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Publications of the Department of General Linguistics 2
University of Tartu

Papers in Estonian Cognitive Linguistics

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Edited by Ilona Tragel

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Foreword

A cognitive linguistics seminar has regularly met at the Chair of General Linguistics of the University of Tartu since 1999. In addition to cognitive linguistics "proper", the seminar discussions have focussed on a range of topics within wider cognitive-functional framework. To a great extent, the present volume is a collection of papers by the participants in the cognitive linguistics seminar. This edition is published as the second volume of papers by the Chair of General Linguistics, University of Tartu, and the majority of the contributors are currently associated with the University of Tartu.

Among the papers included, the metaphor theory is central to Ann Veismann's study of the conceptualization of time in Estonian and Kaja Kährik's treatment of Estonian verb-particle constructions with *alla* 'down' and *maha* 'down', related aspects are also present in Haldur Õim's analysis of the folk theories regarding the Estonian word *ise*.

Several papers address the grammaticalization theory. Külli Habicht employs it to clarify the reasons for the emergence and loss of the adposition *rinnas* 'beside' in Old Literary Estonian. Liina Lindström is searching for the reasons why the connective *või* 'or' has developed into a question particle. Leelo Keevallik's paper applies the methods of conversation analysis to the study of *oota* 'wait' as a particle in spoken Estonian, and places it into the context of the grammaticalization theory.

The papers include an analysis of the polysemy of the verb *seisma* 'stand' by Renate Pajusalu, a proposal by Ilona Tragel as to the criteria and candidates for the core verbs of the Estonian language, a treatment of deictic projection in texts of spoken Estonian by Mari-Epp Tirkkonen and a report of a study into gestures by Silvi Tenjes.

Ilona Tragel
editor

Is there a folk theory of Self: the case of Estonian *ise* and *enese~enda*

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Universtity of Tartu

1. Background and theoretical considerations

The English word *self* is used as a separate word only as a noun and it means usually 'personality' or 'person' (typically, in its psychological aspect). In this sense it is translated into Estonian as *mina* (a noun which in the nominative case coincides – and this is not just a coincidence – with the first person singular personal pronoun *mina* 'I').

This revealed his real self.
See paljastas tema tõelise mina.

But in various compounds (nouns, adjectives), for instance, *self* is mostly translated into Estonian by means of the pronoun *ise, enese~enda* (the parallel genitive forms):

self-defense – enesekaitse
self-esteem – eneseväärikus
self-control – enesekontroll
self-confident – enesekindel
self-indulgent – enesekeskne, isemeelne
self-righteous – ennasttäis
self-sufficient – isemajandav, iseseisev

In addition to these uses, however, *self* participates in forming reflexive pronouns, but only in compounds with personal pronouns: *myself, yourself, himself, herself, itself, ourselves*. These are also translated into Estonian by *ise, enese~enda* (in their corresponding case forms):

He bought himself an ice cream.
Ta ostis endale jäätise.

The Estonian *ise* (from the genitive on *enese~enda*) has much broader use in the grammatical sense: it can also occur as a noun, an adjective, an adverb.

Of these uses, I will concentrate here mainly on its use in reflexive constructions (including compound words and phraseological expressions). My point is that the analysis of the semantics of these

expressions can reveal much about the folk, or naïve, conception of Self, its structure, inherent in Estonian.

For a grammarian, for instance, *enese~enda* (*iseenese~iseenda*) are reflexive pronouns with some morphological pecularities, but with syntactic uses typical of reflexive pronouns, and there is nothing more to talk about. In the most detailed descriptive grammar of Estonian so far, *Eesti keele grammatika* (EKG I 1995), there is only half a page about reflexive pronouns in Estonian (p.28). By this I don't want to say that there should have been more. My intention is to point out that there can be considerable differences between the role some words (word forms) play in the grammatical system of a language and the role these forms play in its semantic system. From the point of view of semantic analysis you could write a whole book about the forms of the Estonian reflexive pronouns *enese~enda*. Let us consider just some examples.

(1a)
Ta pesi end/ennast külma veega.
He/she washed himself/herself with cold water.

(1b)
Ära haletse ennast kogu aeg!
Don't pity yourself all the time!

(1c)
Kontrolli ennast!
Control yourself!

(1d)
Poiss ei andnud endale aru, mis ta teeb.
The boy didn't realise what he was doing
lit: The boy didn't give himself an account of what he was doing.

(1e)
Pidin endaga tükk aega võitlema, enne kui ...
had to fight myself (lit: with myself) for a long time, before...

(1f)
Mehe enesekindlus sai tugeva hoobi.
The man's self-confidence received a hard blow.

What do the forms of *enese~enda* designate in these sentences when considered from the point of view of the person they refer to as reflexive pronouns? It is clear that in different sentences these forms refer to quite different "parts" of the corresponding person as a "self" And, on the other hand, what "parts" do the corresponding subjects refer to in relation to the "part" referred to by reflexive pro-

nouns? In (1a) it is apparent that *ennast* 'himself/herself' refers to the "physical part" of the person, but what about the uses in (1b) – (1f)? When someone pities himself/herself (as in (1b)), *ennast* refers to "something" in the subject that is connected with one's achievements as related to goals, the social position, etc. But who (what "part"), then, is "doing the pitying"? When someone restrains oneself, fights "with oneself", "pulls into oneself" etc., what are the corresponding "parts" then?

In such constructions there are always two different parts of Self under consideration, and semantically the reflexive pronoun *in principle* does not refer back to the same part as it refers to itself. Instead, these "parts" are interacting with one another, or otherwise stand in certain relationship with one another. One part functions as the Subject and the other part as the Object, or the Target, of the relation. And in different cases the Subject and Target represent different parts of Self, depending on the predicate that represents the relation between these parts.

By a systematic analysis of such constructions we can get a more or less systematic picture of the structure of self as represented in the "folk theory of Self" underlying the use of reflexive expressions in the corresponding language - in this case, Estonian.

The idea in itself is not new in cognitive semantics (and cognitive anthropology). It is a commonly accepted presupposition that the lexicon (lexical system) of a language, or at least its certain coherently organized subfields are semantically based on tacit, but structured conceptualizations of the corresponding area in the reality that the words are about. Thus the analysis of these subfields can lead us to discovering the underlying conceptualizations, folk theories. In this case, though, I am not studying some group of semantically related lexical items, but specific constructions which include reflexive pronouns. Implicitly, of course, there is also a semantically delimited group of words – predicates (verbs, adjectives, but also nouns) that represent the relationship between the above-mentioned two parts of Self. These are mainly predicates denoting mental processes or states, but also various forms of communication (one can give oneself a promise, for instance). My focus in this paper is not on the group of predicates that can semantically occur in such constructions, though. I do not deny that this would be an important task, in some sense even the key to the whole issue (why do we take

it as natural, for instance, that one can promise something to himself/herself, but we hardly do so in case of one threatening himself/herself?). But this would be too comprehensive a task to undertake within the confines of the given paper. Instead, I will rely on (more or less intuitive) large-scale semantic characterizations of these predicates, and try to understand how Estonian conceptualizes the structure of Self (according to Estonian) in the sense of delimiting its functional components and their relationships.

From another angle I have treated the same problem in my paper "Outlines and sources of the mental world of Estonian" (Õim 1997, in Estonian). But there I have approached the problem by analyzing the meanings of some Estonian words (*meel, vaim, hing*) that are crucial in the given context (just as in the case of English it would be crucial to analyze the conceptualizations related to the word *mind*). This treatment yielded a macroanalysis, so to speak, of human psychical organization according to Estonian. What I hope to find here is a more detailed and more language-specific structuring of Self in Estonian. In fact, the paper presents only a case study and the focus is rather on the possibilities that such kind of study can offer when carried out systematically than on the results themselves.

The task can be considered a subtask of reconstructing the folk psychology inherent in language. The importance of such studies has been pointed out by psychologists themselves. This has been done in a most clear way by Jerome Bruner, for instance, in his book "Acts of Meaning" (Bruner 1990). In the fourth chapter titled "Autobiography and Self" he writes, in particular: "The "realism" of Self is probably built into folk psychology as a spin-off of the notion of agency. It is surely built into English language usage, though in a strikingly idiosyncratic way. We say "Control yourself" But we do not say "Bring yourself to dinner next Wednesday"... So far as I have been able to determine, there has been no fully systematic study of the linguistic and cognitive prerequisites for the use of personal pronouns as reflexive predicates. One surely is needed." (Bruner 1990:152).

So far I have not found any study either, at least not in the cognitive linguistic framework, with the focus on the reflexive constructions as input data. But in the course of my research I came across a paper by George Lakoff called "Multiple Selves. The Metaphorical Models of the Self Inherent In Our Conceptual System" (Lakoff

1992). This is an Internet paper (I don't know whether a published version exists) prepared for a conference and is largely based on a seminar paper by two of Lakoff's students (Andy Lakoff and Miles Becker).

Lakoff's paper is directly related to the topic I am interested in here: establishing the folk theory of Self as it is represented in our conceptual system and expressed in language usage. But Lakoff's general approach is different. He is interested in relating the established conceptualization of the structure of Self to his theory of metaphors and metaphorization. Accordingly, the language data he makes use of are not restricted to any concrete type of lexis or constructions, although a large part of these data constitute constructions with reflexive pronouns.

I am not directly interested in the metaphorical aspect of the folk theory (theories) of Self revealed by the analysis. I am interested in establishing some basic outlines of our conceptualizations of the structure of Self, be these conceptualizations metaphorical or not. It hardly explains much at the first stages of research when one states, for instance, that such-and-such constructions represent the CONTAINER metaphor. I have chosen one particular type of data – constructions with reflexive pronouns – and will analyse them in the general conceptual framework described above.

Let me remark *in passim* that one of the motives for starting this research was the remark by Jerome Bruner cited above. The paradigm of folk theories Bruner has in view is quite different from the one in which Lakoff is working.

Nevertheless, it can be pointed out already at this point that the main conclusions that Lakoff draws on the basis of his data coincide with mine. First, Lakoff concludes that "There is a Folk Theory of Dualistic Person, namely, that Person is split into the Subject (consciousness, perception, will and judgement) and the Self (everything else)" (p 4). From the point of view of the semantic analysis of reflexive constructions this is a natural and obvious conclusion, as pointed out above. Only it is difficult to say, considering his data, from where Lakoff takes these four components of the Subject (he repeats this list several times in his paper), particularly if the other part of Person is claimed to consist of "everything else" The second conclusion is not so obvious: that there is not one such model (folk theory?) but many "Indeed, we will see that there is not only one

such metaphorical model, but more than a dozen of them, each with somewhat different features, features that make the models incompatible with one another. What we have, then, is a set of multiple incompatible models, each postulating a somewhat different separation of the body from a non-physical locus of consciousness. The study of our system of conceptual metaphors reveals that it is common for there to be many incompatible metaphorical models of important domains of experience." (p 1).

And, of course, one cannot but agree with Lakoff's moral: "The moral of this paper is 'Know your metaphorical system.' Be able to recognize metaphorical models when you see them. Be aware of their entailments. Recognize the situations in which they are useful. Learn what they hide. But be skeptical of them when discussing the "true" nature of the person and the self." (p 2). I, however, would prefer to replace the term "metaphorical model" by "Folk model/folk theory" Not every folk model is necessarily metaphorical.

Before I proceed to the presentation of particular examples, let me make some methodological and terminological remarks.

I have not tried to give any definition of what I mean by *Self.* I surely do not want to define it in the sense in which psychologists and anthropologists speak of self. Instead, I will consider constructions with various uses of the Estonian *ise (enese~enda)* and see what conclusions one can draw on the basis of the analysis.

Because of this, I will also avoid the use of *Self* as a term in the following analysis and refer to the "parts" or "aspects" of person for which the Estonian *ise~enese~enda* etc. are used simply by ISE. As said above, in reflexive constructions this ISE-part stands in certain relationships with another part of the person under consideration. For instance, in the sentence *Poiss ei olnud endas kindel* 'The boy was not sure of himself' *poiss* does not denote the boy "as a whole" but the "part" or aspect of him that makes the judgement about ISE. This "part" I will refer to by the term Subject. In the following, thus, a person (a human being) is analyzed into the Subject and ISE. My main concern is the status of ISE, but in order to establish this I have to consider also the Subject and the relationships between ISE and the Subject in the corresponding cases.

2. The analysis

The analysis is structured according to the roles represented by ISE.

2.1. ISE as the physical aspect of the Subject.

In a sense, this may be considered the simplest case: ISE refers to the bodily "realization" of the Subject:

(2a)
Poiss pesi ennast.
The boy washed himself.

(2b)
Ta vaatas ennast peeglist.
He/she looked at himself/herself in the mirror.

It could be pointed out that there are still some constraints on the possible Subjects here. Although the Subject is not necessarily a person (a cat can also look at itself in mirror, for instance), it apparently must be a living being able to perform or avoid (agentive) actions directed at itself (himself, herself, etc.).

2.2. ISE as [the Subject taken as] a whole.

There are some expressions with reflexive pronouns in the case of which it is hard to delimit any particular aspect of the Subject identified by ISE. For instance:

(3)
Me tundsime endid seal nagu kodus.
We felt ourselves there as [if] at home.

Or take such a concept as *enesealalhoiuistinkt* 'instinct of self-preservation': here *enese* 'self' clearly refers to an organism as a whole.

In addition, in Estonian such words as *isik* 'person', *isiksus* 'personality' *iseloom* 'character' (lit.. self-nature') are all derived from *ise*.

2.3. ISE as the Subject in social relationships and interactions

As the first example of cases where ISE plays a certain specific role in the structure of a person as a psychological structure let us consider the uses where this role is directed outside the person:

(4a)
ennast maksma panema (Ta pani ennast maksma)
assert oneself, lit. 'put oneself cost'

(4b)
ennast (teistele) peale suruma
mpose oneself (on others), lit. 'press oneself (on others)'

In both examples ISE represents the carrier of plans, goals and will that can be imposed on others by the Subject.

The social aspect can also be clearly recognised in expressions such as:

(5)
*enesevääri*kus 'self-esteem'
eneseuhkus 'vanity, self-conceit; self-respect'
enesearmastus 'self-love'
enesekeskne 'self-centered'
isekas 'egoistic, selfish'
isetu 'non-selfish, selfless
etc.

ISE here is the carrier of socially relevant values of the Subject and these values are brought out in the positive or negative sense.

In much the same way we say in Estonian (of the negative characteristics of ISE).

(6)
ennast tähtsaks tegema lit.: 'to make oneself important'
ennast täis puhuma lit.: 'to blow oneself full'
ennasttäis 'conceited, bigheaded' lit.: 'full of oneself'

When someone is "full of oneself", there is no room for values (or considerations etc) that can be important to others. Such expressions as

(7a)
ennast alahindama/üle hindama 'to underrate/overrate oneself'

(7b)
eneseõigustus self-vindication'

can be regarded as representatives of this type, when one is judging oneself with respect to others (or justifying one's actions to others), but also of the next type (2.4.), when judgements are made "inside" a person between the Subject and ISE. Anyway, ISE is considered as the carrier of certain values (abilities, competence, knowledge etc) (7a), or as responsible for the consequences of certain actions or for

certain situations (7b), and the Subject is the one who makes judgements.

2.4. ISE and the Subject as interacting partners in the frames of a person

Here we find three general possibilities: first, the Subject is in a dominating or controlling position with respect to ISE (2.4.1.); second, ISE is in the dominating position (2.4.2.); and, third, the Subject and ISE are as if two interacting partners without a clearly determined relation of dominance (2.4.3.).

2.4.1. The Subject as the dominating participant in interaction

This clearly represents one of the main variants of the naïve model of Self (although nowhere near as general as, e.g., Lakoff suggests (1992:10); see 2.4.3.). It can be demonstrated by a number of expressions and constructions. For instance, in Estonian we can say

(8a)
Ta ei olnud enam täielikult enda peremees.
He was no more fully the master of himself.

(8b)
Ta oli taas enda peremees.
He was again the master of himself.

Both of these sentences show that not only can Subject be "the master" of ISE but that this situation is considered as the normal one in this model.

In addition, let us present such examples as:

(9)
enesekontroll 'self-control'
enesevalitsus 'self-command'
ennast sundima (tegema midagi) 'to force oneself (to do something)'
ennast käsile võtma 'pull oneself together' lit., 'to take oneself into one's hands'
ennast ohjes hoidma 'control oneself', lit., 'to keep oneself in reins'

All the verbal expressions in (9) can be negated (e.g., by saying *ta ei suutnud...* 'he was unable to...'), which means losing control of oneself.

In the same way we can say

(10)
ennast lõdvaks laskma 'to let oneself loose'
endale voli andma 'to give oneself freedom to'
endale järele andma 'to yield to oneself'
endale lubama 'to allow oneself'
etc.

In all cases (9) – (10) ISE is conceptualized as the carrier of intentions, wishes, also hopes etc., which he is trying to realize, but doing this depends on the judgements and decisions of the Subject. Although it is also possible that ISE somehow and sometimes is able to "get free" from the control of the Subject.

Another aspect of the same relationship between ISE and the Subject can be illustrated by expressions like the following which are also quite acceptable:

(11)
end korrale kutsuma 'discipline oneself' lit., 'call oneself to order'
end noomima 'to reprove oneself'
endale etteheiteid tegema 'to reprimand oneself, lit., 'to make oneself reproofs'
endale selgeks tegema, et 'to make it clear for oneself that'
etc.

In these expressions an additional dimension in the conceptualization of ISE is added: these expressions presuppose of ISE the ability to reason and draw certain conclusions from the communication with the Subject.

It is interesting to note that all the expressions in (11) carry negative connotation in the sense that ISE has done (or intends to do) something wrong. The corresponding "positive" expressions (where ISE has done something good) are not difficult to imagine and some of them are also in use, but surprisingly often have also negative connotation for the Subject:

(12)
ennast kiitma/enesekiitus 'to praise oneself/self-praise
ennast ülistama/eneseülistus 'to glorify/extol oneself/ self-extol'

It is implied that the Subject is violating some principles of pragmatics. There are only some neutral usages with positive content. e.g.

(13)
Ta õnnitles end õige otsuse puhul.
He/she congratulated himself/herself on having made the right decision.

The observed fact is interesting, since, as said above, I am trying to interpret these expressions as reflections of communication between two internal "parts" of a person. Why is it interpreted as improper when one part (the Subject) is praising the other (ISE)?

2.4.2. ISE as the dominating participant in interaction.

The cases where ISE is in the dominating position and controls the Subject´s doings are much rarer (I am speaking of expressions that are clearly rooted in the language usage, not of individual inventions – e.g. by poets). However, some expressions can be found in Estonian.

Some cases are represented by the following examples:

(14a)
Ta andis/ei andnud endale aru, mis ta oli teinud.
He realised/did not realise what he had done
lit.: 'He gave/did not give himself an account of what he had done'

(14b)
Ta andis endale lubaduse/tõotuse, et...
lit.: 'He gave himself a promise/vow, that...

It should be clear that here ISE is in the controlling position, since, for instance, in (14b) one of the felicity conditions of promising is that the addressee (here ISE) is able to control whether the promise is fulfilled or not, and if not, then apply some kind of punishment. The same holds for the Estonian *aru andma*: this means to offer explanations, justifications and argumentations which would justify the deed done. And this, again, means that the one who is offering these explanations, etc. is in the position where he/she is obliged to do this.

Some other examples:

(15)
endale tunnistama/mitte tunnistama 'to admit/not admit [to oneself]'

In particular, for instance, it is quite common to say:

(16)
Ta ei tahtnud/ei suutnud endale kuidagi tunnistada, et ta oli eksinud.
'He did not want/was unable to/ admit [to himself] that he had been wrong.

Again ISE is presented as being in the position to judge the righteousness of what the Subject did.

(17)
Ta ei meeldinud endale mitte sugugi.
lit.: 'His self didn't like him at all' (In English it would be the other way round: 'He didn't like himself at all').

ISE is in the position to express what he likes or dislikes in the Subject.

On the other hand, it must be noted that the dominance of ISE above the subject is not at all of the same degree as the dominance of the Subject above ISE. In particular, there is no expression parallel to *Ta oli taas iseenda peremees* 'He was again the master of himself': in Estonian it would be absurd to say *Tema ise oli ta peremees* 'His self was his master' Let us remind also of Jerome Bruner's example: Why do we not consider it normal to say "Bring yourself to the dinner next Wednesday" although it is normal to say "Control yourself!"?

The most apparent explanation is, I think, that according to the model under consideration the Subject is, in normal conditions, in control of agentive actions of a person, and even when ISE is "out of control" and determines the actions, these actions are not interpreted in the folk model as rational and controlled actions.

2.4.3. ISE and the Subject as equal partners in interaction.

It came as a surprise to me that alongside with the models where the Subject or ISE is considered as the dominating partner, there exists a large set of data where the Subject and ISE are treated as equal – as two interacting partners of more or less the same range, as partners "in the same community" Just as such partners in a community can have diverse opinions of each other, trust or distrust one another, be disappointed or delighted in one another, be proud or have pity of one another, the same holds for ISE and the Subject. As my material shows, this subtype is represented by the richest and the most complex pool of data. And because of this it is also very difficult to bring forth the different roles of the Subject and ISE.

The main role of the Subject with respect to ISE seems to be the one of evaluator or judge. Let us give some examples.

(18)
endas kahtlema 'to have doubts about oneself'
endas kindel olema 'to be sure/confident in oneself'
ennast usaldama 'to trust oneself'
endale lootma 'to set hopes on oneself'

All these uses can also occur in the negative form.

Here in the relative positions of ISE and the Subject no question of dominance arises. The relevant aspects of ISE under consideration concern mainly his abilities, or the intentions which rely on these abilities. Other aspects of ISE may also be involved, as shown by the following examples:

(19)
endast lugu pidama 'to respect oneself'
ennast austama 'to honor oneself'
enda suhtes aus olema 'to be honest with oneself'

Here the aspects judged by the Subject concern the moral characteristics of ISE.

One can easily find expressions which focus on various other aspects of relationships between the Subject and ISE. For instance:

(20)
eneses pettuma 'to be disappointed in oneself'
eneseiroonia 'self-irony'
enesehaletsus self-pity
iseendaga pahuksis olema 'to be annoyed at oneself'

In all these expressions there is an implicit clash between what ISE is or has intended to be and what the Subject finds him to be (in intellectual or emotional dimension).

In the same way we can find (or invent) expressions for most of the dimensions of judgements concerning human intellectual, emotional or moral traits. The Subject and ISE are taken as if modelling the members of human community. It must be noted as an important characteristic of this relationship, however, that the relationship is typically presented from the point of view of the Subject: he is the one who "presents the material" concerning ISE. Thus, whereas the Subject and ISE are in one sense– "inside" the person – treated as equal, the "link to the outer word" goes through the Subject.

And one last point, though quite important: it would be interesting to study what kinds of relationships (evaluations, judgements, beliefs) are not taken as natural between the Subject and ISE (according to language usage). Thus, at least in Estonian it would be unnatural to speak of the Subject as threatening ISE, of suspecting ISE of something and so on. But this material is left out of the present study.

3. Some conclusions.

The main conclusion is the one already mentioned in the introductory section. According to the Estonian usage we operate typically with a "dualistic" model of Self (person, human being). In the present paper I have identified the two parts as the Subject and ISE (the last one intended to designate the "part" which can be referred to by a reflexive pronoun). This division coincides in its basic idea with Lakoff's (1992) division of person into the Subject and Self.

My intention was to demonstrate, by presenting the corresponding language material, that the relationships between the Subject and ISE and their corresponding roles "inside" the person are quite complicated. But some structure can clearly be established. Typically the Subject is conceptualized as being in the dominating role with respect to ISE, but the reverse situation is also possible. And the Subject and ISE can be considered as more or less equal partners interacting "inside" the person.

The picture of the inner organisation of a person outlined in the paper can hardly be called a folk theory. But it could be called a model with some underlying principles and some constraints on its structure. A much more systematic and detailed analysis of the material is needed in order to establish the whole picture of our intuitive conceptualizations of the inner functioning of human persons, of our Selves.

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Kas on olemas "mina" naiivteooria? Eesti keele *ise, enese~enda.*

Haldur Õim

Artikli eesmärgiks on analüüsida eesti keele refleksiivpronoomenitele (*enese~enda* ja nende käändevormidele) põhinevaid väljendeid ja lausekonstruktsioone. Kognitiivse semantika paradigmas on eeldatav, et enesekohaste pronoomenite kasutus kajastab naiivteoreetilist ettekujutust isiku/"mina" (ingl. k.

Self) struktuuri. Sellele ongi artikkel pühendatud: analüüsi andmeteks on eesti keele väljendid, kus esineb *enese~enda* ja kuna need pronoomenid viitavad tagasi mingile isikule, keda lauses on varem mainitud, siis on põhimõtteline küsimus selles, millele refleksiivpronoomen tagasi viitab. Nagu näitab analüüs, ei ole refleksiivpronoomeni ja selle poolt viidatud isiku (artiklis Subjekt, refleksiivpronoomeni poolt tähistatut esitab ISE) poolt tähistatud "osad" identsed. Vastupidi, refleksiivpronoomenite kasutus osutab, et inimest käsitatakse psüühilises mõttes tüüpiliselt koosnevat kahest osast, mis/kes omavahel suhtlevad. Artikli materjalianalüüs on pühendatud nende kahe osa rollide võrdlusele. Nagu analüüs näitab, võib eristada situatsioone, kus Subjekt domineerib ISE üle (*enesevalitsus*), kus ISE domineerib Subjekti üle (*endale lubadust andma*), aga enim on kasutusi, kus Subjekt ja ISE on otsekui võrdsed partnerid suhtlussituatsioonis (*endas kahtlema, endast lugu pidama, eneseiroonia*).

Kokkuvõttes: materjali esialgne analüüs näitab, et niisuguse ainestiku najal on põhimõtteliselt võimalik teha järeldusi inimese psüühilist organisatsiooni puudutavate naiivkujutelmade kohta.

On the conceptualization of time in Estonian[1]

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1. Introduction

This paper discusses Estonian time expressions from two perspectives: first, in the light of the conceptual metaphor theory proposed by George Lakoff and Mark Johnson, i.e., how time is conceptualized in Estonian; and secondly, from the point of view of grammaticalization (building mostly on B. Heine), i.e., how time expressions (especially adverbs and adpositions) have developed in Estonian. The two perspectives are obviously related: metaphors, i.e., the creative use of language, allowing meaning extensions from one cognitive domain to another, are regarded by Heine as one of the bases of grammaticalization. As both grammaticalization and metaphorical extensions of meaning are, according to these theories, unidirectional processes, it is important to consider the choice of source and target domains for meaning extensions. Focussing on metaphors in Estonian time expressions, and on their compatibility with the metaphors proposed by Lakoff and Johnson, I will investigate the extent to which different metaphors can be said to form a coherent system, and the way metaphors can combine in time expressions. I will also discuss the development of some concrete nouns into temporal expressions with more abstract (grammatical) meanings.

