45) Viimase aasta jooksul on ta Pekingi valitsusele

*hulga projekti-sid ette pannud,*  
*large number+GEN project-PL+PRT*

*mis Venemaale tule-ksi-vad ette pan-na...* (AJA1910\p10018)  
*that come-CND-3PL forward put-daINF*

'Last year he suggested a large number of projects to the Peking government that should be put forward to Russia...'

It appears that agreement in number in the *tulema*-construction decreased gradually: agreeing construction prevailed in the last decade of the 19<sup>th</sup> century; later on there proportion decreased with each decade among the constructions that allowed agreement. While agreement could be absent from texts in the old written language only in the case of the conjunctive *mis* referring to a plural noun phrase, the corpus material does not reveal such distinction any more. By the 1930s the agreeing clauses remained in minority among the constructions that allowed agreement. In the 1950s agreement suddenly disappears; it could be explained by the rules laid down by normative grammars and strict editing of texts in the post-war years. Most normative and descriptive grammars published at the end of the 19<sup>th</sup> century and during the first decades of the 20<sup>th</sup> century did not discuss agreement of the necessive construction (e.g. Hermann 1896; Looits 1923 and others), or they mentioned the concurrent use of agreeing and non-agreeing examples (Kettunen 1924 : 21–22). However, starting with the 1930s normative grammars required the singular use of the *tulema*-verb in the necessive construction (e.g. Aavik 1936 : 82; Muuk, Mihkla, Tedre 1941 : 17; Jänes, Parlo 1943 : 61; Rimmel, Valgma, Riikoja 1957 : 153). It also made an impact on practical use — the post-war material revealed only three examples of the necessive construction with the agreeing *tulema*-verb, e.g.

(46) 3. võistlustsoonis olevad *kari-* ja *kodulooma-d*  
*livestock and domestic animal-PL*

**tule-vad võistluspäeval hoida köidetult**  
**come-3PL keep+daINF**

500 m kaugusel ringteest... (AJA1960\rh0036)

'Livestock and domestic animals in the third competition area are to be kept tethered at a distance of 500 m from the speedway...'

Thus, non-agreement in number of the necessive *tulema*-construction is likely to have become predominant due to language-external factors.

However, the makings of it were also present in the development of the language, and agreement had begun to disappear already before the decisive impact of language planning.

#### 4. Concerning the possible development of the modal *tulema*-construction in Estonian

For many centuries Estonian has been influenced by the example of Indo-European contact languages. Therefore, when studying the origin of any language phenomenon, one should take into account possible foreign influences. The text sample on which the study is based shows that the modal *tulema*-construction appears in written Estonian at the end of the 17<sup>th</sup> century (the earliest examples being from 1699).<sup>5</sup> Although the grammatical structure of the construction had not taken the final shape by then, its functions in the earliest examples already resembled the modern functions, and the construction could be used in a highly sophisticated grammatical environment. Thus, the old written language does not reflect the gradual development of the grammatical functions of the modal *tulema*-construction over a longer period of time. It is likely that the authors who were the first to use modal constructions may have had in mind a similar construction.

When studying the development of infinitive constructions in Finnic languages, Pauli Saukkonen (1965 : 150–155) claimed that the modal *tulema*-construction originated because of two parallel processes: language(s)-internal development and the example of contact languages. Finnish and partly the Karelian Olonets dialects reveal examples of the construction *tulema*-verb + *ma*-infinitive that expresses obligation modality (Saukkonen 1965 : 151). Thus, the same-subject infinitive construction *tulla* + supine has the meaning of 'have to, be obliged'. Re-analysis of the subject of the *tulla*-verb as an object subordinated to the infinitive changed the construction into a *da*-infinitive construction, e.g. *työ t u l e e t e h d ä* 'the job needs to be done' (Saukkonen 1965 : 151–152). Modal use of the *tulema*-construction occurs in all the Finnic languages; it is likely that similar use in the contact languages may have contributed to its spread, cf. Swedish *det t i l l k o m m e r m i g a t t g ö r a* 'I have to do', German *es k o m m t m i r z u, das zu tun* 'I have to do it', Russian *вам н р и д е т с я п о д о ж - д а т ь* 'you'll have to wait' (Saukkonen 1965 : 152). P. Saukkonen's treatment leaves open the time of changes; the only thing that is clear is that in standard Finnish already the works by Agricola in the 16<sup>th</sup> century reveal examples of the modal *tulema*-construction (Saukkonen 1965 : 154). As the modal construction *tulla* + supine occurs only in a few Finnic dialects and,