2. The conceptualization of time

To be able to understand the relatively abstract domain of time, we conceptualize it in terms of various metaphorical mappings which map elements from more concrete domains on the temporal domain. According to Lakoff and Johnson, we could even say that our understanding of time is entirely dependent on our understanding of motion, space and events (1999: 137). Instead of time, we compare and measure events. The most important metaphor in conceptualizing

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time relies on motion in space (Lakoff, Johnson 1999: 137–139). These claims are relevant also to an inquiry into Estonian time expressions.

Lakoff and Johnson have identified (basing their claims mostly on English) three sets of metaphorical mappings between the cognitive domains of space and time (Lakoff, Johnson, 1980, 1999): the Moving Time Metaphor (*The time will **come** when... In the weeks **following** next Tuesday... I can't **face** the future.*); the Moving Observer Metaphor (*We've **reached** June already.*); and the Time Orientation Metaphor, according to which the speaker is facing the future (*That's all **behind** us now. He has a great future **in front of** him.*), and which is compatible with the other two metaphors (Lakoff, Johnson 1999: 140–148).

All three metaphors are present in Estonian. There are some usages peculiar to Estonian, which nevertheless adhere to the universal tendencies. It remains questionable, however, whether it is possible to speak of an equally coherent metaphorical system in Estonian, as in many cases the examples indicate relatively random combinations of metaphors.

In what follows, I will consider Estonian (spatial) temporal expressions in more detail according to the underlying metaphors. The examples include dialectal words and some archaic expressions, as Modern Standard Estonian alone would yield less interesting material for research. Dialectal examples have been taken from the *Eesti murrete sõnaraamat* (Dictionary of Estonian Dialects – EMS)[2] Other sources of examples are *Eesti kirjakeele seletussõnaraamat* (Explanatory Dictionary of Written Estonian – EKSS) and Saareste's *Eesti keele mõisteline sõnaraamat* (Conceptual Dictionary of the Estonian Language – Srst). Wiedemann's Estonian–German Dictionary (Wied) has been used for examples of archaic (19th c.) language, and Mägiste's Etymological Dictionary (Mägiste 1982–83) for word etymologies.

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[2] The dictionary records the vocabulary of the Estonian local-territorial dialects, most of which have become or are becoming extinct. The dialects have been divided according to former parishes. The following abbreviations have been used: Hää – Häädemeeste, Kaa – Kaarma, Khk – Kihelkonna, Lüg – Lüganuse, Nõo = Nõo, Räp – Räpina, Ris – Risti, Vil – Viljandi, Võn – Võnnu.

2.1. The Moving Time Metaphor

The Moving Time Metaphor conceptualizes time in terms of an object moving in space. The **movement** of time is clearly reflected in the following expressions:

(1)
Mineval (ADJ-ADE-SG, < the verb *minema* 'go', PRES-PART) *suvel oli laulupidu.*
'Last (lit. **going**) summer we had a song festival.

(2)
Ülemineval (ADJ *üle* 'over' + *minev*) *aastal lõpetasin kooli.*
'I graduated two years ago (lit. on the **over-going** year).'

Minev is a temporal adjective derived from the present participle of the verb *minema* 'go' According to the EKSS, it may be used to denote either the previous, immediately preceding events or, less frequently, any past events. The adjective may also take a plural form, e.g. in *minevastel aegadel* 'in past times' Example (2) illustrates a semantically interesting possibility of forming the compound *üleminev*, which, on the one hand, relies on the Moving Time Metaphor (*minev* 'going'), and, on the other hand, on the Moving Observer Metaphor (we can move (or see?) over time as if it were a landscape) for counting the *going* time periods. The latter metaphor has, however, been exploited only indirectly in this expression: *üle* probably came to be used for counting objects through a more general Moving Observer Metaphor (the observer moves *over* each *following* object), before it made its way into various temporal expressions. An alternative interpretation is possible: *üle* means that something has gone or flown over the observer. Accordingly, *minev* would refer to something that is still partly visible, while *üleminev* refers to something that has completely gone. This is supported by the use of *üle* in other expressions (e.g., fits of illness or showers of rain may go *over*). The verb *minema* is also related to *minevik* 'the past', and *läinud* 'last'

(3)
Läinud (ADJ, < the verb *minema* 'go', PST-PART) *aastal oli soe suvi.*
'Last (lit. **gone**) year we had a hot summer.'

Compared to *minev*, *läinud* does not imply immediate precedence – probably due to the use of the *nud*-participle, which expresses an

attribute or state arising in the relative past (Erelt et al. 1995: 67). This explains why (4) is acceptable, whereas (5) is not.

(4)
***Läinud** aastatel.*
'In past (lit. **gone**) years.' (See (3))

(5)
****Minevatel** (see (1), PL) aastatel.*
'In **going** years.

Some moving time expressions are related to the verb *mööduma* 'pass' emphasizing the act of time moving past the speaker, as in *möödanik*, an archaic synonym for *minevik* 'the past' and in the following expressions[3] (the same stem *möö-* is also used in *aegamööda* 'slowly', lit. 'along time', which is an expression of the Time Landscape Metaphor):

(6)
***Möödunud** (ADJ, < the verb mööduma 'pass' PAST-PART) aastal oli soe suvi.*
'Last (lit. **passed**) year we had a hot summer.'

(7)
*Lendasid **mööda** (ADV, from the stem möö-) kuud ja aastad.*
'Months and years flew **by**.'

(8)
*Sõidame maale nädalalõppu **mööda** (ADV) saatma.*
'We are going to spend the weekend (lit. to send a weekend **by**) in the country.'

Other expressions that can be regarded as examples of the Moving Time Metaphor include the adjective *olnud* (the past participle of the verb *olema* 'be'), as in *olnud aegadel* 'in times gone by' lit. 'in times been', if we interpret it in terms of the time (that has once *been* with the speaker) having left, and possibly the noun *kaduvik*, which has been derived from the verb *kaduma* 'disappear' (defined by Srst as 'disappeared time, the past'). Disappearing is, strictly speaking, not a spatial notion, and yet the disappearance or appearance of an object is in a way related to space or the horizon, as in:

[3] *möö-* is an old Estonian stem of unknown origin. Equivalents for *mööda* can be found in almost all Fenno-Ugrian languages (Palmeos 1973: 71).

(9)
Nädalad ja kuud ***veeresid kaduvikku*** (ILL-SG).
'Weeks and months went by.' Lit. 'Weeks and months **rolled into the past**.'

Neither (9) nor (6)–(8) imply an observer facing the future, whom time passes from front to back (as would be assumed if the Moving Time Metaphor were combined with the Time Orientation Metaphor). Both passing and disappearing seem to be associated with a by-stander's position rather than with a front-back orientation.

In expressions referring to the future, the Moving Time Metaphor appears, first and foremost, in the word for "future" itself, *tulevik* (a noun derived from the verb *tulema* 'come') and in the phrases containing the verb *tulema* or its synonyms:

(10)
Tuleval (ADJ-ADE-SG, < the verb *tulema* 'come', PRES-PART) *kuul on juba lund oodata.*
'In the **coming** month, we can expect snow.'

(11)
Saabuval (ADJ-ADE-SG, < the verb *saabuma* 'arrive' PRES-PART) *aastal algab uus aastatuhat.*
'In the coming (lit. **arriving**) year, a new millennium will start.'

(12)
Jõulud ***lähenevad*** (*lähenema* 'approach' PRES-INDEF-3PL) *kiiresti.*
'The Christmas **is approaching** fast.'

It should be pointed out here that similar metaphorical motion can be found in the domain of space: for example, we say *metsaserv* ***tuli*** *aina lähemale* 'the fringe of the wood **was coming** closer and closer' although it is actually the observer that moves, not the fringe. The fringe is simply becoming more and more visible for the person (*coming* into sight)[4]

The Moving Time Metaphor combines with the Time Orientation Metaphor only in some dialectal expressions, where it is clear that the time is coming towards the observer from front. There are no instances of such combination in standard Estonian.

(13)
Tulavad (*tulema* 'come' PRES-INDEF-3PL) *ajad* ***eest*** (adv.), *ähk oo siis paremad ɒɛvad* (Khk).
'Things may be getting better in the future. Lit. '**Come** times **from front**, days may be better then.'

[4] The author is grateful to Professor H. Õim for this remark.

(14)
lestuleval (*ees* 'in front' + *tulev* 'coming') *nädäläl lähän Lüganuse* (Lüg).
'Next week (lit. **front-coming**) week I will go to Lüganuse.'

(15)
Eest tulev *pühapää on vana jaanipää* (Ris).
'Next (lit. **from front coming**) Sunday is the old Midsummer Day.'

(16)
Kas ***ettetuleval*** (*ette* 'to front'+ *tulev*) *üül ka peab valve väl'läs olema* (Vil).
'Must the guard be out tonight (lit. **to front-coming** night)?'

(14) can have an alternative interpretation – the speaker may be referring to the week moving in front of all the others in the line of moving weeks. In (15), however, the speaker seems to refer explicitly to coming from front. (16) seems to emphasize the arrival of a time period in front of the speaker, and not necessarily its coming from front. With these expressions inconsistency in form *ees-tulev* (i.e., coming first in line) or *eest-tulev* (i.e., approaching the speaker from front) – can be found even among the speakers of the same dialect. Although we might conclude from here that a language can never be overly consistent in its conceptualizations, the most likely explanation is that these examples indicate the variability of pronunciation rather than conceptual confusion.

(1)–(16) illustrate the conceptualization of time as a moving object. The following examples of the Moving Time Metaphor show how time as a moving object can be attributed integral front and back parts. (An object external to the speaker is attributed an internal front and back usually on the basis of the location of important perception organs or the direction of movement (see, e.g., Fillmore 1997: 32–33).) If time objects can move, they can also precede and follow each other (see (17) and (23)). Many expressions describing the past contain the old Estonian stem *esi-* 'front'[5] which is also related to the numeral *esimene* 'first' ((17)–(21)). In the line of moving time objects, the earliest events come first as in (20)–(21), or in front of the others as in (17)–(19). For example:

[5] The spatial adpositions *ette* 'to front' *ees* 'in front' *eest* 'from front' *eel* 'ahead' (which can also be used as adverbs and expressions of more abstract relations) are all related to the archaic noun *esi* (GEN *ee*) 'an area or part in front' (Palmeos 1973: 71).

(17)
Eelmisel (ADJ, < the noun *esi* ADE-SG + the noun-forming affix *–mine*) *aastal oli soe suvi.*
'Last (lit. **on front**) year we had a hot summer.'

(18)
Paari aasta ***eest*** (POSTPOS, < the noun *esi* ELT-SG.) *polnud veel seda maja.*
'A couple of years ago (lit. from front) this house had not been built.

(19)
Vanasti 'öeldi: ***iist*** (PREPOS, < the noun *esi* ELT-SG.) *'aega 'olli nõnda või nõnda* (Hää).
'In olden times it was said: in the past (lit. in time **from front**) things used to be so or so.'

(20)
Eesti ***esiajalugu*** (*esi* + *ajalugu* 'history').
'The prehistory (lit. **front / first** history) of Estonia.

(21)
Edimält (ADV, derived from *esi* or *esimene*) *'ol'le Terikeste külän üt's 'tõrdutegijä* (Võn).
'Formerly (lit. '**in front / at first**) there was a vat-maker in the Terikeste village.'

An earlier or past event may be referred to directly as located in front, i.e., towards the beginning of the line of events:

(22)
Eespool/eelpool (ADV, < the noun *esi* INE-SG / ADE-SG + *pool* 'side, towards') *mainitud küsimus.*
'The above-mentioned question' Lit. 'The question mentioned on the **front side / towards the front**.'

By contrast, consider the spatial example *Eespool on tee kinni.* 'The road is closed ahead.' where *eespool* means 'in front of the moving observer' and (52) below, which, using the Moving Observer Metaphor, correlates with this type of spatial usage.

In expressions describing the future, the division of the moving object into parts is reflected in the word *pära* 'rear' (the nominal usage occurs rarely in Modern Standard Estonian), the elative of which may be used as a postposition, preposition or adverb ((24), (25), and (26), respectively). In (27) the adverb refers clearly to a location towards the rear, not to a part of the object. Succession without a reference to the back part of the object is exemplified by (23).

(23)
Järgmisel (ADJ, derived from the verb *järgnema* 'follow') *aastal algab uus aastatuhat.*
'Next year (lit. in the **following** year) the new millennium will begin.'

(24)
Saja aasta ***pärast*** (POSTPOS., *pära* ELT-SG) *mais.*
'In May, in (lit. **from the rear of**) a hundred years' time.

(25)
Varsti ***pärast*** (PREPOS) *pühi.*
'Soon after (lit. **from the rear of**) the holiday.'

(26)
Hommikul paistis päike, ***pärast*** (ADV) *hakkas vihma sadama.*
'The morning was sunny, later (lit. **from the rear**) it started to rain.'

(27)
Hommikul paistis päike, ***pärastpoole*** (ADV, < the noun *pära* ELA-SG + *poole* 'to side / towards') *hakkas vihma sadama.*
'The morning was sunny, later (lit. to the **rear side / towards the rear**) it started to rain.'

In some cases *järgmine* 'following, next' may represent the Moving Observer Metaphor, as in *astume* (verb, pres. indicative 1 pl.) *järgmisse* (adj. ill.sg.) *aastasse* (noun, ill.sg.), lit. '(we) step into the following year', but generally the expressions describing preceding and following are more likely to be explained by the Moving Time Metaphor.

Research on grammaticalization processes has also shown that the front (back) part of an object or a person and the anterior (posterior) location of an object or a person are conceptually closely related. One can distinguish between several stages in the development of a word denoting a body part or another concrete object into a spatial expression (see, e.g., Heine 1997: 44). This is shown also by the above examples – (17), (22), (23) and (27) illustrate the pattern where events are located before or after other events, (18)–(20) and (24)–(26) illustrate the conceptual mapping of the parts of a moving object onto the domain of time. The dialectal example (21) is less easily identifiable as one or the other. Besides, the same word (*edimält, edemält*, or, in standard Estonian, *esmalt*) may occur in usages reflecting the Moving Observer Metaphor, where it refers to events/actions that happen or are carried out first, i.e., to the future.

The past events 'nearest' to the observer may be referred to as *viimane* 'last': *viimasel ajal* 'recently' lit. 'in the last times' *viimasel talvel* 'last winter', *viimati* 'last time' etc. Whether this is

compatible with the Moving Time Metaphor is arguable, the expressions could equally well be interpreted in terms of the Time's Landscape Metaphor: last winter is the one that the speaker has just left.

It could be pointed out that earlier events can be referred to as having a front location also in other languages (which are otherwise characterized by the future-in-front orientation). Examples include *before* in English, *avant* in French ('front part' in its nominal usage), *vor* 'in front of, from front' in German, *przed* 'in front of, from front' in Polish, *li-fney* in Hebrew ('in front of, before', etymologically related to the word for face), and the stem *qdm* in Arabic, which denotes both the spatial front side and temporal precedence (the examples from Hebrew and Arabic have been taken from Henkin 2000). Movement in front is also indicated by the Danish expression *den foregående dag* 'the day before', lit. 'the day that has gone before / in front'

The Moving Time Metaphor may also appear in expressions without a specific reference to the past, present or future. Such usages express the recurrence or succession of events. For example:

(28)
Nägin teda taas pika aja ***tagant*** (POSTPOS).
'I saw him again after a long while (lit. from behind long time).'[6]

A synonym of *tagant* is *järelt*, which is related to spatial succession. The expressions can be considered examples of the Moving Time Metaphor – if we imagine recurring events in moving time, each following event can be thought of as located in a line behind or after a certain time unit (as in, e.g., *Loengud toimuvad iga kahe nädala* ***tagant***. 'The lectures are held every two weeks. Lit. 'The lectures occur **behind** every two weeks' The period of two weeks passes the observer, and behind it a lecture appears again.) The general succession of time units is also expressed by *järjest* 'in succession' as in:

(29)
Oli kolm aastat ***järjest*** *merel.*
Lit. 'He was three years **in succession** at sea.'

[6] The postpositions *tagant* 'from behind' and *tagasi* 'back, backward' can be traced back to a spatial noun whose stem has become obsolete (**taka* has been the source of, e.g., the spatial adpositions *taha* 'to the back of' *taga* 'behind' *tagant~takka*) (see Palmeos 1973: 71).

The linear movement of time units is reflected also in the expressions:

(30)
*Tund läheb tunni **järel*** (POSTPOS).
'An hour passes **after** an hour.'

(31)
*Aasta läheb aasta **kannul*** (POSTPOS, < the noun *kand* 'heel' ADE-PL).
'A year passes after a year.' Lit. 'A year goes at a year's **heels**.'

The following expression conceptualizes the succession of time without movement:

(32)
*Tädi oli päev päeva **kõrval*** (POSTPOS, < the noun *kõrv* 'ear' ADE-SG) *tööl.*
'(Her) aunt was at work day after day (lit. day at the **ear** of day)

The successive arrangement of events (without reference to the past or the future) may be described by expressions highlighting the front part of a moving object (in older use – (33)) or movement in front of something else (in dialectal use – (34)):

(33)
*Ta on üks aasta mu **ees**.* 'He is a year older than me.
Lit. 'He is one year **in front of / before** me.' 'Er ist ein Jahr älter als ich' (Wied).

(34)
*Kui noorem [õde] läheb **eespidi** vanemat mehele, siis paneb vanema tõrre alla (Sim).*
'If the younger [sister] gets married **in front of** the elder, she puts the elder sister under a vat.' (saying)

(33) shows that the birth of the person who is being spoken about is located in front of the birth of the speaker in the succession of years moving towards the past. One could also say that the person referred to moves a year ahead of the speaker with his age, which would reflect the Moving Observer Metaphor. Lakoff and Johnson, however, point out that time and events belong together and are not easily separable in language (and in the mind of speakers) (Lakoff, Johnson 1999: 137–139), which supports the Moving Time interpretation here. There are other similar expressions: *oli minust klass eespool* '(he) was a year ahead of me (at school)' etc..

Older usages include a number of other time expressions with *esi* 'front': *õhta ezi* Germ. 'die Zeit kurz vor Sonnenuntergang' 'the

time immediately before the sunset', *pühade ezi* Germ. 'Vorfeier, der Tag vor dein Feiertag' 'the day before a holiday' *walge ezi* Germ. 'die Zeit kurz vor Sonnenaufgang' 'the time immediately before the sunrise' (Cf. the spatial *kõrtsi ezi* Germ. 'Vorplatz vor dem Kruge' 'the yard in front of a pub') (Wied). In Modern Standard Estonian there are the expressions *pühade eel* 'before a holiday' *pühade-eelne aeg/päev* 'the time/day before a holiday' or *eelõhtu* 'the evening before, eve' lit. 'before-evening', which is used to refer to the time preceding a special event (e.g., *võistluste eelõhtu* 'the evening before the competitions'), or, figuratively, the time preceding important events in history (e.g., *revolutsiooni eelõhtu* 'the eve of revolution'). Less frequently, it is used to designate early evening (e.g., *Täna eelõhtuks valmis saanud saod paistavad ähmaste täppidena vastu põlluveert.* 'The haycocks that had been finished by the early evening look like vague dots along the edge of the field' (M. Raud) (EKSS)). This shows that the original meaning of 'the time immediately before the evening' has extended and come to denote a longer period of time preceding an event.

There are several very common expressions derived from *esi* which are used to speak of the beginning of a period of time or an event: *esiti* 'at first', *esialgu* 'at the outset' *esialgselt* 'originally' *esiotsa* 'in the beginning' This shows clearly that the beginning of an event is understood in terms of the front part of a (moving) time object, where something is happening.

In the case of the words *alguses, algusel, algul, algupoolel*, etc. 'in the beginning' it is unclear which of the senses – temporal or spatial – is primary. Dictionaries often list the temporal sense first, and besides, the reference is often primarily to the beginning of an event (rather than to time).

It is worth of notice that very few of these expressions appear compatible with the Time Orientation Metaphor. There is only one type of dialectal (archaic) expressions in case of which the speaker is clearly facing the future, with the past behind his back ((13)–(16)). At the same time the Time Orientation Metaphor combines very well with the Moving Observer Metaphor (the Time Landscape Metaphor), which will be discussed in the next section (2.2.). There is one expression which seems to be motivated only by the Time Orientation Metaphor, without being combined with the Moving Time or Moving Observer Metaphor:

(35)
Vastu (PREPOS) *õhtut läks taevas pilve.*
'Towards (lit. '**against**') the evening the sky clouded over.'

According to Lakoff and Johnson, the Moving Time Metaphor is related to the conceptualization of time not in terms of a line of moving objects, but as a flowing substance (1999: 144–145). In Estonian we can say that time goes or flows (*aeg läheb* 'time goes' *aeg voolab* 'time flows' *aeg jookseb* 'time runs'):

(36)
Aga kui nüüd 'aasta ehk kaits ***edesi lähäp****, jälle om elu tõist 'muudu* (Nõo).
'But when a year or two passes (lit. **goes on**), life will be different again.'

The metaphor of time as a substance enables us to measure and compare quantities of time, with the following adverbial expressions:

(37)
palju *aega* '**much** time' ***vähe*** *aega* '**little** time', ***küllalt/piisavalt*** *aega* '**enough** time'

(38)
hulk *aega* 'a **lot** of time'

(39)
tükk *aega* 'a considerable time' lit. 'a **piece** of time'

(40)
pikka, pikemat/lühikest, lühemat *aega* 'for a **long, longer/short, shorter** time'

These examples describe time as a substance, although not necessarily a flowing substance. The conceptualization of time as a substance may relate to the time as a resource metaphor, which Lakoff and Johnson associate especially with Western cultures (1999: 161–166). This metaphor appears in the Estonian expressions *aega kulutama* 'waste time', *aega säästma* 'save time', *aega kokku hoidma* 'spare time' *aega raiskama* 'waste time' *aega võitma* 'win time' *aega kaotama* 'lose time' *millegi tegemiseks aega võtma* 'take time for doing smt. , *tegevus võtab aega* 'smt. takes time', *aeg kulub* 'time passes' lit. 'time wears out.

2.2. The Moving Observer, or Time's Landscape Metaphor

According to the Moving Observer Metaphor the observer is moving towards the future on the landscape of time, leaving the past behind. It is common to say in Estonian:

(41)
Kolm aastat ***tagasi*** *käisin viimati linnas.*
'I went to town last three years ago.' Lit. 'Three years **behind** I went last to the town' See footnote 4.

In archaic use, there is a postposition synonymous to *tagasi* 'behind' which connects time and space even more clearly (the example has been taken from Wied):

(42)
Sellest on nüüd kolm aastat ***teed*** (POSTPOS, < the noun *tee* 'road' PRT-SG), *kui viimati linnas käisin.*
Lit. 'It is three years' **road** now from when I last went to the town.

Example (42) shows especially clearly how time can be conceptualized in terms of movement in space.

The adverb *seljataga* 'behind one's back' combines the Moving Observer Metaphor with the Time Orientation Metaphor:

(43)
Kui ülikool ***seljataga****, läksin tööle.*
'After graduating I got a job. Lit. 'When the university was **behind my back**, I went to work.

It has been pointed out already that the expressions *viimati* 'last' *viimasel ajal* 'recently' lit. 'in the last time', etc. seem compatible with either the Moving Observer Metaphor or the Moving Time Metaphor: the expressions may be interpreted as 'the last event that the observer has passed' or 'the last event that has passed the observer'

According to the Time Orientation Metaphor, the future is in front of the moving observer, as in:

(44)
Nüüd ja ***edaspidi*** (ADV, *edasi* (< *esi* 'front') + *pidi* 'along' (ADV, < the verb *pidama* 'keep'.
'Now and from now on.'

(45)
Saab ***eespidi*** (ADV) *näha, mis saab* (Khk).

According to the EKSS, *edasi* 'forward, ahead, on, along' may mean both 'in the forward direction' and 'further in time, in the coming time, in the future'. Events can be postponed by being 'pushed forward' (46), 'left forward' (48, dial.), 'stretched forward' (49, dial.) or 'driven forward' (50, dial.).

(46)
Koosolek lükati ***edasi*** (PART).
'The meeting was postponed (lit. pushed **forward**)'.

(47)
Mis ***edasi*** (ADV) *saab, ei tea.*
'What will happen from now on (lit. '**ahead**'), I don't know.'

(48)
Siis jäeti kohos ***edesi*** (ADV), *'tõise 'kõrra 'pääle* (Lüg).
'Then the court was postponed.' Lit. 'Then the court was left **forward**, for another time.

(49)
Mis sä iks 'aigo ***edese*** (ADV) *vennütät viil* (Räp).
'Why are you still wasting time (lit. stretching time **forward**)?'

(50)
...aeasin 'jälle sedäsi 'päevi ***edesi*** (ADV) (Vil).
... (I) again passed days (lit. drove days **forward**) this way.'

(46)–(50) could be compared to (36), where the forward-moving entity is time, not the observer.

One and the same word may refer to, depending on the underlying metaphor, the future or the past – consider, for example, the use of *iistaeg* (lit. '(from) front-time') in (19) and (51).

(51)
Sii tegu jääb ***iistaja*** *'peale* (Hää).
'This will be done in the future.' Lit. 'This act remains on **front-time**.'

Similarly, *eespool (iispuul)*, which usually refers to an event in the past (see (22)), may refer to the future in dialectal use:

(52)
Iispuul (ADV), *ees* 'in front' + *pool* 'side, towards') *'aegel jäetse sii (põld) karja kätte* (Vil).
'In the future (lit. in times **towards the front / on the front side**) this (field) will be left to the cattle.

The expressions *ees* or *eel* 'in the future' lit. 'in front, ahead', *eelolev* 'next, the coming', lit. 'ahead-being' and *eelseisev* 'next, the

coming' lit. 'ahead-standing' show that time may 'stand' in the future 'waiting' for the moving observer:

(53)
Ta kuulis praegu, et ***eel*** (ADV, *esi* 'front' ADE-SG) *on pulmad.*
'He has just heard that there is a wedding **ahead**.'

(54)
Teda ootab ***ees*** (ADV, < the noun *esi* INE-SG) *suur tulevik.*
'He has a great future **ahead** of him.' Lit. 'A great future is waiting for him **in front**.

(55)
Eelolev (ADJ, < *esi* ADE-SG + *olema* 'be' PRES-PART) *aasta on 2002.*
'The coming (lit. **on front-being**) year is 2002.'