<sup>5</sup> In order to exclude, as far as possible, the possibility that the modal *tulema*-construction may have been used already before the 1690s, the author checked its possible earlier occurrence in the selected early texts of written Estonian compiled by A. Saareste and A. R. Cederberg (VEKVM). The earliest example in the collection belonged to the same period as the sample of this study; one can find it in a publication by Johann Hornung "Ma Kele Koddo ning Kirgo Ramat" (1695; 'Home and Church Book of the Estonian Language'): *Nüüd t u l l e b k a s e s t Ä r r a - h ä u w i t a m i s s e s t e n n e s e s t k u u l d a* (VEKVM 222). 'Now one has to hear about the destruction itself'. In addition to the modal interpretation, in this case the *tulema*-verb could be interpreted as a future auxiliary.



thus, could not serve as the source of the development of the construction in most of the language area, one might assume that P. Saukkonen regards language contacts as the main factor in the origin of the construction.

Nevertheless one might question the claim by P. Saukkonen that the development of the Finnic *tulla*-construction had been greatly influenced by the Indo-European example. The Swedish impact was evidently not that extensive in order to become decisive in the development of the construction in the entire Finnic area; moreover, the Swedish modal *tulla*-construction came into existence only during the period of Modern Swedish (starting with the 16th–17th centuries).<sup>6</sup> Therefore, it is unlikely that it could have been the source of the Finnic construction. It is true that the German *zukommen*-construction, presented by P. Saukkonen was used in the 19<sup>th</sup> century to translate the Finnic *tulla*-construction in dialect collections and grammars (Saukkonen 1965 : 153). However, this construction is generally very unusual in German; nor is such an example reflected in the German sources that serve as the basis for our earlier texts. Nor were contacts with the Russian language close enough in this area so that one might suspect the impact of the Russian construction.

In written Finnish the modal *tulla*-construction has been used from the very beginning; however, the construction appears in written Estonian almost one hundred and fifty years later. The grammatical structure of the construction is not fully identical in Finnish and Estonian (the agent is expressed by means of the adessive in Estonian but by the genitive in Finnish<sup>7</sup>); in addition, the preconditions of language-internal development are different because of the earlier constructions. Thus, one might ask whether the Estonian and Finnish *tulla*-constructions are clearly of the same origin.

The assumption of the common origin is supported by the fact that a rather similar construction can be found in all the Finnic languages. The absence of the *tulema*-construction in Older Written Estonian could be explained by the fact that the synonymous *pidama*-construction was sufficient for the expression of obligation modality. The assumption is further supported by the fact that earlier Estonian texts were translations, and the tradition of morpheme-morpheme translation contributed to the translation of the German *müssen*-construction into Estonian by means of the *pidama*-construction.

Lea Laitinen has studied the development of the Finnish necessive construction as evidenced by the verbs *täytyä* 'have to', *tarvita* 'need', and *pitää* 'must' (Laitinen 1992; 1993; Laitinen, Vilkuna 1993). According to L. Laitinen, the modalization of the necessive verbs followed the following scheme: at first the full lexical verb denoted the state of the subject as the required precondition of the action denoted by the infinitive form of the transitive verb. The necessive structure developed in those

<sup>6</sup> This information comes from Florian Siegl; he also suggested a source that discusses this point in greater detail: Wessén 1992 : 124–127.

<sup>7</sup> However, assuming that the *tulema*-construction is old enough in the Finnic languages, the difference between the Estonian and the Finnish constructions need not be important from the perspective of the history of the construction because the *n*-ending genitive may have an adverbial background (Huumo, Inaba 1997).

constructions where the subject was a singular noun that referred to an inanimate creature or an impersonal referent; thus, from the very beginning the necessary verb in the construction was in the third person singular. (Laitinen 1993 : 169) Also, one might think of the Estonian *tulema*-verb in the sense 'start to be, exist in the future' as the required precondition for the action described by its non-finite dependent and, thus, suspect its common origin with the other necessary verbs. Moreover, the *tulema*-verb is used modally only in the third person singular (or it acts as a dependent to some other verb in the third person singular). Unlike what is described by L. Laitinen the *tulema*-construction is congruent in earlier texts.