(56)
Loengud algavad ***eelseisval*** (ADJ, ADE-SG, *esi* ADE-SG + *seisma* 'stand' PRES-PART) *nädalal.*
'Lectures begin next (lit. **on front-standing**) week.

The EMS records an interesting example where the future has been expressed with the postposition ***eest*** 'after a certain period' lit. 'from front, from before':

(57)
[sa] nopit kõik miu kasu kõjo ärä, mul os paari 'aasta ***iist*** (POSTPOS, < the noun *esi* ELA-SG) *ratta puu olluva* (Nõo).
'(You're) cutting down all my growing birches, in a couple of years (lit. a couple of years **from front**) I would have had wood for (cart) wheels.)

Here the observer or the speaker is moving towards the future, and an event occurs when the speaker arrives in front of it (events seem to be lined up in the same direction as the observer, in contrast to the usual opposed arrangement). Similarly, the Moving Time Metaphor motivates some time expressions where the observer's place is taken by the hands of the clock:

(58)
Kell on viie ***eest*** (POSTPOS, < the noun *esi* ELA-SG) *kaks.*
'It's five to two.'

The pointer has another five minutes in front of it before it reaches the particular time (compare with the synonymous expression *Kell on viie* ***pärast*** *kaks.* (Cf. (24)), indicating that the rear of the moving time appears after five minutes, and then / behind it it is two o'clock).

There is a group of expressions motivated by the Moving Observer Metaphor which reflect the conceptualization of time in terms of locations on a landscape, explaining thus why the metaphor is sometimes called the Time Landscape's Metaphor. Time may be understood in terms of the Observer's path. To reach a location fast, the Observer has to go *otseteed* 'straight' lit. 'by the straight way', i.e., take the shortest and straightest road possible ((59)–(61)), and perhaps even walk *otsejoones* or *joonelt* 'along a (straight) line' ((62)–(65)). It is not surprising that these expressions, along with the synonym *otsemaid*, have come to mean 'immediately, straightaway' The context may range from strictly spatial (59) to highly abstract (60) (the examples have been taken from the EKSS):

(59)
Need vead tuleb ***otseteed*** (ADV, *otse* 'straight' + *tee* 'road, way' PRT-SG) *kõrvaldada.*
'The faults must be corrected (lit. 'removed') straight away.'
Lahkuge siit ***otseteed!***
'Leave straight away!'
Jõudnud jõe äärde, hüppas ta ***otseteed*** *vette.*
'Reaching the river bank, he jumped into the water straight away.'

(60)
Ta ei leidnud ***otsemaid*** (ADV, *otse* + *maa* 'land, distance' PRT-PL) *vastust.*
'He could not find an answer straight away.'
Asuti ***otsemaid*** *tööle.*
'(They) set to work straight away.'

(61)
Otsekohe (ADV, *otse* 'straight' + *kohe* 'immediately') *oli vaja tööle asuda.*
'(They) had to set to work straight away.'

(62)
Poiss jooksis ***joonelt*** (ADV, < the noun *joon* 'line') *õue.*
'The boy ran straight into the yard.'
Jõi klaasi ***joonelt*** *tühjaks.*
'(He) emptied the glass at once.

(63)
(a) *See asi tuleb* ***otsejoonelt*** (ADV, *otse* + < *joon*) *sirgeks rääkida.* 'We need to get this thing straight right away.'
(b) *Nüüd jookseb* ***otsejoones*** (ADV) *emale kaebama.*
Now (he) is running straight to his mother to tell on us.
(c) *Kihutas* ***otsejoont*** (ADV) *koju tagasi.*
'(He) rushed straight back home.'

(63)a, b and c differ only with respect to the case. The use of spatial curves in several conceptual domains in Estonian has been discussed by Õim (2000).

Other synonyms to *otsekohe* 'immediately' include *jalamaid* (*jalg* 'leg, foot' GEN-SG+*maa* 'distance' PRT-PL) and *jalapealt* (*jalg* GEN-SG + *pealt* 'off', POSTPOS), as in *Lahkuge siit jala-pealt!* 'Leave straight away (lit. 'off-foot')!' or *Käsk tuli jalamaid täita.* 'The order had to be carried out immediately (lit. 'foot-distance').', the etymologies of which the author of this article cannot explain. There are other analogous expressions, such as *korrapealt* 'immediately' (*kord* 'time' + *pealt*), *päevapealt* 'during the day' (*päev* 'day' + *pealt*), *tunnipealt* 'within an hour' (*tund* 'hour' + *pealt*).

Another expression reflecting the Time's Landscape Metaphor is *paiku* (ADV < the noun *paik* 'place') 'around a moment in time' lit. 'around a place' an adverb used mostly with hours but also with other temporal expressions:

(64)
Igal õhtul kella kümne ***paiku.***
'Every night around ten (lit. 'around the **place** of ten o'clock').
Jaanipäeva ***paiku*** *teeme pulmad.*
'We'll get married around Midsummer Day.'
Laev lõpetab laadimise ülehomse ***paiku.***
'The ship will finish freighting by around the day after tomorrow.'

The synonymous expression *kandis* 'somewhere around a place' is also acquiring a temporal sense, presumably by analogy, and perhaps under the influence of other languages, as in *kolmapäeva* ***kandis*** 'around Wednesday' or *kella nelja* ***kandis*** 'around four o'clock', but this is generally not considered a standard usage.

The Time's Landscape mapping has also given rise to temporal expressions with the preposition *keset* and the postposition *keskel* 'in the middle of':

(65)
Keset *argipäeva.* 'In the **middle** of a working day.'

(66)
Aasta ***keskel.*** 'At **mid**year.'

which have developed from the spatial substantive <*kesk* (has survived in compounds such as *keskpaik* 'centre', lit. 'middle place'),

and are used also in locational meanings, as in *keset väljakut* 'at the centre of the square' and *linna keskel* 'in the town centre'

The Observer's movement on the time's landscape is also reflected in the adverbs *aegamööda / aegapidi* (See also footnote 2), lit. 'along time' (Cf. *teed mööda / teed pidi* 'along the road'), and in the adposition *läbi* 'through' (*läks läbi metsa* 'walked through the forest' and *kirjutas öö läbi* 'wrote through the night'), and the postposition *saadik / saati* 'since, up to' (*kivi oli poolest saadik mulla sees* 'half of the stone was in the earth', lit. 'the stone was in the earth up to a half' and *kolmapäevast saadik* 'since Wednesday').

It was mentioned in connection with the Moving Time Metaphor that time may be conceptualized as a substance and as a resource. The Moving Observer Metaphor seems to have motivated temporal expressions with the spatial postposition *sees* 'in, within' which show that time may also be conceptualized in terms of a container: e.g., *nende päevade sees see juhtub* 'within these days it will happen'

In her sign language-based study of temporal expressions, E. Engberg-Pedersen seeks an answer to the question concerning the most basic domain in the conceptualization of time, and argues that instead of distinguishing between temporal and spatial domains, it would be reasonable to draw a distinction between dynamic and static conceptualization (1998: 131–152). This view is appealing, but with some reservations. On the one hand, it is clear that in the conceptualization of both time and space we largely rely on the domains of motion and events (in case of the former, both domains are important; in case of the latter, the domain of motion prevails). Motion enables us to understand space – to 'see further', before and beyond things. On the other hand, while in physics time and space are primitive concepts, and motion is defined as the change of location in time, outside physics (i.e., in ordinary thinking) it is difficult to imagine motion without space or time. There are also many well-known examples providing evidence for the tendency of human beings to conceptualize the surrounding space and objects in terms of themselves (their bodies): *the **foot** of a mountain, at the **back** of*, Est. *kõrval* 'by the **side** of', lit. 'at the **ear** of', etc.. It seems that one has to admit here that the domains of space, motion, events and time are interrelated by strong conceptual links, and it is not always possible to identify one of them as more basic than the others. Studies of

grammaticalization processes consider space a more abstract domain than motion or activities (by activities, Heine means all kinds of 'dynamic situations' i.e., activities, events and processes (Heine et al. 1991: 49)), and time and quality more abstract than space. Heine admits, however, that although space has been traditionally considered the source domain for processes (the space-to-process mapping), the relationship may also be reverse, as 'spatial concepts tend to be derived from concepts representing activities" (Heine et al. 1991: 49).

3. The evolution of temporal expressions in Estonian

B. Heine has proposed the following sequence of domains in the grammaticalization chain: person > object > process > space > time > quality (Heine et al. 1991) – i.e., a word with a concrete meaning becomes, through metonymic extension and metaphoric transfer from one domain to another, increasingly more abstract, until a lexical word finally becomes a function word or a clitic. The development of lexical words into adpositions in Older Literary Estonian has been studied by Külli Habicht (2000, 2001). Krista Ojutkangas has investigated the role of body-part terms in the grammaticalization process in Estonian and Finnish (Ojutkangas 2000).

According to Heine, time follows space in the grammaticalization chain, so that space is the direct source for time, but expressions in both domains may derive from the domains of person, object and process. Person is a very common source concept for spatial concepts in many languages, including Estonian. The body-parts Estonians use for the conceptualization of space (as adpositions and adverbs) include, for example, *pea* 'head', *kõrv* 'ear', *külg* 'side' *kand* 'heel' Body-part terms may also be a source for more abstract concepts, including time (as in *käesolev* 'this, current, present' lit. 'in hand-being' *silmapilk* 'a moment; in a moment', lit. 'a blink of an eye', *jalamaid* 'immediately' lit. 'leg/foot-distance' *kannul* (see (31)) and *kõrval* (see (32)). *Käesolev* in its temporal sense seems to have given rise to the expression *kätte jõudma* 'of a time, arrive', lit. 'reach the hand' ((68), compare with the Moving Time Metaphor examples (10)–(12)). Apart from the restricted temporal usages illustrated by (69)–(71), *silm* 'eye' is not a very common source for grammaticalization / semantic shift.

(67)
Käes on *sajandi esimene aasta.*
'It is the first year of the century.' Lit. 'The first year of the century is in **hand**.'

(68)
Peatselt ***jõuavad kätte*** *jõulud.*
'It's Christmas soon.' Lit. 'Soon Christmas will **reach hand**.

(69)
Sel silmapilgul *kadus jõud ta liikmetest.*
'This moment his body became feeble.' Lit. 'On **this blink of an eye**, strength disappeared from his limbs.'

(70)
Esimesel silmapilgul *ei oska ma midagi arvata.*
'At the first moment (lit. 'on **the first blink of an eye**') I cannot think anything.'

(71)
Tule ***silmapilk*** *siia!*
'Come here immediately (lit. '**a blink of an eye**')!'

Silmapilk and *hetk* 'moment' are, however, not fully synonymous: the former is much more restricted in form and usage (e.g., *hetk* can occur in the plural, *silmapilk* cannot). *Käsi* 'hand' appears in temporal expressions already in Older Literary Estonian, as in *aeg on käes* 'it's time' lit. 'the time is in hand' (Habicht 2000: 33). According to Habicht, this and other grammaticalized usages of *käsi* have been influenced by German (Habicht 2000: 34–35).

An interesting development is the extension of the spatial postposition *peale* 'onto' (*pea* 'head' ALL-SG) into the time domain as a preposition synonymous to *pärast* 'after'(72a), which until recently was not accepted in the normative grammar. As a postposition, however, *peale* has been established for a long time in the sense 'since' (72b) and, less frequently, in the sense 'during' (when it follows a noun in the genitive case) (72c).

(72)
(a) ***Peale*** *lõunat tuleb hea uni.* 'After lunch (one) sleeps well.'
(b) *Reedest* ***peale.*** 'Since Friday.'
(c) *Pika aja* ***peale*** *sai asi korda.* 'Finally (lit. 'in the course of a long time') the matter was sorted out.'

The postposition *pihta* (derived from the noun *piht* 'waist') is sometimes, although rarely, used in the temporal sense 'since, beginning from', e.g., *Homsest pihta teen kõvasti tööd.* 'Beginning from tomorrow, I will work hard.

The word *nägu* 'face' has not grammaticalized in Estonian, unlike in many other languages. Speaking of future, however, it is possible to say:

(73)
Ma ei suuda ***tulevikuga*** (kom.sg.) ***silmitsi*** (ADV, < the noun *silm* 'eye') ***selsta*** ('*-da*' INF).
'I cannot face (lit. stand **eye-to-eye** with) the future.

Alternatively, one could say *Ma ei suuda* ***tulevikule näkku vaadata.*** 'I cannot look into the future's face. but many speakers of Estonian does not consider this an acceptable sentence. The metaphors of facing (people or events) thus appear to be based on eyes rather than the whole face in Estonian.

The reason why *külg* 'side' which has several extensions in the spatial domain is not used in temporal expressions may be related to the irrelevance of sides for either the events/times moving in a row or the observer moving straight forward towards the future. However, there is an expression derived from the noun *kõrv* 'ear' (see (32)).

Selg 'back' and *silm* 'eye' have only a limited number of grammaticalized extensions in Estonian. The expression *selja taha jätma* 'leave behind the back' can be used to refer to movement in space or in the domain of time / events, if it is conceived of in terms of the Moving Observer Metaphor.

All in all, 8 body parts may be used in temporal expressions: the head, eye, hand, leg / foot, back, ear, heel, waist. All these words may also appear in spatial adpositions (e.g., *peal* 'on' < *pea* 'head'), and in more abstract domains. Their productivity, however, varies greatly. Of the parts of body used in the conceptualization of abstract relations, the neck, shoulder, nail (e.g., *töö jäi minu kaela* 'I had to do the job', lit. 'the job was left around my neck', *murekoorem on õlul* '(have) a burden of troubles on one's shoulders' *pääses hirmu küüsist* 'got away from the clutches (lit. nails) of the fear') are not relevant to the domain of time. These body-parts are of marginal importance also in the conceptualization of space (one of the few expressions where *kael* 'neck' occurs is, e.g. *kaelakuti* 'with arms around each other's necks').

Object appears as the source domain for these expressions of the Moving Time Metaphor where the moving time is attributed an integral front and rear part (i.e., time is conceived of in terms of a moving object, the front part of which is determined by the direction

of movement) (see (17)–(22) and (24)–(27)). *Pära* grammaticalized in Estonian long ago. According to Habicht the word cannot be found in its lexical meaning in the documented sources of Old Literary Estonian (Habicht 2000: 38). (This is, however, probably explicable by the specificity of the subject matter of the texts. In dialects, *pära* has survived as a lexical word, and as an archaism, it still exists in contemporary language.) While the texts in the Old Literary Language record the causal (*pärast* 'because'), the locational (*päras* 'in the back part'), and the possessive (*päralt, päral* 'belonging to') senses, there is no evidence of the temporal sense, in which the word has by now grammaticalized in the form of an adverb, preposition, and postposition. Object is also the source domain for the time-as-a-substance metaphor ((37)–(40)).

According to this schema of grammaticalization, the space domain is the direct source for the conceptualization of time only in the Time Landscape's Metaphor ((59)–(66)). Other expressions of the Moving Observer Metaphor seem to rely on the domain of motion as well as space ((41)–(56)), and the Moving Time Metaphor is based either only on the domain of motion ((1)–(4), (6)–(12), (36), or motion and object domains (in cases where time and events are conceptualized in terms of moving objects, as in (17)–(28), or where time is conceptualized in terms of a substance).

We may say, then, that the examples from the Estonian language show that all the four domains to the left of time in B. Heine's grammaticalization chain (person, e.g., *käesolev* 'this, current' lit. 'in hand-being' object, e.g., *eest* 'ago' lit. 'from the front', *pärast* 'after', lit. 'from the rear' *palju aega* 'much time', process, e.g., *aeg möödub* 'time passes' or space, e.g., *kella nelja paiku* 'around four o'clock' lit. 'around the place of four o'clock') may appear as sources for the conceptualization of time (and not only space).

Examples (41) and (42) are interesting from the point of view of grammaticalization. Of two formerly fully synonymous postpositions, *tagasi* ja *teed*, only the former has survived into contemporary language. The reasons behind this deserve a detailed study.

The extension of meaning involving a change in the form can be illustrated by the example of *õhta esi* 'the time immediately before the sunset'– a (by now obsolete) expression with a narrow temporal sense has widened in meaning in the form *eelõhtu* 'eve' which can denote a longer period of time.

4. Conclusion

The examples from the Estonian language show that although the moving time and the moving observer are the two basic models in the conceptualization of time and events, there are cases where it may be rather difficult to identify the metaphor underlying a particular linguistic expression. Some expressions can be interpreted in terms of either metaphor (e.g., *viimati* 'last' see also (33), (34), (57). Consider also the expression *aja **jooksul*** (POSTPOS, < the verb *jooksma* 'run') 'in the course of time': it is difficult to say who does the running – the time or the observer. The more likely interpretation, however, is to regard it as an expression of the Moving Time Metaphor, along with other expressions describing the movement of time.

In other cases, one and the same word may be employed by both metaphors (e.g., *eespool* – compare (22) and (52); *edasi* – (36) and (46)–(50); *eestaeg* – (19) and (51)). Moreover, a single sentence may combine different mappings (consider, e.g., *Astume järgmisse aastasse*. lit. 'We step into the following year', or *Aastad lähevad aegamööda*. 'Years go slowly. , lit. 'Years go along time.').

In summary, we may say that the metaphorical conceptualization of time is governed in Estonian by two metaphors, which motivate meaning extensions from, in broad terms, the domain of space into the domain of time: the Moving Observer Metaphor (related to the speaker's orientation in the 'space of time' and to the understanding of space in terms of a landscape), and the Moving Time Metaphor (we conceptualize time in terms of an object with integral front and rear parts, which is moving through space). While in the Moving Observer Metaphor, time is conceptualized in terms of static space (i.e., as stationary), in the Moving Time Metaphor, time is an object moving in space. In the Moving Time Metaphor, time is a succession of moving events (*tuleval nädalal* 'in *coming* week'). Events may be alternatively conceptualized as a row of individual oriented moving objects (*eest*, lit. 'from front' *pärast*, lit. 'from rear'), or as a flowing substance (*aeg läheb, möödub* 'time goes, passes'). The objectification of events / time enables us to measure time as a substance (*hulk aega* 'a lot of time'). In the Moving Observer Metaphor, events are locations in time, which require a certain effort from the speaker to reach them: the speaker has to move for-

ward (*edaspidi*), and which the speaker can leave (*seljataha* 'behind his back'), and which the speaker can recall by returning to them in time (going *tagasi* 'back'). The Time Orientation Metaphor is clearly compatible with the Time Landscape's Metaphor, but not with the Moving Time Metaphor, except in the dialectal examples (13)–(16). Time may pass the observer, e.g., crosswise; it is only the moving row of time objects / events that is relevant. Additionally, there is one expression, (35), which is compatible only with the Time Orientation Metaphor.

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Aja mõistestamisest eesti keeles

Ann Veismann

Artikkel vaatleb eesti keele ajaväljendeid kahest perspektiivist. Esiteks George Lakoffi ja Mark Johnsoni pakutud mõistemetafooridest lähtuvalt. See tähendab seda, kuidas eesti keele seisukohast aega mõistestatakse (alaptk 2). Ja teiseks grammatikaliseerumise vaatepunktist (peamiselt B. Heine järgi) (alaptk 3). Vaatekohad on omavahel muidugi seotud, grammatikaliseerumise üheks aluseks peab Heine just metafoore, st inimese loovat keelekasutust, mis võimaldab tähenduse laienemise ühest kognitiivsest valdkonnast teise. Kuna nii grammatikaliseerumist kui tähenduse metafoorilist ülekannet peetakse nendes teooriates ühesuunaliseks protsessiks, siis on tähelepandavaks probleemiks see, millistest valdkondadest millistesse tähendusülekanded toimuvad. Niisiis keskendun sellele, millised metafoorid on eesti keele ajaväljendites kasutusel ning kuidas need sobivad Lakoffi ja Johnsoni metafooride pildiga. Uurimist leiab, kas erinevatest metafooridest kujuneb mingi süsteem ja kui-

das metafoorid väljendites põimuda võivad. Samas aga jälgin, millistest konkreetsema sisuga substantiividest ja kuidas on tuletatud abstraktsema tähendusega (grammatilisemad) ajasõnad.

Ruumivaldkonnast ajavaldkonda mõistelist ülekannet võimaldavate metafooride kohta võib üldiselt eesti keele näidete põhjal ütelda, et kuigi liikuv aeg ja liikuv vaatleja on kaks põhimudelit, mille kaudu ajast ja sündmustest räägitakse, ei ole konkreetselt keeles iga väljendi puhul metafoori määramine sugugi probleemideta. Nii leidub väljendeid, mille puhul ei saa kindlalt väita, kumma metafooriga on tegemist (nt *viimati*, vt ka näited 33, 34, 57). Ka väljendi ***aja jooksul*** kohta pole võimalik kindlalt ütelda, kas selles metafooris jookseb aeg või kõneleja mööda aega, tõenäolisem on siiski seda kõrvutada teiste aja (mis tahes muul moel) liikumise metafooridega.

Üks ja sama sõna võib olla ka rakendatud mõlema metafoori teenistusse (nt *eespool* – nd 22 ja 52; *edasi* – 36 ja 46–50; *eestaeg* – 19 ja 51). Ning lõpuks võib ka ühe lausungi piires olla kokku pandud kaks arusaama ajast (nt *astume järgmisse aastasse* või *aastad lähevad aegamööda*).

Kokkuvõtvalt võib aja metafoorse mõistestamise kohta ütelda, et eesti keeles eksisteerib kaks metafoori, mille kaudu laiemalt võttes ruumi valdkonnast ajavaldkonda tähenduse ülekanne toimub: esiteks liikuva vaatleja metafoor (mis on seotud kõneleja orientatsiooniga n.ö ajaruumis ja ruumi maastikulisusega) ja teiseks liikuva aja metafoor (milles aeg on mõistestatud läbi ruumi liikuva objektina, millel sisemised esi- ja tagaosa). See tähendab, et esimese puhul on aeg kontseptualiseeritud otseselt (staatilise) ruumi kaudu (paigalseisva ruumina), teise puhul aga (ruumis) liikuva objektina. Liikuva aja metafoori kaudu mõistetakse aega liikuvate sündmusete ahelana (*järgmisel* ehk *tuleval nädalal*). Sündmusi omakorda võib mõista kas üksikute orienteeritud liikuvate objektide reana (*eest, pärast*) või kui ühtlaselt voolavat substantsi (*aeg läheb, möödub*) ning sündmuste/aja objektistamine võimaldab aega kui substantsi mõõta (*hulk aega*). Liikuva vaatleja metafoori puhul aga on sündmused mõistetud lokalisatsioonidena ajas, mille juurde jõudmiseks peab kõneleja tegema pingutusi – edasi liikuma (*edaspidi*), või millest kõneleja saab lahkuda (nende otsa lõppedes) (*seljataga*) ja mille meenutamiseks peab ta ajas (ajateekonnas) tagasi pöörduma (*tagasi*). Kui ajamaastiku metafoori puhul on orientatsioonimetafoori kehtimine selge, siis liikuva aja metafoori puhul see nii pole. Aeg võib mööduda vaatlejast ka nt risti eest läbi (oluline on vaid ajaobjektide/sündmuste liikuv rivi). Vaid mõned (murde) näited kinnitavad orientatsioonimetafoori sobivust liikuva ajaga (13–16). Lisaks leidub väljend (35), mille puhul saab rääkida ainult orientatsioonimetafoorist.

Getting down to 'downs': some observations about the Estonian verb-particle constructions with *alla* and *maha*.[1]

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1. Introduction

The paper addresses the meaning of some Estonian fixed expressions consisting of a verb and an adverbial particle (known as *ühendverbid* 'combination-verbs' in Estonian, *phrasal verbs* or *verb-particle combinations/constructions* in English). I will follow the convention of referring to such expressions as verb-particle constructions.

The analysis relies on two assumptions:

(a) the majority of verb-particle constructions are not idiomatic and arbitrary combinations, but motivated and compositional: both the verb and the particle contribute to the meaning of the full expression (Morgan 1997). Although there certainly are semantically opaque expressions among verb-particle constructions, most of them (especially the particle component) do seem to lend themselves to a systematic analysis.

(b) the semantics of relational lexical items like adpositions and adverbial particles can be described as radial categories, i.e., as structures that can be explained in terms of a central image schema and the various elaborations and metaphorical extensions of the central schema (Lakoff 1987). Image schemas are 'recurring, dynamic patterns of our perceptual interactions and motor programs that give coherence and structure to our experience' (Johnson 1987: xiv). For example, the VERTICALITY schema,

"...emerges from our tendency to employ an UP–DOWN orientation in picking out meaningful structures of our experience. We grasp this structure of verticality repeatedly in thousands of perceptions and activities we experience every day, such as perceiving a tree, our felt sense of standing upright, the activity of climbing stairs, forming a mental image of a flagpole, measuring our children's

[1] I would like to thank Ilona Tragel and Ann Veismann for their helpful comments on an earlier version of this paper.

heights, and experiencing the level of water rising in the bathtub. The VERTICALITY schema is the abstract structure of these VERTICALITY experiences, images, and perceptions....' (Johnson 1987: xiv).

Image schemas are, then, experientially basic structures, which may be projected by metaphor onto abstract spheres. There is substantial evidence to support claims about the psychological reality of image schemas (Gibbs and Colston 1995). Two or more image schemas may be linked together to form image schema configurations or transformations (Lakoff 1987).

Susan Lindner's extensive study of the particles *up* and *down* in English verb-particle constructions shows that a very large number of expressions (nearly 2000) is covered by a small number of prototypical schematic structures (1981). Lindner's study has served as the basis for much further research in the field, including P. S. Morgan's analysis of some verb-particle constructions with *out* (1997), and F. Boers's thorough analysis of English spatial prepositions and their extensions (1996), both of which make extensive use of the Conceptual Metaphor Theory in accounting for the systematicity in the meanings of verb-particle constructions. My analysis of the Estonian adverbs *maha* and *alla* has borrowed a great deal from each of these studies.