The use of the Finnish and the Estonian *tulla*-construction is different in that to this day in Finnish the *tulla*-construction has occurred mostly in literary texts and not in dialect texts (Saukkonen 1965 : 152); the *tulema*-construction, however, is rather common in the dialects,<sup>8</sup> e.g.

- (47) *vèrcu-D* **tule-vaD** mèrDe **lâssa** (Jõelähtme)  
*net-PL* **come-3PL** **cast+daINF**  
 'nets have to be dropped into the sea'
- (48) *ēna-t* **tulè-vaD** sâDu **tih-à** kui naD kuivàD on (Anna)  
*hay-PL* **come-3PL** **make-daINF**  
 'the hay has to be stacked while it's dry'
- (49) *suļlè* **tulè-B** **aù** **ânda**  
**come-3SG** *honour+PRT* **give+daINF**  
**tulè-B** *midàl* **ânda** *kehè* (Kodavere)  
**come-3SG** *medal-SG* **give+daINF**  
 'one has to honour you, a medal has to be awarded immediately'
- (50) *eläjä* **tulè-va** âDa **lâške** (Nõo)  
*animal+PL* **come-3PL** **let+daINF**  
 'the animals should be allowed to enter the pen'
- (51) *neo?* *mâra?* **tulè-va?** **mē̂ške?** (Põlva)  
*this+PL* *berry+PL* **come-3PL** **wash+daINF**  
 'these berries need washing'

Although one should not overestimate the trustworthiness of dialect material (the literary language had influenced spoken language already for a few centuries by the time Estonian and Finnish dialect texts were collected), nevertheless dialect texts could serve as a basis for the hypothesis that in Finnish and Estonian the *tulema*-construction may have developed differently. In Estonian it came into existence as a result of language-internal development; in Finnish, however, it had a literary background from the very beginning, and its occurrence in the earliest texts is related to the emergence of a similar construction in Swedish.

The Estonian language separated from the Finnic dialects in the second millennium AD (Rätsep 1989). Assuming that the *tulema*-construction is original and peculiar to Estonian, one has to conclude that it must be of rather recent origin. However, it does not rule out the possibility that the

<sup>8</sup> The dialect examples come from the general card index of dialect vocabulary at the Institute of the Estonian Language.

occurrence of the *tulema*-construction in Old Written Estonian could nevertheless reflect its use in the spoken language of that time.

Because the *tulema*-construction appears in Written Estonian with well-established functions and occurs in complicated constructions from the very beginning, the language must have previously had some means of expression with similar functions and structure. The *olema*-construction performed this role in written Estonian in the 17<sup>th</sup>–19<sup>th</sup> centuries, e.g.

(52) Sest meile ep olle-Ø mitte  
           1PL-ALL NEG be-3SG NEG

Leeha ninck Were kahs **woidelda.**  
                                   **fight-daINF**

Dann wir haben nicht mit Fleisch vnnd Blut zu kämpffen. (Staheln 1641 : 291)

'Because we don't have to fight flesh and blood.'

(53) Pahategude kokkujuhtumise korral [---] teiste kurja tegudega,  
**on** artikli-s 1126 *kriminalprotsessiseaduse-s*  
**be+3SG** article-INE 1126 *act on the criminal proceedings-INE*  
*20ma-st* *Nowembri-st* 1864 *ole-wa-i-d* *eeskirju*  
*20-ELA* *november-ELA* 1864 *be-vPTC-PL-PRT* *rule+PL+PRT*  
**tähele-pan-na.** (Seadus Rahukohtunikudest 1880 : 7)  
**notice-daINF**

'In the case of multiple wrongdoings, one has to follow the rules laid out in article 1126 of the act on the criminal proceedings of 20 November 1864.'

In contemporary Estonian the sense of obligation has remained in the background in the *olema*-construction; what is important is the function denoting existence, possession, or possibility, e.g.

(54) Et inimkonna-l on vali-da vaid vabaduse  
           human race-ADE be+3SG choose-daINF

ja õnne vahel ja et suurem osa inimkonnast eelistab õnne.

'That the human race can choose between liberty and happiness and that the majority of humankind prefers happiness.'

(55) Kaugelt on kuul-da, kuidas koera-d haugu-vad.  
           be+3SG hear-daINF how dog-PL bark-3PL

'One can hear from the distance how the dogs are barking.'