2. Two case studies from Estonian: the adverbs *maha* and *alla*.

Estonian encodes the movement towards the 'negative' end of the up–down axis primarily by means of two spatial adverbs, *maha* and *alla,* which in most cases can be translated by one of the following English particles: 'down' 'under' 'below' 'off' or 'behind' depending on the particular usage. Both adverbs occur in a fairly large number of verb-particle constructions, especially *maha*: *Ühendverbide andmebaas* (the Database of Estonian Phrasal Verbs) lists 167 instances with *maha*, compared to 94 instances with *alla*[2] *Maha* is etymologically related to *maa* 'earth, ground', and is thus compatible with the grammaticalization evidence from many languages sug-

[2] The figures represent the numbers of different forms – similarly to English phrasal verbs, Estonian verb-particle constructions include many polysemous and homonymous expressions.

gesting that this environmental landmark is the commonest source model for the spatial reference point 'down' (Heine 1997). *Alla* derives from *ala* 'field, area' (Palmeos 1982). According to *Eesti kirjakeele seletussõnaraamat* (the Dictionary of Written Estonian – the EKSS), both adverbs may be used to indicate downward movement and movement to the ground. Saagpakk's *Estonian–English Dictionary* (1992) gives *down* as the first translation equivalent for both. In some contexts, *maha* and *alla* can be used interchangeably:

(1)

Ronis	puu	otsast	alla/maha.
climb-PST:3SG	tree:GEN	from:POSTPOS	down

(He) climbed down from the tree.

It has been pointed out, however, that the apparent interchangeability of two linguistic items does not necessarily indicate perfect synonymy, but may be accounted for by the fact that, although the items essentially differ with respect to the relations they profile, the profiled relations may be applicable to the same real-world configuration of entities (Taylor 1988: 309). Furthermore, the distributional overlap of the two particles appears to be fairly limited: in most spatial expressions with adverbial *alla* and *maha* there is a fairly strong preference for either one or the other. One could ask here whether this is due to arbitrary selectional restrictions that certainly govern much of the way we use language, or can we speak of two distinct categories? In what follows, I attempt to argue that the latter is the case, and that the distribution patterns of *alla* and *maha* can largely be systematically accounted for by the underlying image schema configurations, which, although they both encode verticality, are not identical. The central image schemas and their elaborations that underlie the spatial senses of the two adverbs, appear to motivate also the uses of *alla* and *maha* in more abstract domains. Many seemingly idiomatic and unsystematic verb-particle constructions with *alla* and *maha* can thus be seen as metaphorical extensions from the central schemas; expressions based on the same conceptual metaphor seem to be formed, systematically, with either one or the other adverb; interchangeability is, again, rare.

Erelt et al. (1993) divide Estonian verb-particle constructions into two groups: unique and regular combinations. Unique combinations are described as syntactically and semantically unanalyzable units (e.g., *üles ütlema* 'break' lit. 'say up' *maha võtma* 'put off

weight' lit. 'take down'). Regular combinations are syntactically inseparable but semantically analyzable combinations of verbs and adverbs (e.g., *alla minema* 'go down', *tagasi jooksma* 'run back') (Erelt et al. 1993).

Especially the first group – unique combinations – seems to open up possibilities for further categorization into subgroups based on the degree of semantic transparency. This could be done, for example, along the lines suggested by Morgan, who, in her discussion of English verb-particle constructions, has distinguished between four classes of expressions (1997:355):

(a) literal particle, literal verb. The category could be illustrated by the following examples from Estonian: *Panin kohvri maha*. '(I) put the suitcase down. *Kummardus alla*. '(He) bent down.
(b) literal particle, metaphorical verb: *Kogupauk niitis esimesed ründajad maha*. 'The volley mowed the first attackers down.
(c) metaphorical particle, literal verb: *Kõneleja karjuti maha*. 'The speaker was shouted down. *Kaubad hinnati alla*. 'The goods were sold at a discount. Lit. 'The goods were priced down.
(d) metaphorical particle, metaphorical verb: *Sellist võimalust ei tohi maha magada*. An opportunity like this should not be missed (lit. slept down). *Vaenlane andis alla.* 'The enemy surrendered (lit. gave under).

Since the paper is concerned with the polysemy and metaphorical extensions of the adverbial rather than the verbal component of verb-particle constructions, most of my examples would be classified under (a) and (c) – i.e., where the verb provides, literally, the target domain, and the particle, either literally or metaphorically, an image schema (Morgan 1997: 329). However, occasional examples will be given also of type (d), to show that expressions of this category, the most readily associated with semantic opaqueness, frequently reveal more semantic systematicity than they are generally given credit for, at least as far as the particle component is concerned. The main sources of primary information and examples include the EKSS, *Eesti Keele Sõnaraamat* (the Dictionary of the Estonian Language, 1999 – the EKS), Saagpakk's *Estonian–English Dictionary* (1992), and the University of Tartu *Ühendverbide andmebaas* (*The Database of Phrasal Verbs*).

3. Alla and *maha*: the central schemas. 'Absolute' and 'relative' downness

A schema relevant to the meanings of both *alla* and *maha* is the VERTICALITY (UP–DOWN) schema: *alla* and *maha* are prototypically dynamic (path) adverbs which describe the movement of an entity (trajector – TR) along a vertical space axis.

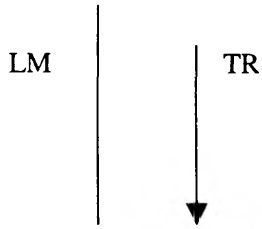
The only landmark relevant to the spatial meaning of *alla* seems to be the vertical dimension of the entity against which/whom the TR's downward movement is profiled, or if there is no such entity, the vertical direction in general. The actual LM entity may thus be expressed overtly or left covert:

(2)

Ta	läks	(trepist)	alla.
he:NOM	go-PST:3SG	(staircase:ELA)	down

He went down (along the stairs).

Figure 1. The central schema for *alla*



In its prototypical sense, *alla* denotes downward movement along a vertical path (Figure 1). This should be regarded, however, as an idealized schema – in reality the path followed by a TR is rarely vertical, but ranges from near-vertical (3) to near-horizontal (4):

(3)

Korstnapühkija	ronis	redelit	mööda alla.
chimney sweep:NOM	climb-PST:3SG	ladder:PRT	along:POSTP down

The chimney sweep climbed down along the ladder.

(4)

Sõitsime	mööda	jõge	alla.
go-PST:1PL	along:PREPOS	river:PRT	down

(We) went down along the river.

The path may be traversed physically, as in (3) or (4), or mentally, as in (5).

(5)

Vaatasin	mäelt	alla	orgu.
look-PST:1SG	hill:ABL	down	valley:ILL

I looked down from the top of the mountain into the valley.'

The origin (source) or the endpoint (goal) of the path may be indicated, as in (5), but neither of the two appears integral to the meaning of *alla*: the adverb simply denotes downward movement without an encoded source or goal.

The central schema underlies a number of spatial verb-particle constructions : e.g., *alla kukkuma* 'fall down' *alla laskma* 'lower, go down a mountain (on a sledge)' *alla lendama* 'fall down (lit. 'fly down')' *alla minema* 'go down' *alla sadama* (Example (6)), *alla vaatama* 'look down' *alla viskama* 'throw down'

(6)

Poiss	sadas	puu	otsast	alla.
boy:NOM	fall-PST:3SG	tree:GEN	from:POSTP	down

The boy fell off the tree.

The central sense of *alla* thus appears to be motivated by two image schemas: the VERTICALITY and the PATH schema. Prototypically, then, *alla* denotes movement from a higher position to a lower position, i.e., descent in general, not related to a particular perspective. By analogy with the term offered by Lindner (1981) for the corresponding usages of *up*, this category of neutral downward movement has been referred to as 'absolute down' (Lindstromberg 1998: 186). 'Absolute down' is opposed to 'relative down' which is related to a particular viewpoint.

Although orientational concepts such as verticality and downward movement are probably among the leading candidates for semantic universals, the way they are 'divided up' by lexicalized categories is likely to be more language-specific. Thus, in contrast with languages such as English, where the same lexical item *down* covers both categories, Estonian seems to have a separate lexicalized concept for 'absolute down' *alla,* and a concept for at least one kind of 'relative' downness: 'down to the ground' or perhaps more accurately, 'down to the surface directly under LM1 ' – *maha.*

For *maha* there is more than one landmark that appear equally integral to the prototypical sense of the adverb: LM1, a vertical space axis, and LM2, a horizontal surface, with which the TR comes into

contact. The former is always covert, the latter may be either covert or overt:

(7)
Ta pillas paberi (põrandale) maha
he:NOM drop-PST:3SG wrapper:GEN (floor:ALL) down
He dropped the wrapper down (on the floor).

The prototypical end-point of the TR's path is probably the ground. However, the downward movement described by *maha* may also be relative to any other surface on which people conventionally stand (e.g., a floor), or on which objects are supported (a table in (8)):

(8)
Natuke kohvi loksus üle ääre maha
some coffee:PRT spill-PST:3SG over:PREPOS brim:GEN down
Some coffee spilt over the brim

The central schema of *maha* seems to encode one more CONTACT schema – the origin of the path (LM3). *Maha* implies that the TR has been in contact with some surface, and been separated from it.

Judging by the examples with *maha* in the EKSS and elsewhere, and the native speaker's intuition, the spatial region profiled by *maha* differs from the 'absolute' *alla* in that it appears to be, at least to an extent, constrained by the 'vertical dimension' of the observer, i.e., the length of the human body: *maha* appears to refer primarily to downward movement within the space confined by the surface directly under the LM1 entity and by the vertical dimension of the LM1. I try to illustrate the statement by the following constructed examples:

(The speaker is standing on the landing of a staircase with a key in his hand. He drops the key.)

(9)
Võti kukkus maha.
key:NOM fall-PST:3SG down
The key fell down.

(10)
"Võti kukkus alla."

(9) refers to a situation where the key was dropped onto the floor in front of the speaker, (10) to a situation where the key fell down the staircase (possibly to the ground below).

Consider also the following examples:

(11)
Raamat kukkus riiulilt maha.
book:NOM fall-PST:3SG shelf:ABL down
The book fell from the shelf.

(12)
Raamat kukkus riiulilt alla.

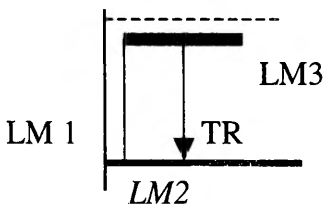
(13)
Lamp kukkus laest alla.
lamp:NOM fall-PST:3SG ceiling:ELA down
The lamp fell from the ceiling.

(14) ?Lamp kukkus laest maha.

While both (11) and (12) are acceptable, (11) would be the preferred choice in a situation where the book has fallen down from a location at or below the observer's face level, and (12) in where the book had been located above the speaker's head. This seems to be confirmed by the oddity of (14). This is consistent with the prominence of the source and goal of the path to the meaning of *maha*: both LM2 and LM3 should be within the immediate perceptual field of the observer.

The central schema of *maha* thus differs from the schema for *alla* in that while *alla* intrinsically highlights the path itself (i.e. downward movement as such), *maha* highlights the initial and the end point of the path (the source and the goal), as depicted in Fig 2.

Figure 2. The central schema for *maha*



(15)
Kohvikann kukkus laua pealt maha
coffe-pot:NOM fall-PST:3SG table:GEN from:POSTPOS down
The coffee-pot fell down from the table.

LM1 – the vertical dimension of the table
LM 2 – the horizontal surface under the table
LM 3 – the horizontal surface of the table
The dotted line indicates that the table is below the observer's face level.

The prototypical relation expressed by *maha* is thus based on an image schema configuration involving the VERTICALITY, PATH, and two CONTACT schemas – contact with the source and the goal of the path.

4. Some elaborations and extensions

These central schemas of *alla* and *maha* can undergo various elaborations and are metaphorically extended into a number of abstract domains.

4.1. Alla

4.1.1. The SCALE extensions

The central schema, defined by a downward TR path and a 'vertical axis'– LM, is metaphorically mapped onto various abstract domains by means of the SCALE schema, which is based on our tendency to "view our world as a massive expanse of quantitative amount and qualitative degree or intensity" (Johnson 1987: 122). We typically structure amount in terms of verticality.

The metaphor LESS IS DOWN is grounded in our experience with objects and substances – if you add to a container or a pile, the level goes up, if you reduce the quantity of a substance in a container, the level comes down (Lakoff and Johnson 1980:16):

(16)
Järv lastakse alla.
lake:NOM let-IMS:PRS down
The level of the water in the lake will be lowered.

The metaphor LESS IS DOWN motivates, for example, the verb-particle constructions *alla hindama* 'lower the price' lit. 'price down', *alla tingima* 'bargain' lit. 'bargain down', *alla laskma* 'reduce', lit. 'let down', *alla minema* (17):

(17)
Hinnad läksid alla.
prices:NOM go-PST:PL down
The prices went down.

The normative character of SCALES appears, e.g., in the following expressions: *alla käima* 'come down in the world', lit. 'go down', also *alla kiskuma*, lit. 'tear down' *alla võtma* (18), *alla tirima*, lit. 'drag down' *alla tõmbama*, lit. 'pull down', *alla viima*, lit. 'take

down', all of which could be glossed as 'reduce the positive value of sth.':

(18)
Poisil võeti hinne alla.
boy:ADE take-IMS:PST grade:NOM down
The boy had his grade lowered.

(19)
Viimase aja sündmused on tema
last:GEN time:GEN events:NOM have he:GEN
autoriteeti kõvasti alla kiskunud.
reputation:PRT considerably down tear:PST-PART
The recent events have considerably damaged his reputation.

It is easy to see that the SCALE-metaphors are consistent with the central schema of *alla*: the vertical axis is a scale (of amount, status, etc.), on which the TR (prices, grades, etc.) move or are moved.

4.1.2. The FORCE extensions

VERTICALITY can be combined with FORCE, as in:

(20)
Vajutas nupu alla.
press-PST:3SG button:GEN down.
(He) pressed the button.

The FORCE schema has been described as a general schema that consists of several more specific schemas: COMPULSION, BLOCKAGE, COUNTERFORCE, ENABLEMENT, etc. (Johnson 1987: 45–47). COMPULSION and BLOCKAGE appear especially relevant to the above schema: an entailment of the schema is that an entity that has been forced down remains blocked until the external force is removed. Although the force schema is in most cases literally expressed by the verb: *tirima* 'drag', *tõmbama* 'pull', *suruma* 'press', etc., this entailment seems to be frequently taken over and carried by the particle in expressions describing situations where an entity is held metaphorically 'down' by metaphorical 'force' The VERTICALITY – FORCE schema configuration is the source model for the conceptual metaphor BEING SUBJECTED TO CONTROL OR FORCE IS DOWN (Lakoff and Johnson 1980: 15) which motivates, e.g., the following verb-particle constructions: *alla jääma* 'lose', lit. 'remain down' *alla suruma* 'suppress', lit. 'press down' *alla vanduma* 'yield (to sb./sth.)' lit. 'swear down'

For this conceptual metaphor Lakoff and Johnson identify a twofold physical basis: "physical size typically correlates with physical strength, and the victor in a fight is typically on top" (1980:15). We should expect, then, to find two kinds of metaphorical expressions – those based on absolute upness and downness (grounded in the physical size correlation in experience, and in the image of metaphorical force "holding" an entity "down"), and those based on the 'down-to-the-ground' schema (grounded in the physical fight correlation: the loser is typically lying on the ground). Examples from Estonian show that this is the case. Compare, e.g. (21) and (22):

(21)
Ma jään talle (jõult/mõistuselt) alla.
I:NOM remain-PRS:1SG he:ALL (strength/intelligence:ABL) down
He ranks above me (in strength/intelligence).

(22)
Ülestõus suruti maha.
rebellion:NOM press-IMS:PST down
The rebellion was put down.

With the verb *suruma* 'press' both *maha* and *alla* can be used, and sometimes, it may seem, interchangeably:

(23)
Ta surus oma viha alla.
he:NOM press-PST:3SG his anger:GEN down.
He suppressed his anger.

(24)
Ta surus oma viha maha.

I would argue here, however, that (23) would be a more natural choice in a situation where the person has managed to restrain his anger, perhaps temporarily (and may explode later, when the force is removed), whereas (24) implies that the anger has been done away with completely, and is thus consistent with the perfective sense of *maha* (see below).

4.1.3. The BALANCE extensions

As *alla* describes 'neutral verticality' – a path along an 'absolute' vertical axis, not constrained by a particular viewpoint or landmark,

it makes sense that *alla* as a postposition[3] is used also in the sense 'under, below, into a location lower than another entity':

(25)
Ta he:NOM puges creep-PST:3SG voodi bed:GEN alla. under:POSTPOS
He crept under the bed.

A similar sense appears also among the adverbial usages of *alla*, but, unlike the postposition *alla*, the adverb *alla* always presupposes contact between the two entities.

(26)
Pani put-PST:3SG õunapuule apple tree:ALL toed supports:NOM alla. under
(He) put supports under the (branches of the) apple tree.

(27)
Pane put:IMP suusad skis:NOM alla. under
Put the skis on.

Alla could not be replaced with *maha* in these examples. In a way, these usages seem to encode, in addition to the VERTICALITY (the vertical sense is relevant, although the path of the TR is not necessarily vertical) and CONTACT schemas also the BALANCE schema – *alla* indicates that the TR moves into a location where it has a supportive function (26) or a function contributing to the readiness-for-action of another entity (27). The schema is metaphorically extended into the domain of written communication, motivating expressions such as *alla kirjutama* 'sign' lit. 'write under' and *(templit, pitsatit) alla lööma* 'seal, stamp' lit. 'put (a seal, stamp) under': by signing or sealing a document we as if balance its contents with our authorization, making it 'ready for action'

4.2. *Maha*
4.2.1. The COVERAGE extensions

An elaboration of the central 'verticality' schema is *maha* in the sense 'into the earth' (according to etymological criteria, this sense of *maha* should probably be considered prototypical, as the adverb

[3] *Alla* has also several adpositional senses. This is a characteristic shared by many Estonian adverbial particles (Erelt et al. 1993), but not by *maha*, which is used only as an adverb.

maha corresponds in form to the illative of the noun *maa* 'ground, earth' The two major dictionaries of contemporary Estonian, the EKSS and EKS, however, list the sense 'to the ground' as the primary sense.), as in:

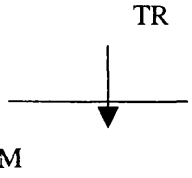
(28)

Need	lillesibulad	pannakse	maha	sügisel.
These:NOM	bulbs:NOM	put-IMS:PRS	down	autumn:ADE

These bulbs are planted in the autumn.

A schematic representation of this sense of *maha* has been provided in Figure 3.

Figure 3



Maha in this sense seems to encode a further image schema – COVERAGE. Our natural inferences about coverage (i.e., a covered entity is hidden from senses) seem to motivate a few verb-particle constructions with *maha*, such as *maha vaikima* 'keep smt. secret' lit. 'hush down' and *maha salgama* 'disown', lit. 'deny down', also *maha magama* 'miss (an event, etc.)' as in (29):

(29)

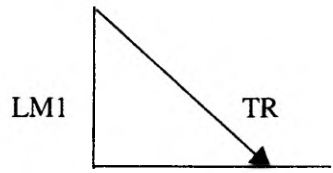
Magas	hea	võimaluse	maha.
sleep-PST:3SG	good:GEN	opportunity:GEN	down

(He) missed a great opportunity.

4.2.2. The 'reflexive' extensions

An elaboration of the English *down* is the 'reflexive' *down*, expressing the downward movement of an entity with respect to the entity itself – i.e., the movement affects only a part of the entity, as in 'They settled down at the table. or 'We lay down. (Boers 1996: 90).

Figure 4



In Estonian the reflexive movement is expressed typically with *maha*, not *alla*:

(30)
Mehed võtsid metsas puid maha/*alla.
men:NOM take-PST:3PL forest:INE trees:PRT down
The men were cutting down trees in the forest.

(31)
Heitsin maha/*alla.
lie-PST:1SG down
(I) lay down.

Since *maha* in such expressions clearly involves contact with the ground (Figure 4), the usage is easily accounted for by the central schema of *maha*. *Alla* is used in reflexive schemas only if there is no contact between the moving part of the entity and the ground:

(32)
Kummardus alla.
bend-PST:3SG down
(He) bent down.

As this schema represents the bodily experience of falling or lying down, as when one is sick or dead, it underlies several metaphors based on bodily posture, such as SICKNESS AND DEATH ARE DOWN (Lakoff and Johnson 1980:15), which is reflected in the large number of verb-particle constructions related to killing: e.g., *maha lööma* 'kill' lit. 'strike down', *maha laskma* 'shoot dead' lit. 'shoot down' *maha kõmmutama* 'shoot dead', lit. 'slam down', etc.. Unlike in English, where the same metaphor has come to motivate the understanding of non-functioning in general – NON-FUNCTIONING IS DOWN also for inanimate objects ('The car broke down.'), this usage of *maha* is more constrained in Estonian by the spatial sense of *maha*:

the examples above, after all, still activate the domain of physical downward movement. The usage, however, seems to have undergone a metonymic extension in that *maha* in the verb-particle constructions entails 'dead'· e.g., *maha laskma* would not be used if the person shot at were not dead (even if he is lying down).

4.2.3. The perfective extensions

Alongside with some other particles, such as *ära* 'off, away', *läbi* 'through' and *välja* 'out' maha is a common marker of perfectivity in Estonian verb-particle constructions (Erelt et al. 1993). This sense of *maha* is not shared by *alla*:

(33)
Rahune maha.
calm:IMP down.
Calm down.

(34)
Koosolek peeti maha.
meeting:NOM hold-IMS:PST down
The meeting was held.

(35)
Giid vuristas oma seletuse kiiresti maha.
guide:NOM rattle-PST:3SG her commentary fast down
The guide rattled off her commentary.

(36)
Käisime paarkümmend kilomeetrit maha.
walk-PST:1PL some twenty kilometres:PRT down
(We) walked some twenty kilometres.

The perfective use of *maha* seems to be fully sanctioned by the central schema of *maha* with its focus on the end-point of the TR's path. However, it is more difficult to explain the motivation behind the extension of the schema for *maha* into the domain of completion. It seems reasonable to assume that several conceptual mappings, rather than a single metaphor (i. e., COMPLETION IS DOWN), have been at work in establishing *maha* in its perfective sense: thus, although all the above examples convey a perfective meaning, (33) instantiates the LESS IS DOWN metaphor, while (34) seems more compatible with the REALITY IS DOWN metaphor (Lakoff and Johnson 1980:19). (35) and (36) are less easy to interpret in terms of the orientational metaphors identified by Lakoff and Johnson and others on the basis of English. I would conjecture that (34), (35) and (36)

show that events and activities can be conceived as vertical structures of some sort, and performing the activities involves gradually diminishing the structures (i.e., taking them down). This seems to be at variance with languages such as English, where the completion of an event is often conceptualized in terms of upward movement (COMPLETION IS UP): *write up*, *eat up*, etc.

A comparison of the verb- *maha* constructions motivated by the LESS IS DOWN metaphor with the verb- *alla* constructions based on the same metaphor shows that while *alla* tends to be used to in the sense 'to a quantity lower than before' (17), *maha* is used in the completive sense 'thoroughly' (29), (30):

(37)
Mees prassis varanduse maha.
man:NOM squander-PST:3SG fortune:GEN down.
The man squandered his fortune.

(38)
Parun mänginud oma mõisa maha.
baron:NOM gamble:PPT his estate:GEN down
The baron (is said to have) gambled his estate away (lit. down).

These usages of *alla* and *maha* are sanctioned by their respective central schemas, the 'absolute/neutral down' schema, and the 'relative down, down-to-the-earth' schema.

In some cases, the completive sense of *maha* appears to be motivated partially by the REALITY/CERTAIN IS DOWN metaphor. The end-of-path schema is again relevant: entities that are 'down on the ground' are generally less elusive than those that are up in the air. The metaphor appears, e.g., in the expressions *maha tegema* 'to agree on smt. lit. 'do smt. down', *maha kuulutama* (39), and *maha saama* (40).

(39)
Maali ja Tõniskuulutati
pühapäeval maha.
Maali:NOM and Tõnis:NOM announce-IMS:PST
Sunday:ADE down
Maali and Tõnis's intended marriage was announced in the church on Sunday.

(40)
Naine sai lapsega maha.
woman:NOM get-PST:3SG child:COM down
The woman had the baby.

Perfective *maha* can be motivated also by reference to the BAD IS DOWN metaphor (Lakoff and Johnson 1980:16), as in *maha laitma* 'disparage, criticize (lit. down)' and *maha hääletama* 'vote down':

(41)

Ma	laitsin	tal	selle	kavatsuse	maha.
I:NOM	criticize-PST:1SG	he:ADE	this:GEN	intention:GEN	down

I criticized his intention.

4.2.4. The SEPARATION extensions

Several verb-particle constructions with *maha* seem to profile a relation based on the SEPARATION schema (the corresponding English particle is *off*). As the CONTACT schema is essential to the meaning of *maha* but not to *alla*, it is not surprising that *alla* has not developed this sense. I have distinguished between two groups of expressions based on the SEPARATION-schema.

(a) SEPARATION – VERTICALITY

An entity, previously in contact with the landmark, becomes separated from the landmark, as in (15). 'Contact' can be understood literally in terms of physical contact (15) or figuratively through metonymy (closeness of entities in space is conceived as being in contact, although there may be no literal contact) or metaphor (emotional attachment or addiction is conceived in terms of contact). Consequently, spatial and mental separation (the cessation of the attachment/addiction) is understood in terms of the severance of contact: consider, e.g., the English verb-particle constructions *shake off* and *put off* in

(42)
They shook off the police.

(43)
The accident put him off driving.

which profile the SEPARATION- schema. In Estonian, separation appears to be construed on the basis of a somewhat different entailment of the schema: if entities lose contact with a supporting surface, they are likely to fall down onto the ground, by the force of gravity:

(44)

Pillasin	käekella	maha.
drop-PST:1SG	watch:GEN	down

(I) dropped (my) watch.

Verticality and the end-point of the path (the ground) thus also becomes relevant, giving rise to a metaphor which could be glossed as SEPARATED IS DOWN. As we generally distance ourselves from the point where we lose contact with someone/something also spatially, *maha* frequently acquires the locational sense 'in a place where one has been, behind' The actual place where the separation has occurred may be either made overt or left covert:

(45)

Ma	unustasin	oma	käekella	(hotelli)	maha.
I-NOM	forget-PST:1SG	my	watch:GEN	(hotel:ILL)	down

I left my watch (at the hotel).

(46)

Tal	jäi	perekond	(kodumaale)	maha.
He:ADE	stay-PST:3SG	family:NOM	(homeland:ALL)	down

He left his family behind (in his home country).

The same schema underlies the expression *maha minema* 'get off (from a bus, train, etc.)' lit. 'go down':

(47)

Selles	peatuses	ei	läinud	keegi	maha.
this:INE	stop:INE	not	go-PST:3SG	nobody:NOM	down

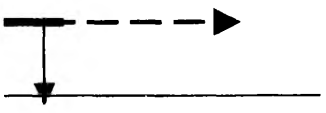
Nobody got off at this stop.

The TR is a person, the LM is a vehicle, which continues along its path, leaving the person 'down' (behind).