The same construction was interpreted in two ways also in the 19<sup>th</sup> century. For example, an Estonian syntax by Eduard Ahrens published in 1853 interpreted such *olema*-constructions as follows:

(56) *laud on pesta* 'der Tisch ist zu waschen [= ] muß gewaschen werden  
 [= ] wird gewaschen' (Ahrens 2003 : 393).

*laud* on pes-ta  
 table be+3SG wash-daINF

'the table has to be washed' / 'the table will be washed'

As the examples show, the *olema*-construction has an analogue in German. At the same time in the Estonian dialects the *olema*-construction

has been used more extensively in the deontic and dynamic senses than it would be possible in the contemporary standard language, e.g.

(57) kołm nädàlit̃ **ol̃-Ø** pãgõlìn **ol̃à** (Otepää)  
**be+IMPF-3SG** **be-daINF**

'one had to attend confirmation classes for three weeks'

(58) kui lam̃BAD ol̃id̃ mẽizaz,  
s̃iz̃ **ol-ì-Ø** kar̃ttuleid̃ **noppi-da** [mẽizale] (Järva-Jaani)  
**be-IMPF-3SG** potato-PL-PRT **pick-daINF**

'when the sheep were at the manor, one had to pick potatoes [for the manor]'

However, because the development of obligation modality on the basis of possession and existential verbs is typologically highly common in the world's languages (Bybee, Perkins, Pagliuca 1994 : 183), it leaves open the possibility that the Estonian *olema*-construction could have been original and not introduced artificially to the written language through translation. There is no modal *olema*-construction in Finnish.

The Estonian *olema*- and *tulema*-verbs are often contrasted as expressing the present and the future, which makes one think that perhaps also the modal *tulema*-construction may have come into existence as a future variant of the *olema*-construction. The hypothesis is, for example, supported by the few examples that allowed multiple interpretations of the *tulema*-verb in the construction with the *da*-infinitive construction and where modality was one of the meanings; in such cases the other possible interpretation carried the meaning of future. The Estonian dialects reveal even such examples where the *olema*- and *tulema*-modality are contrasted as the (relative) present and the (relative) future in one and the same sentence, e.g.

(59) tēzè pühà **ol-ì-Ø** tüdàr **rišti-da**  
**be-IMPF-3SG** daughter **baptise-daINF**

tēzè pühà **tul-ì-Ø** mätta **ma** (Pärnu-Jaagupi)  
**come-IMPF-3SG** bury+daINF

'one one holiday the daughter had to be baptized, on the next holiday she had to be buried'

Although it is characteristic of the world's languages that the meaning of the future develops on the basis of agent-oriented modality and not the other way round (Heine, Kuteva 2002 : 218), the emergence of modal use on the basis of the meaning of future would not contradict the unidirectionality of grammaticalization. The modal meaning had developed already in the *olema*-construction; the emergence of the *tulema*-construction added only a future shade to the previously existed modal meaning. For the same reason there is no conflict with L. Laitinen's treatment.

## 5. Conclusions

The earliest modal uses of the *tulema*-verb come from the last decade of the 17<sup>th</sup> century. It seems that from the very beginning the construction carried a clear necessive function, and it was used in a highly complex grammatical environment as early as in the 17<sup>th</sup> century. In the case of

some necessary *tulema*-constructions in the Old Written Language one can assume the possibility of non-modal interpretation; the overlap of the modal and future functions is rather systematic.

In sentences with modal interpretation the semantics and the functions of the *tulema*-verb in the Old Written Language resemble those in the contemporary language; in a few cases one might suspect that obligation in the meaning of the construction was perceived somewhat more weakly than now. The grammatical structure of the construction varied throughout the period of the Old Written Language. It is likely that the nominal part of the sentence, which in contemporary Estonian grammar is analysed as the object of the infinitive construction, was in many constructions previously perceived as the subject that was subordinated to the main verb (agreement of the *tulema*-verb with this part of the sentence points to this). Frequent use of the nominal part in the partitive indicates that the object interpretation existed at the same time. Usually the *tulema*-verb in modal constructions of the Old Written Language occurs in the affirmative indicative of the present tense; in some cases also the conditional and the imperfect are used.

The corpus of 20<sup>th</sup>-century Literary Estonian enables me to claim that there were no major semantic changes in the modal use of the *tulema*-verb during the century or by comparison with the earlier period. The most notable semantic shift concerns negative necessary constructions, where in the course of the century the scope of negation shifted from the infinitive construction to the modal *tulema*-verb.

As for the grammatical structure of the necessary *tulema*-construction, the most striking change is the disappearance of the agreement in number. The proportion of congruent examples decreased decade by decade during the first half of the century; starting with the 1950s there were almost no examples of congruence. Abrupt disappearance of congruence after the Second World War can be explained by the impact of language planning.

One could put forward a number of hypotheses with regard to the development of the modal use of the *tulema*-verb. The modal *tulema*-construction emerges in the written language at once with a clearly necessary meaning; thus, the written language does not enable us to follow the gradual development of the modality of the *tulema*-verb on the basis of other senses. It is likely that there may have been some similar construction in the minds of the people that introduced the construction to the written language. One possible source of analogy could be the influence of Indo-European languages, but one cannot think of any example in the contact languages that is sufficiently widespread. Absence of a similar construction in the German texts that served as the basis of early Estonian-language translations enables us to suggest that the modal *tulema*-construction could have existed in spoken Estonian much earlier than in written language. In written texts the *tulema*-construction need not have been necessary because in the tradition of word-for-word translation the same function was fulfilled by the synonymous *pidama*-construction, the structure of which corresponded to the German *sollen*- and *müssen*-constructions.

However, assuming that the written language reflects adequately the development of the *tulema*-construction, one should look for a suitable

similar construction in earlier Estonian, the example of which could assign an unambiguous grammatical function and a rather well-established form to the *tulema*-construction since the first uses. A possible example is the modal *olema*-construction, which was used in the Old Written Language and also in the Estonian dialects more extensively than in the contemporary standard language. In Estonian the *olema*- and *tulema*-verbs are often used to contrast present and past events; therefore, it is conceivable that the *tulema*-construction may have been introduced as future analogue of the *olema*-construction.

### Abbreviations

**1, 2, 3** — person; **ADE** — adessive; **CMP** — comparative; **CND** — conditional; **daINF** — *da*-infinitive; **GER** — gerund; **IMPF** — imperfect; **maINF** — *ma*-infinitive; **NEG** — negative; **PF** — perfect; **PL** — plural; **PL\_NOM** — plural (nominative); **PRET** — preterite; **PRT** — partitive; **SG** — singular; **vatINF** — *vat*-infinitive; **vPTC** — *v*-participle.

### Sources

**Jggaüks** — Jggaüks, kes nouab sannakulik ja õige olla..., Tallinn 1802; **Jummala surest Teggudest** — Jummalas surest Teggudest Ma-ilma peäl. Kolmas Jäggo, Tallinn 1789; **Jutlussed** — Monned Armsad Jutlussed, mis Saksa kelest on ümberpandud Ma keele peäle; Eesti-Ma rahwa waeste heaks, kes suremat jutlusse ramatud ei joua osta. Essimenne jäggo, Tallinn 1844; **Kässi-Ramat** — Kässi-Ramat/ Kumma sisse on kokkopantut/ Kuida Jummalatenistust/ Christlikko Kombede nink Kirko-Wiside ka meie Ma Koggoduste sees peap peetama nink techtama. Sädu Tokolmi Linnas ue Kirko-Sädust möda selle 1693. Aastal, Tallinn 1699; **Luggemisse-Ramat** — Luggemisse-Ramat hinge kassuks, maenitusseks ning Öppetusseks, Tallinn 1815; **Masing** — Wiiskümmend kaks luggemist Uuest Testamendist wäljawallitsetud, kuhhu küssimisi, mis mötlemist tahtwad, häid öppetusi, ja pühha kirja salmisid jurepandud, mis Otto Willem Masing, nore rahwa ja kolilaste heaks, wäljaandnud, Perno 1824; **Piibli Ramat** — Piibli Ramat<sup>9</sup>/ se on keik se Jummalas Sanna, mis Pühhad Jummalas Mehhed/ kes pühha Waimo läbbi juhhatud/ Wana Seädusse Ramatusse Ebreas Kele ja Ue Seädusse Ramatusse Krekas Kele essite on ülleskirjotanud/ nüüd agga hopis/ Jummalas armo läbbi, meie Eesti-Ma Kele Essimest korda üllespandud, ja mitme sünda salmiga ärraselletud. Essimeses otssas on Üks öppetus ja maenitus nende heaks, kes Jummalas sanna omma hinge kassuks püüdwad luggeda, Tallinn 1739; **Seadus Rahukohtunikudest** — Seadus Rahukohtunikudest peale pandawate trahwide üle, Tartu 1880; **Seitse Paasto-Jutlust** — Seitse Paasto-Jutlust, Tallinn 1817; **Seäduste-täitmisse tükkid** — Sure Keisri-härra polest kinnitud seäduste-täitmisse tükkid, mis nende tallorahwa pärrast, kes pärrismoisade al ellawad 1819mal aastal Liwlandima tallorahwa seädusse ramato jure lissatud, Rija 1845; **Staheln** — Leyen Spiegel/ Darinnen kürztlich gezeiget wird/ wie ein einfaltiger Christ Die Fest- vñ Sontägliche Evangelia in reiner Lehr vnd heiligem Leben ihm zu nutze machen kan/ Zugerichtet Von M. Henrico Staheln/ biszhero Thumb-Probst vñ Pastorn an der Haupt-Kirchen des Fürstenthumbs Esthen in Revall/ vnd des Königl. Consistorij daselbst primario Assessore, nun aber verordneten Superintendenten in Jngermanland. Mit Königl. Mayst. zu Schweden Allergnädigster Begnädigung vnd Freyheit nicht nach zu drucken, Revall 1641; **Toomas Westen** — Toomas Westen [1682–1727], Lapo rahwa uso ärataja Norra maal, Tartu 1844; **Willmann** — Juttud ja Teggud/ kui ka Monningad Öppetussed mis maiapiddamisse pärrast tarwis lähtwad. Eestima-rahwale heaks on üllespan-