Maha in these expressions thus seems to encode two kinds of path schemas: the vertical path of descent, and the horizontal path of journey (Figure 5):

Figure 5

(45)



Our experience with letting things we are no longer interested in keeping fall down and leaving there, while we are moving on appears to have motivated the use of *maha* in the verb-particle combination *maha jätma* 'abandon, desert' lit. 'leave down':

(48)
Jaak olevat pruudi maha jätnud.
Jaak:NOM be:QUOT girl-friend:GEN down leave:PPT
Jaak is said to have left his girl-friend.

(49)
Jätsin suitsetamise maha.
leave-PST:1SG smoking:GEN down
(I) gave up smoking,

Maha contributes also a sense of completeness to the above expressions – the separation must be (or intended to be) of a permanent nature. E.g., in a situation where a person has stopped smoking temporarily, (49) would be inappropriate, while (50) is acceptable:

(50)
Jätsin suitsetamise.
leave-PST:1SG smoking:GEN
(I) stopped smoking.

A further elaboration of the schema seems to highlight the locational aspect of the schema – *maha* as behind, while, however, not downgrading the relevance of the CONTACT-schema:

(51)
Ta ei jää minust sammugi maha.
he:NOM not stay-PRS:3SG I:ELA step:PRT down
She won't fall a step behind.

(52)
Jäin rongist maha.
stay-PST:1SG train:ELA down
I missed the train.

A figurative extension of the schema underlies the verb-particle constructions where *maha* carries the evaluative meaning 'less advanced, successful, etc.' calling upon the metaphor PROGRESS IS MOVEMENT FORWARDS, which can be regarded as a part of the well-known LIFE IS A JOURNEY metaphor:

(53)
Poiss jääb matemaatikas teistest maha.
boy:NOM stay-PRS:3SG maths:INE others:ELA down
The boy lags behind the others in maths.

(b) SEPARATION – NON-VERTICALITY

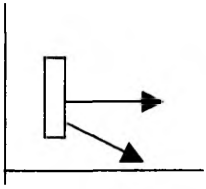
Maha in the sense 'off with no reference to VERTICALITY, as in:

(54)
Võta mantel maha.
take:IMP coat:NOM down
Take (your) coat off.

(55)
Hakkasin riietelt tolmu maha rapsima.
begin-PST:1SG clothes:ABL dust:PRT down wipe:INF
(I) began to wipe dust off (my) clothes.

can be considered a 'rotated' schema: the central vertical schema has been 'rotated' so that VERTICALITY is no longer relevant (Figure 6). What is relevant here is again the SEPARATION- schema.

Figure 6



The schema underlies, e.g., the verb-particle constructions referring to the removal of irrelevant information – *maha tõmbama* 'cross out (lit. down)' *maha kustutama* 'wipe out (lit. down)' or to the removal of excess weight – *maha võtma* 'put off (weight) lit. 'take down': it is difficult to think of a vertical path as relevant here.

In some of the extensions of the schema, there is no physical removal of entities involved, but the removal of ideas: *maha kirjutama* 'cheat, copy unfairly' lit. 'write down', *maha lugema* (56), etc.:

(56)
Ta luges kõne paberilt maha.
he:NOM read-PST:3SG speech:GEN paper:ABL down
He read his speech from paper.

5. Final remarks

The paper has covered only a very small part of the rich polysemy structure of the two Estonian spatial adverbs, and is no more than a glimpse into the stock of verb-particle constructions in Estonian.

Almost no reference has been made to the way the particle and verb combine to contribute to the meaning of the full expression, nor to the more idiomatic senses of the expressions. Furthermore, no 'speculative' description like this one could be really convincing unless supported by more reliable sources of data, such as evidence from psycholinguistic research, or from more extensive, corpus-based studies.

The semantic compositionality and metaphorical motivation of verb-particle constructions is a field which offers ample opportunities for an in-depth analysis. A cognitive linguistic approach, making use of image schemas and conceptual metaphors, seems to provide efficient tools for such analysis.

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Afiksaaladverbide *alla* ja *maha* tähendusest ühendverbides

Kaja Kährik

Artiklis käsitletakse afiksaaladverbide *alla* ja *maha* kasutamist ühendverbi komponendina. Lähtutakse järgmistest seisukohtadest: (1) ühendverbide (sh. ka tavaliselt idiomaatilisena käsitlevate väljendite) tähendus on paljuski süstemaatiline ja motiveeritud (Lindner 1981) ja (2) afiksaaladverbi tähendust on võimalik vaadelda polüseemilise struktuurina, milles iga tähendus kujutab endast keskse tähenduse variatsiooni (ingl. k. *radial category*, Lakoff 1987). Tähendusi ja nendevahelisi seoseid saab kirjeldada nn. kujundskeemidena (*image schema*). Kujundskeemid on teatud kognitiivsed põhistruktuurid, mis inimene omandab suhtluses maailmaga (nt. KONTAKT, INKLUSIOON jne.) ja mida ta kasutab "korra loomiseks" ka abstraktsemates kogemustes (Johnson 1987), mis keeles avaldub mõistemetafooridel põhinevates ülekannetes.

Nii *alla* kui *maha* tähistavad allapoole ja madalamale liikumist ja ka liikumist maapinnale või mingile muule pinnale (EKSS). Seega võiks oletada, et tegemist on sünonüümsete adverbidega. Samas saab *alla* ja *maha* puhul vastastikusest asendatavusest rääkida üksnes suhteliselt vähestel juhtudel. Vaadeldes *alla* ja *maha* orientatsioonimetafooridel põhinevaid tähendusülekandeid abstraktsetesse valdkondadesse, hakkab samuti silma jaotuse süstemaatilisus (nt. VÄHEM ON ALLPOOL metafoori esindavates väljendites kasutatakse valdavalt afiksaaladverbi *alla* (nt. *Hinnad läksid alla.*), perfektiivsust väljendab ainult *maha* (nt. *Käisime paarkümmend kilomeetrit maha.*) jne.). Sellest tulenevalt oletan, et *alla* ja *maha* jaotumist piiritlevad nende tähenduse aluseks olevad skeemid, mis, ehkki sarnased, ei ole siiski identsed. Kasutades S. Lindnerilt (1981) laenatud terminoloogiat võib öelda, et *alla* puhul on tegemist absoluutse allapoole liikumisega – *alla* pidepunktiks on ainult verti-

kaalne dimensioon. *Maha* pidepunkte on rohkem kui üks: olulised on ka liikumise alg- ja lõpp-punkt ja järelikult KONTAKT- skeem.

Artikkel keskendub eelkõige ühendverbidele, milles verbi tähendus on suhteliselt otsene ning mille metafoorsus tuleneb afiksaaladverbi kasutamisest. Mõne näite abil püüan siiski näidata, et samade mudelite alusel võib käsitleda ka idiomaatilisemaid ühendverbe.

On the genesis and loss of the adposition *rinnas* ('abreast, beside') in Literary Estonian

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On the grammaticalization of body-part terms

Adpositionalization of the words denoting body-parts is among the most typical cases of grammaticalization studied extensively in different languages. From the cognitive standpoint, the main interest lies in the ways we use language to interpret and conceptualize the surrounding world, and how the grammatical categories, which frame our understanding of the world, are supplemented. According to the underlying principle of grammaticalization, the notions more immediately accessible to human experience are used to conceptualize more abstract domains. (Heine, Claudi, Hünnemeyer 1991)

Nouns with body-part meaning are well-suited as sources of relational words because of their relational and static semantics, as they denote parts of a whole, and a part can metonymically extend to the space surrounding it. (Heine, Claudi, Hünnemeyer 1991) The diachronic chain of spatial concepts emerging from body-part terms is typically the following:

BODY-PART → RELATIONAL CONCEPT → SPATIAL REFERENCE POINT (Heine 1997: 39). Often it is the two more important regions of human body – the head and trunk – that provide the basis for conceptualizing space, the extremities are a less significant source of spatial concepts (Heine 1997: 43).

The difference between an inflectional noun form and the relational word is that in case of an inflectional noun form the relationship between the landmark and trajectory is expressed by the inflection, but an adverb or adposition, detached from the noun paradigm, expresses this relationship as a whole. In the evolution from the source concept to the target concept, two main shifts occur. The first is the shift from object domain to space domain and the other is the shift already within the space domain. The evolution starts from the body-part term, which is transferred to mean a part of an inanimate object. A new stage is reached when the body-part term starts to denote the region immediately adjacent to that object, and finally the

body-part denotes the whole adjacent space with no immediate contact with the object. Considering the expansion of the denoted region, this evolution proceeds via the following four stages:

1. A region of the human body
2. A region of an inanimate object
3. A region in contact with the object
4. A region detached from the object (Heine 1997: 44).

According to Heine, the concrete meaning serves as a structural template for more abstract meaning. As a result, the linguistic unit in question starts to be regularly associated with abstract meanings, i.e., the expression of grammatical relationships becomes more important than the expression of lexically concrete context – words will lose the properties linking them with the lexicon, and gradually develop into grammatical forms. In this process, the following implications can be brought:

1. Such items turn from open-class categories into closed class categories.
2. They lose in lexical meaning and acquire grammatical meaning.
3. They shift from autosemantic (they have a meaning that is largely independent of that of other items figuring in the same sentence) to synsemantic items (they depend on the meaning of other items for their realization)
4. They tend to develop into invariable forms that may no longer receive affixes.
5. They themselves tend to become clitics and eventually affixes on other words.
6. They are likely to lose in phonetic substance – that is, they become shorter. (Heine 1997: 36)

Heine also speaks of the anthropocentric and zoomorphic models of conceptualization. In case of the former, human categories are used whenever possible to understand the nonhuman categories – the human body provides the most important model for conceptualizing spatial orientation. With the zoomorphic model, the structural template for spatial orientation is provided by the body of an animal. However, no languages have been found so far where the zoomorphic model would constitute the only model for structuring the entire cognitive domain. Even in these languages where most spatial concepts originate from the body of an animal, there are at

least some terms that have a human body-part as a source (Heine 1997: 40).

The chain of grammaticalization is triggered by reanalysis of a certain grammatical structure, its precondition is the ambiguity of the construction. Reanalysis builds on analogy, whereas the model for creation of a new adposition can be supplied by an adposition already existing in the language. Reanalysis becomes noticeable when the change in language structure caused by it spreads extensionally. What is significant in this process is the meaning of the word becoming more abstract and the expansion of the construction's context of usage.

The process of grammaticalization is essentially metaphorical – it is characterized by transfer of meaning from one cognitive domain to another, typically from the spatial domain to the domains of temporality or causality. The changes occur in stages: based on the study of African languages, Heine, Claudi and Hünnemeyer (1991: 130–131) outline the following stages of grammaticalization of body-part terms:

stage 0: body-part of X (what?)
stage I: simultaneously part of X and a location (what? where?)
stage II: simultaneously a location near X and part of X (where? what?)
stage III: location near X (where?)

According to Heine et al., the stages where an expression has two overlapping meanings occupy a significant place in the grammaticalization process. They suggest that in case of body-part terms a metaphoric extension takes place at stage 0, as a word denoting a specific part comes to be used in a more general meaning. This is a metaphoric extension where the relationship between the body-part and the rest of the body is mapped onto the relationship between a location in space or landscape and its part (e.g., *mäe rind, künka rind* 'mountain slope, hill slope'). Thus, metaphorization occurs already at the noun stage, where a body-part term acquires a wider meaning than just reference to the human body-part. The following analysis of the grammaticalization of the word *rind* supports this claim rather than the view of metaphoric extension as occuring later, during syntactic reanalysis when the noun and its locative case-ending come to be perceived as a postposition and the genitival noun as belonging to it. The metaphorization involved in the cycle of grammaticalization

would then occur between stages I and II (Bybee, Perkins, Pagliuca 1994: 24–25).

On the grammaticalization of *rind* in Estonian

The following will focus on the grammaticalization of *rind* 'breast' in Written Standard Estonian, a unique case of grammaticalization, but not unexpected from the standpoint of the language system. In the languages of the world, the lexical concept 'breast' is a source for frequent spatial notions of 'front' (Heine 1997: 43). In modern Estonian, some rather infrequent adverbs have survived involving frozen locative inflections of this word, but it is no longer known as an adposition, as it appears in a text by H. Stahl dating from the first half of the 17th century. The analysis of this adposition is complicated on the one hand by the fact that the only occurrence found so far is in Stahl's work "Hand- vnd Haußbuches..." (Stahl 1638), which is one of the first longer texts preserved in the history of Written Standard Estonian.[1] Therefore there is reason to suggest it may be a translation-induced phrase used in Stahl's text occasionally as a result of German influence. What is also problematic, is the impossibility of providing an unambiguous contextual explanation of the meaning of the adposition *rinnas* used by Stahl. That this passage from St. John's Gospel, describing the Last Supper of Christ and the disciples is highly figurative, is evidenced also in the difficulties of rendering the contents in later translations of the Bible.

The current analysis proceeds from the assumption that grammaticalization is a step-to-step process, which in certain cases presumes a stage of lexicalization or the word becoming semantically

[1] Before this four-volume work in Lutheran spirit by Stahl, the first part of which appeared in 1632, the second in 1637 and the third and fourth parts in 1638, only short fragments of texts have preserved from the early records of Written Estonian, incl. the 11 fragmentary pages of the first preserved book, the cathechism by Wanradt and Koell (1535). Neither these nor the first longer manuscript, the sermons by Georg Müller (1600-1606) do not contain examples of the grammaticalization of the word *rind.* At the same time, Stahl's works laid a strong foundation to the older literary language and the author himself is considered the shaper of the earlier tradition of Literary Estonian, and one of the most influential authorities among the German men of letters, who also wrote the first grammar of the Estonian language published in 1637

independent, which in the case of the *rind*-adposition should be interpreted as the genesis of semantically full adverbs of the same stem from the noun denoting a body-part on the basis of meaning extensions. As the adposition under scrutiny appears in its outer locative cases also in e.g., Finnish, the existence of this usage in older Estonian can at least be speculated. The grammaticalization of Finnish *rinta* has been studied by K.Ojutkangas, who considers the zoomorphic model to be a likely source of grammaticalization, as it reflects the human's understanding of a part of the surrounding world, and therefore the use of a zoomorphic model is still anthropocentric- in the grammaticalization of words denoting adjacency, the point of view of the language user himself is central. (Ojutkangas 2000: 17) As a possible source-context, Ojutkangas describes the situation where, e.g., the adjacent harnessing of two animals was spoken about, whereas in the case of a four-legged domestic animal its breast may be seen as part of its side (Ojutkangas 2000: 15). In this case, the evolution of the 'adjacent/next to' meaning on the basis of *rind* 'breast/chest' would be fully logical and expected.

In Balto-Finnic languages, the evolution of new relational words from the locative forms of nouns is common, while the corresponding words can function as adverbs or adpositions depending on the sentence context. As a result of this syntactic flexibility, any word functioning as an adverb and adposition can become a model for a new relational word and there is no need for considering only, e.g., the combination of genitive and locative as a source context for the change (Ojutkangas 1998: 76). The grammaticalization of *rind* into a locational particle corresponds to the second stage of grammaticalization in the stages suggested by Heine et al.

The grammaticalization of *rind* should be viewed as entirely logical and cognitively grounded. It could be an important body-part for conceptualizing space, larger in size and with a different function than *pea* 'head' and *nägu* 'face' marking the same direction. Hidden away in the chest (Estonian *rind* denotes both breast and chest) there is the heart, therefore this body-part is closely associated with linguistic expression of emotions. Also, the marking of physical contact with expressions including the body-part word *rind* has an emotional connotation – the phrases *kedagi rinnale suruma* 'clasp someone to one's breast' *kellegi rinnale langema* 'fall onto someone's breast' (seek support from someone), *kellegi rinna najal olema* 'to lean on

someone's breast' are all of positive emotional coloring, bearing a feeling of closeness or intimacy.

Grammaticalization of body-part terms is hence a cognitively significant domain, where through the conceptualization of one's own body the surrounding space is becoming conceptualized – the body-part term starts to refer to an area of space which is associated in a certain way with the location of the body-part or its spatial extent. Such typical evolution is represented by *rinnas*, the adposition in the old literary language, which in its grammaticalization has already passed through the following chain of development: noun (*rind* 'breast') → adverb in periphrastic constructions (*rinnas lesima* 'lay on (lit in) the breast', *rinnas kandma* 'carry in one's heart') → adposition (*Jeesuse rinnas* 'at Jesus' side').

Judging by the data of Older Literary Estonian, the grammaticalization of body-part terms has often been preceded by the stage of a periphrastic construction consisting of an adverb and a verb. In Stahl's "Hand- vnd Haußbuch" there are seven forms of *rind*, three of these in the nominal meaning denoting a body-part in the collocation *rinna peale lööma* 'hit on one's breast/chest' e.g.,

(1)
löit (löö-PST PL 3) nemmat omma **rinda** (rind SG GEN) **pehle** (PP) / ninck pöhrsit jelle ümber.
schlugen sie **an** ihre Brust / vnd wandten wider vmb. (HH III, 237)
'they **hit on** their **chests** and turned round again'

This is an expression translated from German, also occurring once in a later collection of sermons by Stahl, the "Leyen Spiegel"

The rest of the examples registered from "Leyen Spiegel" also concern verb combinations. There are two examples of the figurative periphrastic phrase *rinnas kandma* 'carry in one's heart (breast)' which could literally mean 'carry in one's arms, at one's breast' although the following context is definitely figurative, referring to mental rather than physical care for someone:

(2)
Sedda **kandap** (kand-PRS SG 3) temma ommas **rindas** (rind SG INESS) / ninck piddap temma armsast Pölwede pehl /
Den **träget** er **auff der seiten** / vnd helt ihn freundlich auff den Knien / (LS, 560)
'this (one) he **carries on** his **breast** and holds gently on his knees'

An intriguing fact is that German *auff der seiten* could be translated into Estonian as *kõrval* 'next to, beside' which is a particle derived

from body-part term *kõrv* 'ear' In the first full translation of the Bible into Estonian, the corresponding part from the Book of Isaiah has been also rendered with an expression rather surprising from the standpoint of modern Estonian, *käe peal* 'on the arm/hand', the modern equivalent of which might be *kaenlas* 'under arm/in one's arms' The form of the phrase is also unexpected, as plural has been substituted with singular, which could indicate a set expression:
*Teie peate **käe*** (käsi SG GEN) ***peäl*** (PP) *sama kantud, ja pölwede peäl jahhutud.* (P 1739) 'You will be carried **on the arms** and consoled on the knees.

In the modern Bible translation the section is as follows:
*Tema lapsi kantakse **kaenlas** ja kiigutatakse põlvedel.* (P 1991) 'His children will be carried **in arms** and dandled on knees.'

The certain conceptual vagueness involved is indicated by the differences between the translations from different periods. *Kaenlas kandma* 'carry in arms' is a phrase which has survived in modern Estonian and refers to the location of something carried on the side, at about the height of breast. As a matter of fact, this interpretation is possible in Stahl's text as well (example (2)).

There is one occurrence in Stahl of *rinna peal lesima* 'lay on the breast':

(3)
Petrus agkas pöhris hend umber / ninck negkis se lüngri tullewa / kenne IEsus armastas / ke kahs öchtosöhmenajal temma **rinna** (rind SG GEN) **pehl** (PP) **lessinut** (lesi-PRS PRC) /
Petrus aber wandte sich vmb / vnd sahe den lünger folgen / welchen IEsus lieb hatte / der auch **an** seiner **Brust** am Abendessen **gelegen war** / (HH III, 162)
But Peter turned around and saw the disciple coming, whom Jesus loved and who **lay on** his **breast** during the supper.

Semantically, a transfer expressing emotional rather than physical closeness could be presumed here.

In the following examples there appears a more synthetic construction *rinnas lesima* 'lay at breast', expressing here mother-child relationship (mother carries the child at her breast, breastfeeds him). The unexpected inner locative case used in the example sentence is not surprising, texts by German authors often exhibited variation of this kind:

(4)
Temma **lessip** (lesi-PRS SG 3) omma emma **rindas** (rind SG INESS) /
temma pihm sahp temma rohgkax /
Er **ligt an** seiner Mutter **Brust** / ir Milch ist seine Speiß / (HH II, 17)
He **lies at** his mother's **breast**, her milk is his food.

At the same time, the above sentence already indicates the beginning of the formation of a relational word, as *rinnas* has been used here with a noun in genitive to convey a locational relationship. What is denoted here is location on the breast, in contact with the breast, thus the transfer of meaning from body-part to the surrounding space has not yet taken place. The same collocation can be seen in the phrase:

(5)
sest sesamma **lessis** (lesi-PRS SG 3) Iesusse **rindas** (rind SG INESS)
/ ninck pajatas temma wasto:
denn derselbe **lag an der Brust** Iesu / vnd sprach zu ihm: (HH III, 206)
'as the same one **lay at** Jesus' **breast** and answered him'

A somewhat more figurative but at the same time more grammaticalized use is illustrated by the following sentence, again open to several interpretations:

(6)
Sehl olli agkas üx temma lüngride sehs / ke lauwal istus / **Iesusse** (Jeesus SG GEN) **rindas** (PP) /
Es war aber einer vnter seinen lüngern / der zu Tisch saß / **an der Brust Iesus** / (HH III, 206).
'But there was one of his disciples who sat at the table **beside Jesus'**

Grammatically it is an obvious adpositional phrase, consisting of a noun in genitive (*Jeesuse* 'Jesus') and a relational word transferred to locative meaning (*rinnas* 'in/at the breast'). In the modern translation this passage from the Gospel of St. John (Jh 13: 23) reads as follows:
Üks tema jüngritest, see, keda Jeesus armastas, oli lauas istumas Jeesuse ***rinna najal.*** (P 1991) 'One of his disciples, the one that Jesus loved, was sitting at the table **leaning on** Jesus' **breast**'

and in the latest reading:
Üks ta jüngritest, see, keda Jeesus armastas, oli tema ***kõrval*** *lauas.* (P 1999) 'One of his disciples, the one that Jesus loved, was at the table **at the side** of him'

In the sample from Stahl's text, *rinnas* is not connected to a verb construction, it is already clearly a locational adposition, whose

meaning seems to be 'beside' also evidenced by the fact that the adpositional phrase complements the verb *istuma* 'to sit'

The most interesting example because of its high degree of grammaticalization is example (6) from Stahl's text, where different explanations can be suggested for the evolution of the adpositional construction used. As a corresponding adposition is used in the related languages, it can at least be speculated that it has earlier existed in Estonian as well (especially when we consider the existence of several periphrastic verb combinations where locative forms of *rind* are used, e.g., *rinnas lesima, rinnas kandma* 'lay, carry on/at the breast' in Stahl). At the same time, it seems more likely to suggest German influence in the emergence of this adposition and its occurrence in Stahl's text – this assumption is supported by the fact that no other similar usage can be found in other sources and the analysis of other linguistic features indicates that Stahl's grammatical interpretation is more German-like than for example his predecessor Georg Müller's.

Neither is *rinnas*-adposition registered in Ferdinand Johann Wiedemann's Estonian-German dictionary, a rich document of Older Literary Estonian, the first print of which appeared in 1869 nor in the corpora of Written Estonian from the end of the 19th century and the 20th century. Therefore, it may be possible that Stahl, at his level of language proficiency, has Estonianized the German prepositional phrase *an der Brust,* which already occurs in Luther's Bible, revealed, for example, in the 1545 print of the Bible as follows:
Es war aber einer vnter seinen Jüngern / der zu tische ***saß an der Brust*** *Jhesu / welchen Jhesus lieb hatte* (Jh 13. 23).
(http://home.t-online.de/home/Michael.Bolsinger/cjoh.htm)

In Stahl's text the German prepositional phrase has been translated into Estonian as a postposition, based on the analogy with the existing postpositions. There are more of similar obviously translationally borrowed adpositions in Older Literary Estonian, e.g., *asemel* 'an Statt, an Ort' 'instead', *heaks* 'zu gut' 'for the benefit of' *nimel* 'im Namen' 'in the name of' *viisi(l)* 'auf Weise' 'by means of'(see Habicht 2000).

Perhaps it is because of the meaning ambiguity resulting from translational borrowing that the adposition *rinnas* has not been preserved in Estonian (the same semantic function is performed in the modern language by the adpositions *kõrval* (from noun kõrv 'ear') 'beside, next to' and *vastas* 'facing, opposite' from which *kõrval*

already existed at the time of the first documented use of *rinnas*-construction), as has been the fate of many other loan translations.

Judging by the scarce examples only, this is not clear either, what sense of the word has been the basis for the observed case of grammaticalization in Old Literary Estonian. As the adposition in the old literary language essentially expresses locatedness beside or next to something, then the grammaticalization can be presumed to proceed from the locative form of the noun *rind* in its metaphorical sense of *'rida, rivi'* 'row, rank' i.e., in a manner similar to the use in the metaphorical compound *väerind* 'army front' in the periphrastic constructions *rinnas seisma, rinnas käima* 'stand, walk abreast' or in the derived adverb *rinnastikku* 'abreast, breast-to-breast' The corresponding passage from the first translation of the Bible into the South Estonian dialect also refers to the meaning of locatedness just close by, not in contact with the breast:

Ent ütz temmä Iüngrist / kumb lawwa man iste IEsusse ***lähükessen*** */ kumba IEsus armast* (Jh 13. 23) (WT 1686). 'But one of his disciples, who sat **near** Jesus at the table and whom Jesus loved.'

If, however, we were to proceed from the alternative 'opposite, facing' interpretation, which, however, is less likely in view of the context, semantic change originating in a human body-part would be more obvious. At the same time, the extended meanings of the nouns, which have given rise to the independent body-part- based adpositions in Estonian have been viewed as essentially expressing several different locations in space. For example, *pea* 'head' may denote the starting (e.g., *tabeli pea* 'head of the table') as well as endpoint (*jalutuskepi pea* 'head of the walking-stick'), *kand* 'heel' the backside (*nööbi kand* 'heel of the button') as well as the lower part (*kuhja kand* 'low part of the haystack') (Sildvee 2000: 852). Considering these multiple possibilities for extension, the conceptual ambiguity in case of the *rinnas*-lexeme does not perhaps seem so overwhelming any more.

Hence, because of the scarcity of contextual information and the high degree of figurativeness it remains open for discussion at that point whether the grammaticalization has occurred according to the anthropomorphic or the zoomorphic model. In the former case, the meaning would have been transferred from the human breast, i.e., front part of the body, to the surrounding space, as could be expected. As a spatial concept describing the locatedness of humans,

rinnas can most probably encompass even a more extensive horizontal area, not only the region immediately adjacent to the object (see Figure 1).