<sup>9</sup> The entire work was not used; the selection covered 195 pages of the Old Testament and 55 pages of the New Testament. Maple V 4.00c software was used to generate a random selection of pages.

nud, Reedik Willem Willmann, Öppetaja Karja-Kirriko peäle, Saaremaale. Fabeln und Erzählungen zur Verbeszerung des Wizzes und Sitten der Ehsten, nebst einem Anhang von oeconomischen Regeln, verfasstet von Friedrich Willhelm Willmann, Prediger zu Karris, Tallin/Reval 1782.

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ПИЛЛЕ ПЕНЬЯМ (Тарту)

**ФОРМИРОВАНИЕ МОДАЛЬНОГО ЗНАЧЕНИЯ  
ГЛАГОЛА *tulema* 'ПРИХОДИТЬ' В ЭСТОНСКОМ  
ЛИТЕРАТУРНОМ ЯЗЫКЕ XVII—XX ВЕКОВ**

Основная грамматическая функция глагола *tulema* 'приходить' в современном эстонском языке — выражение модальных значений неизбежности и обязательности. Статья представляет собой обзор формирования модального значения глагола *tulema* в эстонском литературном языке.

Начало модального использования глагола *tulema* относится к последнему десятилетию XVII века. Модальная конструкция сразу стала выражать обязательность и уже в XVII веке использовалась в крайне сложном грамматическом контексте. В предложениях с модальной интерпретацией семантика и функции глагола *tulema* в старом литературном языке совпадают с современными. Грамматическое строение конструкции варьирует на протяжении всего периода существования старого литературного языка.

На материале корпуса эстонского литературного языка XX века можно утверждать, что больших изменений в семантике модального использования глагола *tulema* за прошедшее столетие по сравнению с более ранним периодом не произошло.

Возникновение модального значения глагола *tulema* можно объяснить с помощью разных гипотез. В литературном языке постепенное формирование мо-



дальности на базе других значений глагола *tulema* не прослеживается, следовательно, в сознании вводящих эту конструкцию в литературный язык должна была существовать какая-либо аналогичная конструкция. Отсутствие таковой в немецких текстах, послуживших основой для ранних эстонских переводов, позволяет предположить, что модальная конструкция существовала в эстонском разговорном языке до появления ее в литературном.

Если все же предположить, что литературный язык адекватно отражает формирование модальной конструкции, в качестве аналогии можно рассмотреть модальную конструкцию с глаголом *olema* 'быть', которая использовалась в старом литературном языке и в эстонских диалектах на протяжении более длительного времени, чем в современном эстонском языке. Глаголы *olema* и *tulema* часто употребляются в эстонском языке для противопоставления действий, происходящих в настоящем и будущем времени, вероятно, конструкция с глаголом *tulema* вошла в язык как аналог конструкции с глаголом *olema*, используемой для настоящего времени.