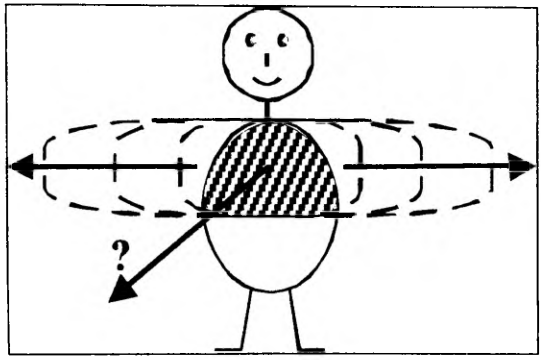

Figure 1. Extension of the word *rind* to a spatial concept denoting locatedness

The extension of the word *rind* to express a locational relationship is definitely supported by its denoting mother's breast as an organ vital for the offspring. There is a rich stock of fixed expressions in Estonian that are associated with the conceptualizing of *rind* as central to the mother-child relationship, e.g. from Wiedemann's Estonian-German dictionary the following phrases can be found: *naezel on laps rinnas/rindes** [2] 'das Weib hat ein Kind an der Brust, stillt ein Kind' 'the woman is suckling a child' lit.: 'the woman has a child at/in the breast' *laps on rinnust ära** 'das Kind ist entwöhnt' 'the child is weaned. lit.: is off the breasts', *laps ei võta rinda* 'das Kind saugt nicht' 'the child does not take the breast' (Wiedemann 1973: 956).

In addition, other figurative expressions related to the human breast can be found, e.g., *rinnule ajama** 'anfangen sich zu bessern (von schwer Krancken), 'to lean up on one's chest and elbows', *kui kaks kätt rindele saab/paneb** 'wenn man im Sarge liegt' 'when the two hands will be folded on the chest', which bear euphemistic connotations – the first of recovering from an illness and the second of death, and *südame rindu võtma* 'sich ein Hertz fassen' lit: 'take one's heart into chest/pluck up one's courage' which expresses

[2] Henceforth (*) is used to denote an archaic use, lost from Modern Estonian.

gathering courage to complete something, hence an emotional activity (Wiedemann 1973: 956).

Metaphorically, *rind* has been extended from the body-part term to denote any kind of protrusion or projection, which draws it nearer to the spatial domain, e.g., *jalaserind** 'aufgebogenes Vorderende der Schlittensohle' 'the protruding part of the sleigh runner' *laevarind** 'Vorderbug des Schiffes' 'bow of the ship' *rind* is also associated with numerous natural objects, e.g., in Estonian there are *rinnakohad* 'Untiefen in Wasser' 'sandy elevations in a body of water' *hauarind** 'abschüssige Stelle im Wasser' 'a steep depth in a body of water', *joarind* Abstrurz des Wasserfalls' 'the sheer drop of a waterfall' *mäerind* 'Bergrücken' 'mountain slope' There is also an interesting transfer to the temporal domain: **lõunarind* lit.. 'breast of noon' has denoted in popular Estonian the time between the middle of the morning and midday (Wiedemann 1973: 956).

The sense of a broad projection in the preceding examples is also the source for the figurative sense of 'row, file, rank', which is already a characteristic of spatial location, e.g. *rinna peal olema** 'gleich vorn stehen','to be in the forefront', *rinnas käima** 'neben einander gehen' 'to walk abreast, side by side' *ühes rinnas seisma**, *ühe rinna peal seisma** 'in einer Linie stehen' 'to stand in a line' *tulge rinda** 'tretet vor, in die Fronte' 'step forward', *vägi asus rinda** 'das Militair trat in Reih und Glied' 'the troops lined up' (Wiedemann 1973: 956–957).

Among the adverbial uses, Wiedemann brings out an interesting form in the Alutaguse dialect *rinna** 'abreast, side by side' This is an archaic instructive, which could be presumed to have a zoomorphic source, as originally in the movement of plough or draught animals their positioning side by side, abreast was important. It is also interesting to note that likewise in Modern Estonian the adverbs denoting manner of location *rinnu, rinnastikku, rinnutsi* ja *rinnakuti* have the senses of 'breast to breast' on the one hand, and 'side by side' on the other hand – thus at least regarding adverbs the conceptual ambiguity has not been lost with time.

It can be suggested that the corresponding adverbial usage in the vernacular has preceded the use of the inessive of *rind*-noun as an adposition that we saw in the text sample (6) from Stahl. The phrases *rinnas käima* ja *rinnas seisma* 'walk/stand abreast' listed in Wiedemann's dictionary attest to the transferred use of the form and

adverbilization in certain collocations where there is a verb complement expressing location or position.

The causes for the loss of *rinnas*-adposition

It is quite surprising actually that no adposition formed from the *rinnas*-stem can be found in modern Estonian. Why could the adposition occasionally used in old literary language have become obsolete? One reason could certainly be the possible translational origin of this adpositional construction and the fact that the same function was performed by some other relational word in actual usage. That this may have well been the case is asserted by the occurrence of the adposition *kõrval* 'beside, next to' both in Müller's sermons (1600–1606) as well as in texts by Stahl himself – true, it is not a frequent adposition in any one of the old texts (occurs twice in Müller, six times in total in all writings by Stahl). Thus the reason could be the conceptual gap having already been filled earlier, as well as the foreignness of the construction in Estonian.

The reason could also lie in the semantic ambiguity of the adposition *rinnas* itself, i.e., in the fact that according to the meaning originating from the anthropocentric conceptual model *rinnas* could have rather denoted the area or object situated nearby, facing the viewer, while in the reality there may have been a still earlier zoomorphic conceptualization model (see, e.g. Ojutkangas 2000), according to which the adposition *rinnas* used by Stahl may have passed through the following chain of development (given in the parentheses is the explanation of the notional formation of the concept and in the brackets the possible grammatical development): *rind* (front part of animal thorax) [noun] → *rinnas* (position of animals side-by side, breasts aligned) [inessive form of noun → adverb] → *rinnas* (position of humans side by side or facing each other) [adverb → adposition].

When the extension of the adverbial meaning spread to a too wide and obscure territory, the relaying of grammatical position may have been hindered, as the notional obscurity may have prevented the grammatical construction from taking root. Ideally, grammatical constructions are expected to be unambiguous and transparent.

The inner locative form of the grammaticalized word is also a matter of discussion. Judging by the data of Old Literary Estonian it can be suggested based on the form of the word that the grammati-

calization proceeded from the metaphorical sense of 'row, rank' (Cf *rinnas käima, rinnas seisma* 'to stand/walk abreast'). The outer locative form *rinnal* seems to have become fixed to denote a closer location in contact with the breast and even this only during later developments of the literary language (e.g., *nuttis ema rinnal*, 'cried on mother's breast').

Conclusion

The pattern of the genesis of adverbs and adpositions of spatial location from body-part terms is a near universal across languages. Therefore the origin of the Estonian adposition *rinnas* is not typologically surprising. What is problematic is the development of the meaning of the adposition and the question of origin in the context of the development of Written Standard Estonian.

The case of the grammaticalization of the word *rind* seems to reveal an intriguing combination of antropomorphic and zoomorphic models as the potential sources for the relational word. This claim can be based on the polysemy of the adverbs surviving in contemporary Estonian. e.g. *rinnu, rinnuti, rinnutsi* can mean both 'breast to breast/facing' and 'abreast, beside' Further support is offered by the unique registration of the adposition in Old Literary Estonian, whose meaning is not unambiguously clear from the context: on the one hand the meaning of the adposition *rinnas* can be interpreted proceeding from the contact with breast as body-part and locatedness in relation to it, on the other hand it can denote a group of several members being positioned next to one another, in a line (breast next to breast, breasts aligned). In the latter case the zoomorphic origin could be considered. The only counterargument could be posed by the fact that most of the fixed expressions in Estonian are still associated with the spatial locatedness of humans, therefore the sense of a 'row, line' could originate in the positioning of people, e.g. during reaping or men aligned in troops for military campaigns.

The example of grammaticalization discussed above also illustrates the fact that in time, different lexical and grammatical possibilities are tried out for conceptualizing space in language, and not all instances of grammaticalization appearing logical from the standpoint of language development need necessarily pass into usage or 'settle down' Cognitively such a try-out of concepts makes sense in all respects, especially during the period under observation, the early

development of the Estonian literary language in the first half of the 17th century, when there was a need for shaping the language to meet the new figurative requirements stemming from the biblical texts.

In the case of *rind*, German impact on the origin of the grammatical structures of literary Estonian should be underscored – it is likely that Stahl, being a German proceeded from the German adpositional phrase *an der Brust* in a literal translation into Estonian by means of the inessive form of the noun *rind*, a choice possibly modeled on the existence of periphrastic phrases including the word *rinnas*. Replacing the German prepositional phrase with the Estonian postpositional phrase could have been modeled on the Estonian postpositional pattern known to Stahl (this is evidenced by Stahl's consistency in translating the German prepositional phrases as postpositional in Estonian, e.g., *pörgkohauda sees* 'in der Hellen' 'in Hell' *omma Achnusse perrast* 'nach ihrem Geitz' 'because of his greed' *sesinnase te pehl* 'auff dieser Bahn' 'on this road' a.o.). Mostly, Stahl's translations of analytical constructions remain nevertheless true to the multi-word structures of the source language, in the present case, however, he has used a synthetic locative form in example (6), which still makes it possible to suggest that such a construction might have existed in the popular language, but fallen out of use in the later literary language because of its infrequency or obscurity of meaning. Although there are grammaticalized forms of *rind* in Estonian as adverbs and periphrastic constructions formed with these, they have not been preserved in syntactic constructions, i.e. on a higher stage of grammaticalization.

The grammaticalization case described above is interesting as the preconditions for the genesis of an adposition have existed: on the one hand, in older Estonian there is an abundance of locative adpositions originating from body-part terms, e.g. *peale, peal, pealt* 'on' *kõrvale, kõrval, kõrvalt* 'beside', *kätte, käes, käest* 'in hand', a.o.; on the other hand in the case of *rind*, the metaphoric and metonymic extension necessary for the development of a relational word has been completed, which is attested by the surviving periphrastic constructions consisting of an adverb and verb, e.g., *(kellegi) rinnale langema* 'fall onto someone's breast' *(kedagi) rinnale suruma* 'clasp someone to one's breast' At the same time, the loss of the adposition may have been caused by the conceptual ambiguity (*rinnas* can mean both 'in front, opposite' as well as 'beside'), which could most likely

not be displayed by a grammatical unit expressing spatial relationship and closely related by stem to the source noun.

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Adpositsiooni *rinnas* tekkest ja kadumisest eesti kirjakeeles

Külli Habicht

Kehaosanimetuste abisõnastumine on üks tüüpilisemaid grammatikaliseerumisjuhtumeid, mida on eri keelte materjali põhjal ulatuslikult uuritud. Kognitiivsest seisukohast pakub huvi ennekõike see, kuidas me keele abil end ümbritsevat maailma tõlgendame ja mõistestame ning kuidas saavad täiendust grammatilised kategooriad, mille raamides me maailma mõistame. Kehaosanimetustest ruumilist paiknemist väljendavate adverbide ja adpositsioonide tekke mall on keeltes suhteliselt universaalne. Seetõttu ei ole ka eesti keele *rinnas*-kaassõna tekkes midagi tüpoloogiliselt üllatavat. Probleeme tekitab vaid vastava kaassõna tähenduse kujunemine ja algupära küsimus eesti kirjakeele arengu kontekstis.

Artiklis keskenduti eesti kirjakeele *rind*-sõna grammatikaliseerumisele kui omanäolisele, ent keelesüsteemi seisukohalt ootuspärasele grammatikalisatsioonijuhtumile. Maailma keeltes on *rind*-sõnast lähtunud ruumimõisted sageli kasutusel 'ees' tähenduses. Tänapäeva eesti keeles on selle sõna kivinenud kohakäändevormidega säilinud mõningaid harva kasutatavaid adverbe (nt *rinnu, rinnastikku, rinnutsi, rinnakuti*), kuid adpositsioonina, nagu see tuleb esile 17. sajandi esimesel poolel kirja pandud H. Stahli tekstis, seda enam ei tunta.

rind-sõna grammatikaliseerumise puhul näib olevat tegemist väga huvitava kombinatsiooniga, kus suhtesõna tekkel võivad olla liitunud antropo- ja zoomorfne mõistestusmudel. Seda võib oletada tänapäevani eesti keeles olemasolevate adverbide tähendusliku mitmesuse põhjal, nt *rinnu, rinnuti, rinnutsi* võivad tähendada nii 'rind rinna vastu/vastas' kui ka 'rind rinna kõrval, kõrvuti' Seda toetab ka vanast kirjakeelest omapärasena registreeritud kaassõna näide, mille tähendus pole konteksti põhjal üheselt selge: ühelt poolt võib *rinnas*-kaassõna tähendust tõlgen-

dada, lähtudes kokkupuutest rinna kui kehaosaga ja paiknemisest selle suhtes, teisel juhul aga mitmeliikmelise grupi kõrvuti (rind rinna kõrval, rinnad ruumiliselt ühel joonel) asetsemise tähendusest, mille tekkel võib oletada zoomorfsest mudelist lähtumist. Viimase vastu võiks rääkida vaid asjaolu, et enamik püsiväljendeid on eesti keeles seotud ikkagi inimese ruumilise paiknemisega, mistõttu võib ka 'rida, rivi' tähendus lähtuda näiteks töötavate inimeste asetumisest viljalõikuse ajal või meeste paiknemisest sõjakäigul.

Eespool käsitletud grammatikaliseerumise näide ilmestab ka tõsiasja, et ümbritseva ruumi mõistestamisel proovitakse keeles aja jooksul läbi erinevaid leksikaalseid ja grammatilisi võimalusi ja mitte kõik keele arengu seisukohalt loogilisena tunduvad grammatikalisatsioonijuhtumid ei pruugi laialdasemalt kasutust leida ja "koduneda" Tunnetuslikult on selline mõistete läbiproovimine igati arusaadav, eriti vaatlusalusel eesti kirjakeele kujunemise algusperioodil, 17 sajandi esimesel poolel, kui keelt oli vaja täiendada ja kujundada piiblitekstidest lähtuvatele uutele kujundlikele nõudmistele vastavaks ning iga autor oli lausa sunnitud

rind-sõna puhul väärib tähelepanu ka saksa keele mõju eesti kirjakeele grammatiliste struktuuride tekkel – on võimalik, et Stahl kui sakslane lähtus saksa keele kaassõnafraasist *an der Brust*, tõlkides selle otse eesti keelde ja kasutades *rind*-substantiivi inessiivi vormi, millise valikul võis eeskuju pakkuda perifrastiliste ühendite olemasolu *rinnas*-sõnaga. Saksa eessõnafraasi asendamiseks eesti tagasõnafraasiga võis aga eeskuju anda eesti keele tagasõnade mall, mis oli Stahlile tuttav (sellele viitab asjaolu, et Stahl tõlgib küllalt järjekindlalt saksa keele eessõnafraasid eesti keelde tagasõnafraasideks, nt *pörgkohauda sees* '**in** der Hellen' *omma Achnusse perrast* '**nach** ihrem Geitz' *sesinnase te pehl* '**auff** dieser Bahn' jt). Üldjuhul jääb Stahl analüütilisi konstruktsioone tõlkides siiski truuks lähtekeele mitmesõnalistele struktuuridele, praegusel juhul on ta aga näite (6) puhul kasutanud sünteetilist kohakäändevormi, mis jätab siiski võimaluse oletada, et tegemist võib olla eesti keeles olemas olnud konstruktsiooniga, mis oma vähese tuntuse või sisulise ebaselguse tõttu on hilisemas kirjakeeles kasutuselt kõrvale jäänud. Ehkki adverbide ja nendega moodustatud perifrastiliste ühendite näol on eesti kirjakeeles *rind*-sõna grammatikaliseerunud vormid olemas, pole need süntaktilistes konstruktsioonides, st kõrgemal grammatikalisatsiooniastmel, keeles püsima jäänud.

Eespool kirjeldatud grammatikalisatsioonijuhtum on huvitav selle poolest, et eeldused kaassõna tekkeks on keeles olemas olnud: ühelt poolt leidub vanemas eesti keeles rohkesti kehaosanimetustest lähtunud kohakäändevormis kaassõnu, nt *peale, peal, pealt, kõrvale, kõrval, kõrvalt, kätte, käes, käest* jt; teisalt on *rind*-sõna puhul toimunud ka

suhtesõna tekkeks vajalik metonüümne ja metafoorne ülekanne – sellele viitavad tänapäevani keeles olemas olevad adverbist ja verbist koosnevad perifrastilised ühendid, nt *(kellegi) rinnale langema, (kedagi) rinnale suruma*. Kaassõna kadumise on aga võinud põhjustada mõisteline mitmeti tõlgendatavus (*rinnas* võiks tähendada nii 'ees, vastas' kui ka 'kõrval'), mida lähtesubstantiiviga tähenduslikult seotud grammatilise üksuse puhul ilmselt olla ei saaks.

Grammaticalization of *või/vä* questions in Estonian

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1. Introduction

It has been observed in a number of languages that the particle 'or' a conjunction in written language, is used as an question particle as well. In Estonian, similarly, the connective function has been considered central for *või* 'or' At the same time, it has been noted already long since that in spoken language *või* is used as a question particle to form questions, as in example 1.[1]

(1)
M: mhm:h aga millise=sis. (.)
mhmh but which one then.

O: ((mõtleb)) m:hh mis on normaalne pirn laualambile
((thinks)) m:hh what is a normal bulb for a desk-lamp

kas kuuskend peakski äkki olema vist nagu seal kirjas on.
should it perhaps be sixty as it is written there.

M: tahate samasugust pirni nagu siin sees on=**või**.
you want the same kind of bulb as in here **or**?
((M shows the bulb in the demonstration lamp))

O: peegel on vist parem kui mitte[peegel ma arvan]
reflective is probably better than not reflective I guess

Even more frequent as a question particle in modern spoken language is *vä*:

(2)
K: jah (.) ja sis=ma natuke võtan maha, ja sis `ülejäänu teie maksate,
yes, and then I'll deduct a little and then the rest you pay,

ja saate terve `kella ja `kuus kuud garan`tiid.
and you'll get the repaired watch and six months warranty.

O: ahah? (.) noo? (.) [päris `soodne=ju.]
is that so? really? pretty decent, isn't it.

K: [jaa (.)] aga `klaas on ka sellel `terve=**vä**. (.)
yes but its glass is unbroken **or**.

---

[1] I am grateful to Leelo Keevallik for most useful comments.

O: .thh ja-aa?
thh yes ((pulls the glass cover of the clock out of the bag))

On the basis of the above examples 1 and 2, we can say the following about the interrogatives ending in *või/vä:*

1) both the *või* and *vä* questions can be structured as a regular declarative clause, the only interrogative element is *või/vä* at the end of the utterance;
2) *või* and *vä* behave in the same way at the end of the clause, i.e., they are both used as a question particle;
3) *või* and *vä* are located at the immediate end of the clause (and the turn) and may be encliticized; there is no pause, other particle or other hesitation marker between the preceding word and *või/vä*;
4) *või* and *vä* are unstressed in the clause-final position;
5) *või* and *vä* are accompanied by a falling intonation contour, thus they conclude the utterance;
6) the listener interprets a clause ending in *või/vä* as a question by answering it.

Thus the clauses ending in *või/vä* can be seen as independent interrogatives, to which a yes/no answer is expected. Both the speaker and the hearer perceive such clauses as interrogatives.

In the current paper, I will try to answer the question about the evolution of this type of interrogative sentences in Estonian. I will make an attempt to clarify whether it is a classical case of grammaticalization, whereby lexical units in language become grammatical units and less grammatical units become more grammatical (Heine, Claudi, Hünnemeyer 1991: 2), and how the question particle has been grammaticalized. I will build on Paul Hopper's idea that different stages of grammaticalization and the sources of grammaticalization may coexist in language at one time (Hopper 1991) and thus be revealed by synchronic linguistic research.

I will base my analysis on the texts from the Tartu University Corpus of Spoken Estonian. Among the data used there are both everyday conversations as well as institutional dialogues, unmediated as well as telephone conversations. The material used has been taken from the spoken language subcorpus Korpus 2000, in which the proportion of different texts and situations of interaction has been balanced, and from which some texts of the same type or with the same participants have been excluded (see the details in Hennoste et al 2000: 263). In total, Korpus 2000 includes 212 conversations of

variable length, approximately 100 000 words. The number of *või/vä* questions I analyzed is 397.

Based on this material, I will first try to outline the main uses of *või/vä* and the grounds for these uses. Next, I will proceed to establishing a possible relationship between the emergence of this particle and grammaticalization.

2. On the status of the questions formed with *või/vä* in Estonian

2.1. Variation of the clause-final question particle

As a clause-final question particle, *või* has several phonetic variants. Table 1 presents the variants that surfaced in the data studied. Altogether, 397 intonationally complete clauses ending in *või/vä* were analyzed.

Table 1. Variation of the clause-final *või* 'or'

Variant	Example	No. of clauses	%
või	*tahate samasugust pirni nagu siin sees on=**või**.* 'you want the same kind of bulb as inside this one **or**'	94	23.7
vä	*aga `klaas on ka sellel `terve=**vä*** 'but its glass is also unbroken **or**'	272	68.5
võ	*mhmh a koos selle `nahkpaelaga=**võ*** 'yes, but together with the leather strip **or**'	27	6.8
väh	*ta: `on elistand=**väh**.* 'he has called **or**'	1	0.25
väi	*sa `ära ei tunne siis=**väi**.* ' you don't recognize him **or**'	1	0.25
võih	*nägid uhked välja (.) ee mismoodi need pulmad olid, või olid=nad päris tavalised=**võih** (.)* 'looked great umm what was the wedding like, or were they quite ordinary **or**'	1	0.25
võe	*võ=tahate `uut et ma kirjutan=**võe**.* 'or you want me to write a new one **or**'	1	0.25
Total		**397**	**100**

As can be seen, the most frequent clause-final variants are *vä* and *või*, among the rest only *võ* is more frequent. More clauses ending in *vä* than *või* are used, 68% or slightly more than 2/3 of the *või/vä*

questions end in *vä*. It is most probable that in actual usage there are additional variants not reflected in the data analyzed.

Naturally, it must be taken into account that the variants were taken down as heard and no phonetic analyses of the vowel qualities have been carried out. It is quite possible that in phonetic analysis only a negligible difference between all the reduced variants would be revealed, and there is actually an indefinite vowel. For the present purposes, the exact phonetic quality is not important; what is more significant is the tendency to use a phonetically simplified variant. Phonetic simplification of form is known to be a change accompanying the grammaticalization process (Heine, Claudi, Hünnemeyer 1991: 15, Hopper & Traugott 1993: 145–150).

The *või/vä* questions are primarily a feature of the spoken language, they are extremely rare in writing. Among the texts of the 1990s in the Corpus of Standard Written Estonian (approx. 1 million sentences) I found only 62 clause-final (interrogative) uses of *või*. Even these are mainly from character speech, thus used to mark spoken language. Interrogatives ending in *vä* were completely missing from the corpus of written language.

It seems strange that the *või/vä* questions are so rare in writing and only a feature of spoken language, in the view that they are by no means a new phenomenon in Estonian. The first three questions ending in *või* are already represented in the fiction of 1900–1909 included in the Corpus of Written Estonian, though also as markers of direct speech, e.g.:

(3)
"Jaan – teie poiss Jaan **või**?" (ILU1900\ilu0137)
"Jaan – your boy Jaan **or**?"

While in the corpus of texts from the 1900s there were only three questions ending in *või*, then in the 1930s corpus there were already 24. It is doubtful whether the *või*-questions had become more widespread in the language over the period. It can be assumed, rather, to be the matter of the authors' sense of the language: by the 1930s, the turn-of-the-century German-influenced usage had become more Estonian-like.

Also, it can be seriously doubted whether the *või*-questions could have sprung up only at the turn of the century. It seems rather more likely that their existence in spoken language was simply not reflected in the German-influenced language used in earlier fiction.

2.2. The relationship of *või/vä* questions to other question types

"Eesti keele grammatika" (EKG, The Grammar of Estonian Language) terms the *või*-ending questions general questions, which presume a yes/no answer. In Estonian, especially in spoken language, several additional types of yes/no questions are common. In the EKG the following have been outlined: 1) interrogatives beginning with the question particle *kas*, which is the most widely used type of general questions in Standard Written Estonian; 2) interrogatives with inversion, where the finite verb is located at the beginning of the sentence; 3) interrogatives ending in *või* (*vä* is not mentioned); 4) clause-final inserts (question tags) *mis, ah, ega, kas pole* etc. EKG II: 168–169). Helle Metslang (1981) has described even more types of yes/no questions.

In addition, combinations of the types presented above can be found. Among the mixed types there are also many that end in *või/vä*. *või/vä*-ending interrogatives are among the most productive types of interrogative in spoken usage, which are often used in combinations with other question-forming devices.

To what extent can *või/vä* questions be considered an independent type of questions? Is it related to some other type of interrogatives? I analyzed the material from the additional viewpoint of how often the two question particles are used together, *või/vä* clause-finally, and *kas*, the most frequent question particle in the written language, clause-initially. The results are reflected in Table 2.

Tabel 2. The connection of the question particle *või/vä* to the question particle *kas*

Total no. of clauses		With *kas*		Without *kas*	
Variant	**N**	**N**	**%**	**N**	**%**
või	94	20	21.3	74	78.7
vä	272	37	13.6	235	86.4
other	31	4	12.9	27	87.1
Total	**397**	**61**	**15.4**	**336**	**84.6**

As evident from Table 2, the variant without *kas* is more common. Clauses with initial *kas* and final *või/vä* numbered only 61 in total,

i.e., 15.4%. It can be concluded that at least to the *kas*-interrogatives the *või/vä* questions are not too tightly connected, and can be considered a separate type of interrogatives. (In order to be able to make this a firm assertion, the relationship of *või/vä* to other, less frequent ways of interrogative formation, e.g., inversion, should be explored). Slightly more frequent are the *kas*-interrogatives connected to *või*-endings, the phonetically reduced form *vä* appears in the same clause with *kas* less commonly.

2.3. Fields of usage of *või* and *vä*: similarities and differences

In Written Standard Estonian, *või* is considered a conjunction. According to the "Grammar of the Estonian Language" conjunctions are indeclinable words, the only syntactic function of which is to link the sentence constituents, without affecting the form of the latter (EKG I: 40). More specifically, according to EKG, *või* is a coordinating conjunction with a disjunctive function (EKG I: 40).

In spoken usage, the functions of *või* are considerably more varied than in the written standard. In addition to the connective function, it also has the function of a discourse particle and that of a question particle. However, the boundaries between these groups can be set only provisionally, and it is often impossible to decide whether a particular case functions as a conjunction or a discourse particle on the one hand, or as a discourse or a question particle on the other. *vä* can function almost only as a question particle.

2.3.1. Conjunction

The most prototypical as a conjunction is the clause-internal *või*, which connects two elements in the same part-of-sentence function. In example 4, the conjunction *või* connects and presents as alternatives the attributes *vene* 'Russian' and *inglise* 'English'

(4)
RZ: mina mäletan ku=ma (1.2)
I remember when I

vanasti me kirjutasime `artikleid ikka kas vene vene **või** `inglis=keeles.
earlier we used to write articles either in Russian Russian **or** English.

VE: mhmh (0.8) vene ajal. (0.5)
mhmh in the Russian times.

However, examples of this kind, where the parts of sentence linked by *või* are equal in form as well as content, were relatively infrequent in the Corpus of Spoken Estonian. Instead, in the predominant usage one of the alternatives presented was a semantically well-defined concept, while the other was a phrase of very general or vague meaning. In example 5, in the phrase *keemik keem- keemik [või] midagi taolist* 'chemist chem- chemist or something like that', *või* distinguishes between *keemik* 'chemist' on the one hand, and *midagi taolist* 'something like that' on the other. In this case, one variant (chemist) is in focus, while *või* and what follows it are rather used to denote uncertainty, possible other alternatives: in reply to the question asked by E., M. offers a concrete example of the authors of the artwork being discussed, but then replaces it with a less definite phrase *või midagi taolist* 'or something like that' Hesitation is also marked by the phrase *ma ei tea kellena* 'as I don't know who' and the partial or full repetition of the word *keemik* 'chemist'

(5)
E: ned=on nagu=ee kunstnikud siis on teinud=või või tarbe[kunst]
nikud=vä
these are like ee artists then have made or or applied artists or

M: [ei] ei
noh kuidas kes ( ) Miia Rand on muidu hoopis ma ei tea kellena
keemik keem- keemik **[või]** midagi taolist
no no well it depends Miia Rand actually is as I don't know who
chemist chem- chemist **or** something like that

E: [aa mm] mhmh
aa mm mhmh

või can also be in the inter-clause position and present two clauses as alternatives. At the same time, in this case it might rather be called a discourse particle.

2.3.2. Discourse particle

Discourse particles have been defined and classified in various ways.[2] D. Schiffrin in her by now classic paper "Discourse markers" treats discourse markers (particles) "as sequentially dependent elements which bracket units of talk" (Schiffrin 1987: 31). Her

[2] An Estonian-language overview of discourse particles can be found in Hennoste 2000: 1773-1806

treatment also includes conjunctions, without an attempt to draw a line between these and other discourse particles, as, "discourse roles of *and, but* and *or* parallel their grammatical roles" (Schiffrin 1987: 190).

A clear distinction between discourse particles, and for example, conjunctions, is indeed difficult to make, as the phonetic form suggests one word with several more or less grammatical usages (see also Abraham 1991) [3] If, however, to make an attempt at separating the conjunction from the discourse particle, the boundary in case of *või* would run between the clause-internal and inter-clausal *või*: the clause-internal *või* normally links parts of the same clause (conjunction), the inter-clausal *või* is located on the boundary between the clauses (either at the beginning or the end of a clause) and signals a connection between clauses (discourse particle). Still, this distinction should be understood as very tentative.

The discourse particle *või* is most frequently used as a particle initiating self-repair, i.e., it signals an upcoming repair sequence, which replaces a previous word, phrase or textual unit or adds something to it (see also Hennoste 2000: 2704–2705). The notion of repair originates in conversation analysis where it has been seen as one of the important systems organizing interaction. Repair is used to amend all kinds of trouble related to speaking, hearing and understanding in interaction (Schegloff et al. 1977: 361). The most common trouble-sources are word replacement, repairs on person-reference, and repairs on next-speaker selection (Schegloff et al. 370–372).

Usually, two types of repair are distinguished: self-repair and other-repair, whereas self-repair is the preferred one. These can in turn be categorized according to who initiates repair and who accomplishes it. Most commonly, the speaker initiates self-repair and

[3] I am of the opinion that it would be more correct to treat conjunctions as the written language counterparts of the discourse particles, and not to make the distinction at all in spoken texts. In conversation analysis this is what has been tacitly agreed upon (see, e.g. Schiffrin 1987). At the same time, from the grammaticalization-theory viewpoint the prototypical usage of a conjunction is more grammatical than that of a discourse particle, therefore I have attempted to distinguish at least tentatively between these prototypical usages in the currrent paper.

accomplishes it, in case of other-repair the hearer initiates and the speaker him/herself accomplishes the repair, the role of the hearer is just to point to the problematicity of the preceding text (see Schegloff et al 1977, Hutchby&Wooffitt 1998: 61). In the current paper, repair has been categorized according to who initiated it (self-initiation of repair and other-initiation of repair).

In example 6 the repair sequence is *või seal kõrval garaašis* 'or in the garage beside', which repairs the previously uttered *meie garaašis* 'in our garage' Here we do not have an alternative suggested as in the case of *või* functioning as a conjunction, but the repair sequence initiated by *või* replaces the whole preceding part of the clause: the hearer is to understand that the preceding *meie garaašis* 'in our garage' was a slip of the tongue and the speaker intended to say *meie kõrval garaašis* in the garage beside'

(6)
Ti: kus: ta kolis=sis.=
where did he move then.

Õ: =@ ma=i `tea. @ (0.8) ma=i `mäleta, (.) keegi `rääkis ka. (0.8)
I don't know.I don't remember, someone told me as well.

sest ma enam ei `näind, ta käis alati sealt meie alt (.)
cause I didn't see [him] any more,he always went there downstairs from us

ta elas (0.6)`garaašis ju, `meie `garaašis **või** seal `kõrval garaašis.
he lived in the garage in our garage **or** in the garage beside

Ti: a see `tume kes on=vä. (.)
oh the dark one who is or.

The interclausal *või* can be usually interpreted as a particle initiating self-repair: the following sentence repairs the whole preceding clause or part of it. In example 7 T asks E if there is any yoghurt left at home. E first suggests that there is still some left at home. However, she probably starts to doubt her own words seriously, as a repair sequence follows where she replaces the former firm claim with a less sure opinion. The repair sequence starts with the particles *või noh* 'or well', followed by an explanation why E does not know whether there is any yoghurt and she replaces her previous statement with an unsure hesitation *ma ei tea ma ei vaadanud üldse ma ei otsinud võibolla kapis oli* 'I don't know I didn't check at all I didn't look for it perhaps there was some in the fridge'

(7)
T: no mis me veel võtame ((pöördub Liisu poole)) Liisu kas sina ka midagi tahad=või (.)
well what else shall we take ((turns to Liisu)) Liisu do you want something as well or

Liisu (.)tahad midagi kaasa ei oska midagi tahta. (.)
Liisu want something to go, don't know anything what to want.

((the child does not answer, T turns to the shop assistant again))

ma võtaksin siis ühe suure hapukoore ( )
I would then take a large sour-cream

((T küsib E käest)) kuidas jogurtiga on ( ) (-)
((T asks E)) how's it with yoghurt

E: minu=arust meil oli neid [**või noh**] ma ei tea ma ei vaadanud üldse
I think we had these **or well** I don't know I didn't check at all

ma ei otsinud [võibolla kapis oli]
I didn't look for it perhaps there was some in the fridge

In example 8 *või* connects two interrogatives, one of which is starting with *kas* and the part beginning with *või* can be interpreted as self-repair: it is in the beginning of the part which makes the preceding question more general. P is buying a plant and wishes to know into what kind of a pot she should plant it in future. She assumes that the plant needs a large pot, but is probably not quite sure about it (the repetition of *või või* 'or or' also signals hesitation) and repairs her question to make it more general and thus more neutral.

(8)
P: [jah] (.) meie oma isegi õitseb
Yes ours is even flowering

M: jah
yes

P: .hh jaa kas ta tahab suurt potti **või või** millist potti
hh right does it want a large pot **or or** what kind of a pot

M : mm:
mm

Thus one of the more important functions of *või* is to mark the self-initiation of repair within the boundaries of the turn. Repair is commonly used when something in the preceding text (clause, turn) is considered problematic in some ways: either something is unclear to the listener or he misses something or the speaker thinks that the hearer may not have got everything right; the speaker may also

consider her own turn too imprecise etc (Schegloff et. al 1977, Drew 1997).

Often, the single *või* at the end of the clause is problematic as well: one gets the impression that it might be an attempt to initate a rephrase, which for some reason has been left unfinished. However, this clause-final use of *või* is likely to have become established: this is suggested by the falling intonation concluding the phrase in example 9 *ja=s mena olin mena=i=tea poole aastane=või* 'and I then was I don't know half a year old or' In this phrase, the final *või* suggests vagueness of the information or an assumption, this is also signalled by the phrase *mena=i=tea* 'I don't know'

(9)
U: [menaolin: ju`väike ja mul:=e mamma=ja: (1.0)
I was little then and my e ma and

papa Jänesselja mõisas elasid papa oli sin: Jänesselja mõisa `valitseja. (0.3)
pa living at the Jänesselja manor, pa was here the bailiff at Jänesselja manor.

ja siis meil=oli `toa `koer olnud=ja, (.)
and then we had had a pet dog and,

ja=s mena olin mena=i=tea poole aastane=**või**, (.)
and then I was I don't know half a year old **or**,

ja se `koer oli noh ikka niuke voodikoer=meil. (.)
and the dog was well such a bed-dog for us.

M: jah
yeah

Uncertainty can be marked by the final-position *vä* at the end of an affirmative statement. This is the only use where *vä* does not denote a question but something else. In example 10, for example, the claim is mitigated, marking the approximateness of the information or insecurity. Õ is speaking about a football coach, who has been away from Pärnu for quite a few years already. Initially she suggests the time he has been away is *kolm=neli=viis aastat* 'three four five years' but probably this seems too vague for her, for she elaborates after a pause *no neli aastat=vä* 'well four years or' The addition of *vä* was most likely prompted by the suppositional nature of the time-definition (four years), as Ti does not interpret it as a question – he does not reply to it, but asks another question of his own (*kus ta kolis=sis.* 'where did he move then') after a long pause.

(10)
Õ: aga=se `Tarmo on `küttekontoris
but=that Tarmo is in the heating supplies office

ja `teine on sis `jalgpalliteener.
and the other one is then the football coach.

aga see `teine kolis `Pärnust `ära. (0.5)
but this other one moved away from Pärnu.

nüüd ta=on üks kolm=neli=viis aastat juba `ära kolinud.
now he has been about three four five years already living elsewhere.

no [`neli] aastat=**vä**. (1.2)
well four years **or**.

Ti: [ahsoo].
oh I see

Ti: kus: ta kolis=sis.=
where did he move then?

2.3.3. Question particle

As a question particle, *või* can be clause-initial as well as clause-final.

2.3.3.1. Clause-initial question particle

In the initial position the question particle almost always occurs in its phonetically unreduced form *või* and never as *vä*. The initial *või* as a question particle resembles to great extent the particle starting a repair: the question begun with *või* is rather a question increment, which is used to add something to the previous turn of the same speaker, which is usually a question or a suggestion. Here we are looking at self-initiation of repair, but repair is usually prompted by something in the turn of the conversational partner or absence of that turn. In the example 11 R proposes to meet on Friday. She concludes from E's hesitant reply *noo?* 'well?' that E might have other plans for Friday. Proceeding from this, she supplements her preceding turn with the question *või või sa pidutsed reedel* 'or or you'll be partying on Friday'

(11)
R: sis võiks ˈreedel ˋkohtuda. (0.6)
then we could meet on Friday.

E: noo?
well?

R: ˈ**või või** sa pidutsed reedel (1.1)
or or you 'll be partying on Friday

E: vaevalt=et=ma=nd ˋkogu päeva ˈpidutsen.
not likely that I'll then ˋbe partying the whole day long.

R: ahah ahah (1.0) ee aga ˋõhtul ˋküll ˈvõi.
right right ee but in the evening still or.

The clause-initial question particle is a relatively infrequent phenomenon in conversations, especially in comparison with final-position question particles. Unlike initial particles, the final question particle has a considerably more grammatical function to form a question: it is not tied to a narrow context, but can be the first one in the adjacency pair sequence, start a new topic etc.

2.3.3.2. Clause-final question particle

The clause-final question particle has two main forms: *või* and *vä*, whereas *vä* is significantly more frequent in current usage (see Table 1). In comparison with other functions of *või*, *vä* is clearly a question particle only – the *vä*-variant does not occur in any other functions. There is only one type of exception to this rule – these are the *vä*-s functioning as discourse particles in affirmative statements, which are located at the immediate end of the clause (as in the questions) and mark the uncertainty of information. This type of clause is represented above by example 10, where *vä* marks insecurity, suppositional nature of the information. The main types of *või/vä* questions are the following:

1. A common alternative question, where everything expressed by the clause is included within the scope of the question. This is the most grammatical type of *või/vä* interrogatives, which forms an independent question on its own: it is the first of adjacency pairs in conversation and can introduce a new topic, longer narrative etc. The hearer interprets it as a question and replies to it. In example 12 there is a total of two such questions: L's first phrase, which includes a repair (insert) *[Dol-] (...) Doltše viitas vist (.) ah ma küsisin vist juba et midagi ˈuut ei ole=vä* 'Dol- in Dolce Vita I guess oh I guess I

asked that already that there isn't anyhting new or' and L's second question *aa=sa sa 'seda Doltše viitat kuulsid, kui uute saatejuhtide `konkurss oli=vä* 'oh you you heard the 'Dolce Vita' when there was the competition for new programme hosts or'

(12)
L: [Dol-] (...) Doltše viitas vist (.) ah ma `küsisin vist juba,
Dol- in Dolce Vita I guess oh I guess I asked that already,

et midagi 'uut ei ole=**vä**. (0.5)
that there isn't anyhting new **or**.

H: m pole `kuulnud.
haven't heard.

L: aa=sa sa 'seda Doltše viitat kuulsid, kui uute saatejuhtide `konkurss oli=**vä**. (.)
oh you you heard the 'Dolce Vita', when there was the competition for new programme hosts **or.**

R: mqm (0.5) pole 'ammu ültse kuuland.
No haven't listened to it for some time at all

2. Considerably more common is the use of *või/vä questions* as topic-continuers. Such questions are located after the introduction of a new topic and denote interest in the topic and a wish to develop it. These questions typically start immediately following the previous turn or already during this (Raevaara 1996: 32).

In the next example (13) E's question is prompted by the fact that R speaks about tape-recording the news, but E knows that R herself works in the radio. When H speaks about taping the news, she is intrigued to specify whether R taped the news programmes compiled by herself as well. Thus these questions are strongly associated with interaction-related information and mutual knowledge.

(13)
H: noo 'vahva sis (.) ma olen 'püüdnud `sulle: `lindistada midagi. (0.5)
well great then I have tried to record something for you.

V: VAH-=

H: umbes `turu`hindasid=ja (0.7) 'raadioturu `t(h)eateid=j(h)a.
like market prices and radiomarket announcements and.

V: hehe ((naerab lõbusalt))
hehe ((laughs amusedly))

H: m(h)õningaid u(h)udiseid=aga=
some news but

V: =`enda uudiseid `ka ikka `lindistasid=**või**.
your own news you also taped **or**

H: noo mõned `jah ikka.
well some I did yeah indeed.

Close connection to the previous turn (as in example 13) and the context link this type of questions to some extent to other-initiation of repair: other-initiation of repair is also associated with the previous turn, in which something remained obscure for the listener, and often realized as a question (see example 14). At the same time, other-initiation of repair is a dispreferred continuation, and it is usually supplied following a pause (Schegloff et al. 1977), while here V's question has attached to H's previous turn without any pause, and it demonstrates an interest in the topic.

3. One of the major areas of usage of *või/vä* ending questions is other–initiated repair. Other-initiation of repair is used by a hearer to indicate to a prior speaker that he/she has trouble in understanding or hearing the speaker's utterance or a part of it (Schegloff et. al 1977. Egbert 1997: 612). Other-initiated repair constitutes an adjacency pair on its own, in the first part of which the hearer points to the problem and then the speaker resolves it. It is common for the first pair-part of the adjacency pair to have a question format (Schegloff et al. 1977, Egbert 1997).

It is significant about the *või/vä* questions that repair initiation is accompanied by an offer of interpretation, not just an indication of the problem. For instance, in example 14 the local elections are being discussed. K says that he voted for his uncle. It is probably unclear for Le who exactly is being talked about, and she offers, in the form of a question, her own variant of interpretation, i.e., the name: *selle `Alberti=või.* this Albert=or' After that, K in turn confirms Le's interpretation.

(14)
K: ((süües)) nii see `käüb. (1.0)
((eating)) that's the way it works.

ma valisin `tädimehe. (.) hehe (0.5)
I voted for my uncle. ((laughter))

ei `olnd kedagi teist valida, mida sa valid.
there wasn't anyone else to be voted for, what is there to be voted.

Le: selle Alberti=**või**.
this Albert **or**.

K: ((süües)) jah, mõtsin saab vähemalt oma `õuegi (kaitsta.)
((eating)) yes, I thought at least I can protect my own yard

Other-initiated repair is also used for seeking confirmation, expressing surprise or marking of new information. This is a type of *või/vä* questions that could as well be termed conventionalized other-intiated repair. *või/vä* questions are employed to inquire once again about what was said by the speaker, to obtain confirmation to the fact that the addressee had correctly heard the information unexpected or new for him, and properly understood it. There is new information presented to the hearer, which he considers interesting or important for himself. Usually, such inquiries are accompanied by surprise, therefore the *või/vä* consruction can be interpreted as marking surprise. These questions are not always given a reply, which is probably not even expected, thus the conversational partner does not interpret it as a question, but rather as a phrase expressing surprise. This is why they cannot be considered regular other-initiation of repair, but fixed expressions that have evolved from repair.

In example 15 Ar is talking about a friend's house, which the friend's mother had sold without telling the friend. Both hearers simultaneously respond to this: Ai with a feedback marker *hm::* and M with a confirmation-seeking phrase *päriselt ka=vä.* for real=or'

(15)
Ar: ja nüüt=tuli `välja=et se `emaga olid neil suhted nagu nad olid=ä,
(0.5)
and now it appeared that, well the relationship with their mother was as it was,

ema müüs selle `maja neil selja taga `maha=tead. (0.5)
mother sold the house behind their backs you know.

M: `päriselt ka[=**vä**].
for real **or**?

Ai: [.`hm::]
hmmm

Ar: ükspäev astus üks `härrasmees `sisse ja=ütleb, (1.0) minu maja .
one day a gentleman stepped inside and says, my house.

Another firmly established kind of other-repair, which has become a prototypical *või/vä*-question in the Estonians' language awareness

and also a topic for anecdotes[4] is a delay of the reply. Here it is not functionally a repair, but a delay of reply to 'win time' or refute an accusation as in example 16.

(16)
R: a=miks=ta kapist `väljas=on. (.)
but why is it not in the cupboard.

V: sa ei `pand kappi.
you didn't put it in the cupboard

R: mina:=**vä** (0.5) panin `küll. (.)
I **or** I did put.

V: mqm
no

4. A proposal, formed as a question, to which a confirmation is expected. It is possible that its realization as a question serves as mitigation: the speaker does not wish to appear pushy and therefore puts the proposal as a question, which can be answered negatively, i.e., the speaker enables the hearer to turn down the proposal, *või/vä* denotes mitigation, and seems to offer the hearer an opportunity to refuse the proposal. That it is still quite formal, is illustrated in example 17, in which B turns down A's proposal. As a result, A is very surprised and repeats in amazement his question if B indeed does not want to read the letter (*ei taha?* 'do not want?')

(17)
B: hakkavad `küll aga noh (.) suurtes majades on raske `teha neid.
they'll start yes but well in big houses it is difficult to do these

A: n seda nüüd `küll jah.=
now that's true yeah.

B: =meile tuli üks `kiri $ tahad ma `näitan=**vä**. *$*
a letter came for us, you want me to show **or**?

A: mqm:
no

B: ei `taha?
you don't want?

---

[4] For example: "What's the difference between a babe and a megababe? When you ask a babe what her name is, she replies: "*Minu vä?*" 'Mine or?'.When you ask a megababe the same question, she replies "*Minu vä?* Nimi vä? Päriselt vä?" 'Mine or? The name or? For real or?'"

Thus the most extensive among the fields of usage of *või* is *või* acting as a discourse particle, the main function of which is to mark self-initiation of repair, but sometimes also uncertainty, suppositional nature of the claim. *või* in the function of a discourse particle usually occurs sentence-initially or finally and in the beginning of the repair sequence.

või in the function of both a conjunction and a question particle is related to the discourse particle. *või* as a conjunction also denotes alternatives, being located between the two possible alternatives. The boundary with discourse particle is blurred in cases when the second alternative is added later, is more general and vague and the sequence beginning with *või* can be interpreted as a repair sequence.

In the function of a question particle, *või* can be located both at the beginning as well as the end of the clause, mostly at the end. The initial *või* can form an intonationally complete unit, but it can also be interpreted as self-initiation of repair, as this unit adds something to the preceding request, proposal or question. *või* in the final position forms a complete interrogative, which can be an independent interrogative, topic-continuation interrogative, interrogative understood as other-initiation of repair (and its established variants), interrogatives or proposals marking uncertainty.

3. The grammaticalization of *või* into a question

As appeared above, *või* can be seen as belonging to three functional categories: conjunction, discourse particle and question particle. Of these, the most central field of usage has the discourse particle, which has important connections with other usages. The semantics and functions of the discourse particle (initiation of repair and marking of uncertainty) can be traced in the usage of the conjunction and the question particle. Regarding frequency, the use as a discourse particle was one of the most significant as well: there were approximately as many uses as those of the question particle, and considerably more than those of the conjunction.

Therefore I suggest the discourse particle functions of *või* are earlier than those of the question particle or conjunction, and both the functions of the conjunction and of the question particle have evolved from the discourse particle. What we have here is a grammaticalization process, where the less grammatical units (discourse particle) have become more grammatical units (conjunction

and interrogative). Thus it is a change from the domain of pragmatics into syntax in the well-known chain of grammaticalization outlined by T. Givón in 1979 (see also Heine et al. 1991: 13):

discourse > syntax > morphology > morphophonemics > zero

The grammaticalization process is generally considered unidirectional: "As conceptual manipulation leads from lexical or less grammatical meanings to more grammatical ones, this process is unidirectional, and so are all developments in the process of grammaticalization. Although cases in the opposite direction have been reported, they may be viewed as exceptions to the unidirectionality principle." (Heine, Claudi, Hünnemeyer 1991: 212)

Therefore another possible explanation – the development of *või* from a conjunction into a question particle – is probably out of question, as it is not possible to claim that the conjunction is a less grammatical unit in language then the question particle. In addition to this, as mentioned above, it is difficult to distinguish between the conjunction and the discourse particle, and at best the discourse particle can be distinguished only from the most prototypical uses of the conjunction. For this reason, in the term 'discourse particle' the less prototypical uses of the conjunction (e.g., the inter-clausal *või*) are also included.

The original lexical meaning of *või* is unclear. The etymological dictionary of the Finnish language suggests as an earlier counterpart of the word *vaje*, which means 'interval, gap, difference' but adds that the word may originate from a different stem (SKES: 1590–1591). Thus we are unable to trace the whole grammaticalization process of the word, but only the so-called secondary grammaticalization, in the course of which "expressions of functional categories become more bonded over time" (Traugott 2000).

3.1. The changes accompanying the grammaticalization of *või*

The changes accompanying grammaticalization and signalling grammaticalization have been described in detail in the literature on grammaticalization (e.g., Heine, Claudi, Hünnemeyer 1991, Hopper & Traugott 1993, Traugott 1997). Abraham (1991) has summarized them as follows:

a) increase of the morphosyntactic range of a morpheme
b) shift from lexical to grammatical (or from less grammatical to more grammatical) status (e.g. from a derivative formant to an inflectional one)
c) loss of semantic complexity
d) loss of pragmatic significance
e) loss of syntactic freedom
f) loss of phonetic substance
g) increased constrainedness by grammatical rules.

When we observe the grammaticalization of *või* into a question particle, the most significant of the changes listed above are the following.

• Loss of pragmatic significance. Compared to the use as a discourse particle, the use of *või/vä* is free from modality: it does not point (in the more grammaticalized cases) to the wish to repair or supplement, i.e., modify, one's preceding text. Such are the uses of the question particle, which no longer have a strong connection to discourse: they can form independent interrogatives, understood as complete interrogative clauses outside the local context as well.

However, in the grammaticalization of the discourse particles, processes in the opposite direction have been observed as well: pragmatic strengthening and subjectification (Traugott 1995 [1997]; Traugott 1999a, Traugott 1999b). These may have occurred during the evolution of *või* into a discourse particle as well, as it displays those qualities when used as a discourse particle. However, this must have occurred in the remote past. In case of the *või* evolved into a question particle, these features have been lost again or are currently disappearing.

• Loss of syntactic freedom. While *või* used as a discourse particle has a relatively more free position in the clause (but not free: it may be located either in the beginning or the end of the clause or in the beginning of the rephrases), then in the function of the question particle, it has been narrowed down even more: *või/vä* is located at the very end of the clause (question), being usually encliticized to the preceding word.

• Loss of phonetic substance. In the clause-final position *või* is unstressed and often encliticized to the preceding word. As can be seen in Table 1, *või* has also undergone phonetic simplification in most cases – there is a clear tendency towards diphtong loss *või>vä*.

This tendency is observed only in questions and not in cases of either the conjunction or the discourse particle *või* (excl. the clause-final discourse particle). Still, at the present moment, the diphtong has not yet been lost completely, the occurrence or non-occurrence of this change could be probably clarified by a quantitative sociolinguistic approach.

3.2. Why has *või* evolved into a question particle?

As appeared above, one of the most important fields of usage of the question particle is other-initiation of repair – repair initiated by the conversational partner, which marks a problem of understanding that had arisen in the previous speaker's turn. Other-initiation of repair is commonly formed as a question (Schegloff et al. 1977. Drew 1997, Egbert 1997). The repair-questions can be very general questions about the whole preceding turn (e.g., *'what?')* or denote more specifically what element of the preceding text was problematic (e.g., *'with who did he go?'*).

An important factor to note in case of the other-initiation of repair ending in *või/vä* is that in addition to raising the problem the initiator of the repair puts forward his own interpretation. Inevitably, an interpretation is accompanied by the possibility of it being incorrect. Therefore the repair initiator marks it as suppositional, uncertain – and uses the mitigating clause-final *või* for this end.

Such might be the context having given rise to the *või/vä* questions. The following aspects also suggest this kind of context:

- the *või/vä* questions most commonly are short and strongly bound to the context (but it is the repair questions that are especially strongly context-bound);
- other-initiation of repair is one of the more frequent types of *või/vä* questions (in my data, there were 90 occurrences of *või/vä* questions that can be interpreted as other-initation of repair);
- repair has been connected to such uses firmly established in interaction as uses of *või/vä* questions to mark surprise or new information.

How did *või* end up at the clause-final position?

The most important mechanism in the grammaticalization of *või* is likely to be reanalysis: a confusion in defining the boundaries of linguistic units and the rebracketing occurring as a result (Hopper &

Traugott 1993). There may have been two of such important moments:

1) in the course of the evolution of the clause-final discourse particle;
2) in the analysis of the discourse particle into a question particle.

I will observe these more closely.

1. Evolution of the clause-final discourse particle

Most probably, the *või/vä questions* have been started off by such uses of the discourse particle marking repair where the speaker wishes to add something to the preceding text or correct it – thus from ordinary self-repair. He initiates repair, using one of the more common markers of the beginning of a repair, *või*, but then gets stuck. *või* (or then at least one of the series of *või*'s which fill the time of planning the repair) is therefore separated from the rest of the repair sequence that it starts, being often temporally closer to the preceding sentence, i.e., the one being repaired. Thus it may have happened that *või* came to be interpreted in certain contexts rather as belonging to the preceding sentence. This could be sketched out as follows:

Stage I. *või* starts self-repair at the sentence boundary:

> kas=see sein peab `hirmus tasane olema **või:** võib olla ka siuke: (...) `krobeline.
> 'Does this wall have to be awfully even **or** can it be such rough?'

Stage II. The *või* starting the repair is encliticized to preceding word, the rest of the repair follows the hesitation and can have a more general meaning than the first part. Here the first *või* is interpreted as a wish to start a repair sequence; *või* signifies that the speaker finds the preceding text problematic in some way:

> .hh a kule kas sa `mõtlesid seda muuseumi asja `täna=**või=või** `lihtsalt nii
> 'but look did you mean this museum thing today **or or** just so?'

The repair sequence can be dropped altogether when the speaker does not succeed in formulating it:

> a kuidas sa näiteks tunned oma noh kudas=sul `tervis läks halvemaks või või noh näiteks see kas sa e noh (1.5) `oled sa `füüsiliselt nõrgaks jäänd või=või=või (1.8) **või [või]**
> 'but how are you for example feeling your well how your health became worse or or well for example that have you well become weak physically or or or (1.8) **or or**'

Stage III. Reanalysis: the *või* that has ended up at the end of the clause comes to be interpreted as a marker of the problematicity of the preceding text sequence and the clause is considered completed:

kas on kuidagi võimalik kont'rollida `kuhu see `jäi või miks seda ei ole tulnud=***või***
'Is it possible to check where it is or why it has not arrived **or**.'

This is how the clause-final *või* has evolved, the main function of which is to mark the problematicity of the preceding text, the suppositional, uncertain or indefinite nature of the information. Such a use may have developed in any context, even in that of the affirmative clause. This is the way it is employed in affirmative clauses today as well (see examples 9, 10).

It could be assumed that the above-said is sufficient as an explanation of the grammaticalization of *või*: *või* could have evolved in the context of an interrogative and therefore the *või* remaining at the final position came to be gradually understood as a question particle. However, this hypothesis is contradicted by the fact that today the *või/vä* ending questions are very weakly linked to *kas* (see Table 2). Therefore I think that the context where *või/vä* questions originated in had to be such that it was not associated with *kas*. Such context is for example, other-initiation of repair, which still remains one of the more important areas of use of *või/vä*.

2. The evolution of clause-final discourse particle into a question particle

The clause-final *või* expressing supposition, uncertainty is especially important in other-initiation of repair, especially of the type where only a certain element from the preceding turn is repaired. The more frequent elements demanding repair have been considered, e.g., discourse referents (e.g., people being spoken about) etc. (see Schegloff et. al 1997). As was said above, for the word or text element that remained obscure often one's own interpretation is offered, which may also be incorrect, and therefore requires marking as a problematic suggestion for interpretation. It is exactly this type of other-initiation of repair where *või/vä*-questions are employed today.

This is most likely to be also the context where the discourse particle in the final position acquired the functions of the question particle. The reason for this is the overall context of the clause – in

other-initiation of repair, it is usually interrogative. Thus we can add another stage to the above schema.

Stage IV. Reanalysis: *või* is analyzed in the interrogative context of the other-initiated repair as an element belonging to an interrogative, which is not followed by a rephrase and the sentence is intonationally complete:

selle Alberti=**või**.
this Albert **or**?

As *või* had acquired the meaning of the question particle, it spread on to other contexts: initially to the topic-continuation questions slightly similar to repair (example 13) and after that to other interrogative contexts. By now a separate type of interrogative sentences has evolved from it, which can also be used outside the particular textual context, for example, introducing a topic (example 12).

The fact that *või/vä* questions originate in repair could also be the reason why the phenomenon has not spread into the written language (in addition to the overall inertia of the written language), although it has been used in the written language as a marker of speech for at least a century already: as the context of origin of the questions is repair, a phenomenon which is caused by the linearity of spoken language, then it is alien and insignificant to the written language, and will probably come to the fore only having entered very extensive use in the *või/vä* questions.

3.3. *or*-questions in other languages

or-ending questions are common in other languages beside Estonian, e.g. Moré, Hausa, Kxoe, Latvian, Basque a.o. (see, e.g., Heine & Kuteva, in press), but it is not at all clear whether their pattern of evolution was similar.

The *eller*-ending questions in Swedish have been analysed by method of conversation analysis by Anna Lindström (1999). She has found that the Swedish *eller*-questions also mostly mark a problem: either the content of the question or the preceding text is problematic or uncomfortable. "Analysis of or-inquiries in a range of sequential contexts demonstrated that the or-construction is associated with the invitation of activities that can be understood as problematic. The point is not that every problematic action is done as an or-inquiry. Rather, the or-construction marks the action as problematic. It is a

way of "doing problematicity" I proposed that the positioning of *eller* within the turn relaxes the preference organization of the turn to allow for a 'no'-type response." (A. Lindström 1999: 103)

Thus she is concluding that the speaker (the person asking the question) is enabling the addressee to give a reply more easily in this way. If we compare this use with Estonian *või/vä*-inquiries, then the or-questions have evolved in a different context, not in that of other-initiation of repair. I would rather compare it to the first stage in the grammaticalization process of the Estonian *või/vä*-questions – the upshot of clause-final discourse particle (which has occurred in the context of inquiry).

4. Conclusion

Repair is one of the fundamental systems underlying interaction, helping to resolve misunderstandings and problems arising in interaction. For this reason, repair has always existed in language in some for or another. It is hard to believe that a system employed so frequently would not have grammaticalized in language in any way. The present paper is an attempt to explain the evolution of the *või/vä* interrogative type from discourse particle via repair.

I have described this process as two-staged.

1. The discourse particle initiating repair (one of the main functions as discourse particle) occurs at the end of the clause by the breaking off the repair sequence, but preserves the problem-marking meaning there, and evolves into an independent final particle marking problematicity (uncertainty, supposition).

2. *või* acquires the functions of a question particle only in the initiations of other-repair, where an interpretation is suggested to the problematic element in the previous speaker turn.

This context is usually that of an inquiry, and for this reason *või* acquires the function of a question particle here. From here, the question particle *või* moved on to other contexts and by now it can be used in any types of yes/no questions in spoken Estonian.

This process has been accompanied by other changes, which are generally typical of the grammaticalization process: 1) loss of pragmatic significance; 2) loss of syntactic freedom; 3) loss of phonetic substance.

It is possible that in the search for a possible chain of grammaticalization, the present treatment may have overestimated

the role of self-initiation of repair: in principle, it is possible that the formation of a sentence-final particle denoting problematicity is not a precondition for the emergence of a question particle. However, even more so I would like to emphasize the role of other-initiation of repair in the chain of grammaticalization, as other-initiation of repair is the most likely context where the reanalysis of *või* into a question particle may have happened – this context is frequent in interaction, and interrogative by nature. The origin of *või/vä* questions in the context of other-initiation of repair can also be explained by their relative infrequency in written language – repair is a necessary mechanism in spontaneous spoken interaction, and not needed in writing.

Certainly, other theories of origin for the evolution of the *või/vä* questions in Estonian can be suggested. But it should not by any means be overlooked that *või/vä* questions have their origin in interaction – therefore, when seeking explanations it is necessary to account for the organization of interaction and systems regulating interaction.

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Või/vä küsimuste grammatikaliseerumisest eesti keeles

Liina Lindström

Käesolev artikkel tegeleb *või/vä*-lõpuliste küsimuste kasutuse ja võimaliku tekkemehhanismi selgitamisega eesti keeles. *või/vä*-lõpulisi küsimusi on peetud Eestis peamiselt suulises keelekasutuses levinud nähtuseks. See ei ole aga sugugi mitte uus nähtus eesti keeles – esimesed *või*-lõpulised küsimused on Eesti kirjakeele korpuses olemas juba ajavahemikust 1900–1909. Samas ei ole seda tüüpi küsimused kirjakeeles praegugi väga laialt levinud – 1990ndate korpuses oli neid vaid 62 (kuigi selles alamkorpuses on umbes 1 miljon tekstisõna). Seetõttu võib oletada, et nende küsimuste tekkepõhjus on seotud mõne suulise kõne eripärast tingitud nähtusega, mille järgi kirjakeeles ei ole vajadust – näiteks parandusliigendusega (*repair organization*). Parandusligenduse abil parandatakse kõnelemisel ja kuulamisel tekkivaid arusaamatusi (vt ülevaadet Hennoste 2000: 2689 jj).

Artikli materjal on pärit suulise kõne korpusest, kokku analüüsitud 397 *või/vä*-lõpulist lauset, millele lisanduvad muud *või* kasutused. Analüüsitud on *või* ja *vä* grammatilisi ja pragmaatilisi funktsioone. Selgub, et *või* võib tänapäeva suulistes tekstides esineda: 1) sidendina (näited 4, 5); 2) diskursusepartiklina, mis alustab eneseparandusi (*self-initiation of repair*, näited 6–8), ning lauselõpulise ebakindlust väljendava partiklina (näited 9–10); 3) küsipartiklina (näited 11–17). Küsipartiklina kasutamisel on üks oluline kasutusala teise algatatud parandused (*other-initiation of repair*, näited 14–16).

Käesolev artikkel on katse selgitada *või/vä*-lõpulise küsilausete tüübi teket diskursusepartiklist *repair*'i kaudu.

Olen seda protsessi kujutanud kaheetapilisena:

1) eneseparandust alustav diskursusepartikkel (*või* üks peamine funktsioon diskursusepartiklina) satub paranduslõigu poolelijätmise kaudu lause lõppu, ent säilitab seal probleemi markeeriva tähenduse ning kujuneb iseseisvaks lauselõpuliseks problemaatilisust (ebakindlust, oletuslikkust) markeerivaks partikliks;

2) küsipartikli funktsioonid omandab *või* alles teise algatatud parandustes, milles pakutakse välja ka omapoolne tõlgendus problemaatiliseks osutunud elemendi kohta eelneva kõneleja voorus.

Selline kontekst on tavaliselt küsiv ning seetõttu omandab *või* siin küsipartikli funktsiooni.

Siit liikus küsipartikkel *või* edasi teistesse kontekstidesse ning praeguseks on see kasutatav kõikvõimalikes valikküsilausetes.

Selle protsessiga on kaasnenud ka teised muutused, mis on üldiselt grammatikaliseerumisprotsessile iseloomulikud (Abraham 1991, Hopper&Traugott 1993): 1) pragmaatilise tähendusrikkuse nõrgenemine; 2) süntaktilise vabaduse nõrgenemine; 3) foneetilise kuju lühenemine ja muganemine.

Tracing grammaticalization of *oota* 'wait' in Estonian conversation[1]

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Introduction

The term grammaticalization has been used to denote a kind of language change whereby something less grammatical becomes more grammatical, a more lexical unit becomes a more functional unit. The present usage of the 2nd person singular imperative of *oota* 'wait!' in Estonian seems to indicate a possible development of exactly the kind: a specific form of a full lexical verb is also used as a particle.[2]

Grammaticalization has often been treated as a coherent process with definable features leading to changes in grammar: "(---) grammaticalization is a kind of language change, subject to certain general processes and mechanisms of change, and characterized by certain consequences such as changes in grammar" (Traugott and Heine 1991:3). However, whether particles should be treated as part of grammar depends on what we mean by the term *grammar* Heine's and Reh's definition of grammaticalization (1984: 15) is less restrictive in this respect: "with the term "grammaticalization" we refer essentially to an evolution whereby linguistic units lose in semantic complexity, pragmatic significance, syntactic freedom, and phonetic substance respectively" According to them, grammaticalization could just be seen as a complex of related or parallel processes.

Heine and Reh (1984: 16) have also suggested a tripartite classification of correlations of change: Semantic-pragmatic status, grammatical behavior, and phonological substance (Traugott and Heine 1991: 6). As to particulized usages of *oota*, all of these processes seem to apply: several semantic components of *waiting* have

[1] The author is grateful for Bengt Nordberg and Ilona Tragel for valuable comments.

[2] A proposal to call this type of changes *pragmaticalization* rather than grammaticalization has been put forward by Erman and Kotsinas (1993:79) but the term has not attracted general acceptance.

gone lost, the particulized forms cannot generally take person and number endings or direct objects, and the form is often shortened into *ota, ot*, or *oot*. As will be discussed below, the processes are not necessarily finely attuned to each other, which could be seen as a further argument for considering grammaticalization a common name for correlated processes rather than a single path of evolution (Traugott and Heine 1991: 6).

This paper attempts to characterize the usage of *oota* in present-day Conversational Estonian leaving possible historical developments untouched. As Traugott and Heine (1991:1) have put it, "there is (---) disagreement about whether grammaticalization is primarily a diachronic phenomenon to be studied from a "source and pathway" perspective, or primarily a syntactic, discourse-pragmatic phenomenon, to be studied from the point of view of fluid patterns of language use across time or at a synchronically segmented moment in time" The present study subscribes for the latter standpoint, partly because of the nature of the data, but also because the observations here seem to support the idea of continuously emergent grammar, which has gained ground during the recent decades (for a classic, see P. Hopper 1987).

One of the central claims in the study of grammar as temporal, emergent, and continuously disputed, is that regularity comes out of discourse, i.e. that grammar is shaped by discourse as much as grammar shapes discourse (P. Hopper 1987: 4). In grammaticalization studies the role of discourse has been recognized for a long time (e.g. Traugott 1982: 267) but it is still not common in the field to pay much attention to factors outside the immediate linguistic context.

One caveat of not working with the interactional premises of language seems to be the by now firmly established unidirectionality hypothesis. Put forward by Traugott (1980;1982;1989) it basically states that the development of the item in the grammaticalization process goes through three functional-semantic components, from propositional (to textual) to interpersonal, and not the other way round.

What Hakulinen and Seppänen (1992: 546–547) have already noticed is the fact that when working with interactional data the interpersonal component is ever-present and not easy to separate from neither the propositional nor the textual component. It would be especially counterintuitive not to consider imperatives interpersonal – the Finnish *kato* discussed by Hakulinen and Seppänen is also origi-

nally an imperative, meaning 'look!' Consequently, in the case of conversational *kato* and *oota* the propositional and interpersonal components should be considered intertwined from the start, and there is even a possibility for these items to acquire textual functions, which is a developmental track not predicted by the unidirectionality hypothesis.

The Estonian *oota* may not yet have developed as far as the Finnish *kato,* which is already acquiring the textual flavor of a causal connective (Hakulinen and Seppänen 1992: 533), but we can already trace a tendency to use *oota* as a topic-disjunctive particle. Neither of these items, though, seems to have made their way to the respective written language yet. Interpersonality is preserved in the textual usage of *kato* as well as in *oota* since they are both among other things used to indicate the structure of the speaker's contribution to the interlocutor(s). The present study thus supports objections to the unidirectionality hypothesis that could be suffering from written language bias, as suspected by Hakulinen and Seppänen (1992: 547).

The paper describes the usage of *oota* on a continuum of more literal to more particulized. I will start, however, by describing the item, its variants, and its frequency.

The data

The data comes from 324 naturally occurring phone conversations of two types: telemarketing calls by three telemarketers selling one of the biggest daily newspapers in Estonia during one night each (109 conversations), and everyday calls between family members, relatives, friends, and colleagues, recorded at the informants' homes. All in all there is more than 10 hours of conversational language and about 103 000 words in the corpus. The great majority of the informants seem to be speaking Common Estonian, which is the oral variety closest to the Written Standard. The corpus includes representatives of both sexes and all ages but there is somewhat more data from younger females who were my primary informants.

The item *oota*

The variants of the item according to the present database were in the order of frequency *oota* (69), *ota* (69), *ot* (57), and *oot* (11 cases). The latter never occurred alone but was either reduplicated and/or

used in combination with other variants (*oot oot* (1), *oot oot ot* (1), *oot oot ota* (1), and *oot ot ot* (5 times)). Even *ot* had a tendency to occur in combinations, (4 times as *ot ot*, and once as *ot ot ot*, *ot ot ot ot*, *ot ot ot ot ot*, and *ot ot ot ot ot ot ot*, which leaves us with 18 cases of single *ot*). So far I have not traced any functional differences between the reduplicated and non-reduplicated variants.[3]

To a great extent the difference between the transcriptional variants of *oot* and *oota* on the one hand and *ot* and *ota* on the other is of course the stress weight of the item in the intonation unit, but the length of the sounds *o* and *t* is also of importance. It is impossible to say at the present moment whether it is the weakened stress that has triggered shortening or *vice versa*. The shortening may also have to do with whether there is a whole phrase following immediately, in which case *oota* tends to be phonologically reduced and unstressed.

There is no one-to-one correspondence between semantic bleaching and phonological reduction of the form. Table 1 presents a very rough classification of the variants by their function, the division line being simply whether the interlocutor is literally expected to wait or not. (Notice that in the discussions below the meaning of the terms *literal* vs. *particulized* usage is much narrower.) Even if all the variants occur in both categories, *ota* stands out as the most frequent form of the particle. The reduced form *ot*, at the same time, seems to be far less frequent in this function.

Table 1. Variants of *oota* and their functions.[4]

	More literal	More particle-like	% of more particle-like forms
oota	43	30	43.5
ota	20	51	73.9
ot	41	15	26.3
oot	7	5	45.5
oodake	25	1	3.8

[3] Hennoste (1998:161; 2000:1365) has claimed that the reduplicated variant *otot/odot* is a question but there is no proof whatsoever for this statement neither in the present corpus nor in Hennoste's writings.

[4] It should be noticed that the overall sum of the table does not match the overall number of occurrences since some cases are ambiguous and some impossible to classify. Table 1 is thus only a very rough guideline.

The indicative imperative paradigm in Estonian involves three forms in Standard Estonian: 2SG (*oota*), 2PL (*oodake*), and 1PL (*oodakem*).[5] The latter is markedly formal and is not represented in the present corpus. *Oodake* 'wait:2PL is represented by 26 cases, generally used literally, i.e. for making the interlocutor wait for a while: *oodake natukene* 'wait a second' (S1B13), *oodake ma küsin* 'wait, I'll ask (somebody)' (ÜA15), *oodake üks etk ma kutsun isa* 'wait a moment I'll call my father' (RA24). Once, however, it is used to get an explanation on an earlier topic: *oodake aga kui ma kolmeks kuuks tellin siis läheb sada kolgend krooni* 'wait but if I order (it) for three months then it'll be a hundred and thirty kroons' (ÜA10). This could be treated as an argument for seeing the present usages of the verb *oota* as a case of mere polysemy since several forms seem to be behaving the same. On the other hand, the 2nd person plural form never shows up as a "pure" disjunctive particle and it is very rare indeed in the more particle-like usage. It is therefore left out of the rest of the discussion.

It would be convenient to have a single form to refer to when talking about the item, but since the usages form a continuum, it is not easy to settle for one. In one end of the continuum we have the literal usages of the imperative *oota* 'wait' and in the other end there is the conversational particle whose most frequent form is *ota* and which is not as easy to translate. For the time being, the common neutral denominator for all the cases is going to be the phonologically full form *oota*.

Frequency

The relationship between frequency of tokens in text and the emergence of grammar has been pointed out by several authors in the last decade (e.g. P. Hopper 1987; DuBois 1985; Thompson and Mulac 1991: 314), since logically, ritualization presupposes repetition (Haiman 1994). Frequency has been considered one of the three licencing conditions of grammaticalization (besides semantic suitability and salience), and the only one that actually leads to grammaticalization and hence to fixing, freezing, idiomatization, etc. (Traugott and

[5] For trascription and glossing conventions, see Appendix 1.

Heine 1991: 9). Frequency thus seems to be a decisive factor in the process of ritualization and/or grammaticalization in language.

As to *oota,* it was very frequent among verb forms in the present corpus: the phonologically full form *oota* and the shortened *ota* shared the 25–26th position. This is very high considering that there were eight forms of the verb *ole-* 'be' among the first thirty most frequent forms as well as several particulized forms (*kule* and *kuule* 'listen:IMP:2SG' *tead* 'know:2SG'; *tähendab* and *täendab* 'mean:3SG').[6] The verbs *mine-* 'go' and *tule-* 'come' were both represented by three forms in the top-frequency chart, and *saa-* 'get' by two. The two variants of *oota* were placed on a par with the expectedly frequent forms in (phone) conversations, e.g. *arvan* 'I think' *mõtsin* 'I thought' and *elistan* 'I call/I'm calling' Furthermore, when *ot* and *oot* were added to the calculations, and phonological variants of other verbs had also been coalesced, *oota* could easily be characterized as one of the most frequent verb forms in the corpus, ranking 9th. It should thus fulfill the frequency requirement of an item that could possibly be undergoing grammaticalization.

Literal usage

We can now take a closer look at the semantic continuum of usages of *oota* where in the extreme cases the particle *ota* only seems to have a conversation structural function. We could start by looking at the most literal usage of *oota*, i.e. the cases where the addressee literally has to wait.

In phone conversations it happens that one speaker tells the other to hold on for a while (about the American English *hold on* in phone conversations, see R. Hopper 1991). Since phones are used for communication outside the actual physical surroundings of the speakers, the reasons for holding on abound: one of the speakers may have to fetch something, answer the doorbell, talk to a third person etc.

The pause induced by the need to attend to any matters outside the auditory realm of the conversation is in Estonian often introduced

[6] In frequency calculations I have left out newspaper calls since the topic and the task at hand there were always the same, which could have skewed the frequency results of lexical items in a way that would not reflect the speakers' daily experience.

by the imperative form *oota*, sometimes combined with adverbs *üks hetk* 'one moment' *natuke* 'a little' or something of the kind. (Whenever an adverb is involved, the verb is never phonologically reduced.) The plea to wait may be followed by a clarification why the interlocutor has to continue hanging on the phone without using it for neither listening nor talking. Examples include *ota ma räägin* 'wait, I'll talk (to her)' (ÜB3), *no ota ma küsin siis kohe präegu* 'wait, I'll ask (him) straight away' (K1B11), *ota ma annan talle* 'wait, I'll pass on (the receiver) to her' (K3B1). When *oota* is used alone and followed by silence, it is most often treated as a literal order to wait.

Besides following the verb directly, the reason for holding on may succeed the pause after *oota*. In Example 1, the speaker P has proposed her good friend R to meet her later that night. R agrees but asks P to hang on the phone without any further clarification (line 1). At this point it cannot be clear for P what is going on: R has either been interrupted by something in her physical surroundings (e.g. a boiling kettle) or the action she is going to carry out during the pause is somehow relevant for what they had been talking about, i.e. the planned meeting. In either way, R is accountable for the long pause (4.8 seconds). Immediately after it, R offers a clarification in the form of a list of tasks – she has obviously been checking the calendar for her obligations for the evening, which is relevant in regard to her ability to go out with P.

(1) Going out

1	R:	[e::t okei] lähme (0.2) .hh oota üks hetk hh
		that okay go:1PL wait:IMP one moment
		Okay, let's go. Wait a second!
2	P:	[@@@]
3		(4.8)
4	R:	ma pidin täna (ühele sõbrannale) kirja
		I must:IMF:1SG today one:ALL friend:ALL letter:GEN
		I was going to write a letter to a friend today
5		ära kirjutama siis lastele sõnad välja trükkima
		ÄRA write:INF then child:PL:ALL word:PL out print:INF
		then print out words for the children
6		/---/
(P1A4)		

As can be deduced from the examples above, *oota* may be used to indicate a postponement of a relevant next action (e.g. continuation of the conversation) because there is another time-consuming (and in the present corpus often partly physical) action that needs to be carried out first. The speaker may then introduce this another activity with *oota*. If it is possible to carry out the intermittent activity while still hanging on the phone, the activity may be accompanied by either a reduplicated *oota* (e.g. *ot ot ot ot ot ot ot* while the speaker is looking for the relevant place in a manuscript (M2BE1)), or a verbal explanation all the way through, as in Example 2.

Two friends are discussing the time for a concert rehearsal. In lines 1–4 K offers relatively vague information about it – the rehearsal is going to take place on a Saturday or a Sunday close to the Wednesday of the concert. Without acknowledging this as a new or relevant information or agreeing to turn up at the rehearsal, E starts looking in her calendar, supposedly for the exact dates. The searching activity is accompanied by a verbal explanation, initiated by *oota*: *oota ma vaatan seda kalendrit* 'wait, I'll have a look at the calendar' (line 5).

(2) Rehearsal date

1 K: [(vist)] nimodi et kui on e kolmapäv on
probably so that when be:3SG Wednesday be:3SG
Probably so that when the performance is

2 väljalaulmine siis laupäval vist või midagi
performance then Saturday:ADE probably or something
on Wednesday then on Saturday probably or something

3 niisugust (.) või pühapäval või midagi noh
like that:PRT or Sunday:ADE or something NOH
like that or on Sunday or something

4 äsi seal ligidal
very there close
very close

5 E: oota ma vaatan seda kalendrit millal
wait:IMP I look:1SG this:PRT calendar:PRT when
Wait, I'll have a look at the calendar when

6 siis oleks nagu laulmine oleks:
then be:COND NAGU singing be:COND
(it) would be the singing would be

7 K: mmhm ota ma võtan ka oma märkmiku mh (0.3)
MMHM wait:IMP I take:1SG too own notebook:GEN
Uhuh. Wait I'll take my notebook too

8 ma arvan et põhiline [seltskond]
I think:1SG that major group of people
I think that most people
(K3B12)

Another case of similar usage of *oota* can be found in line 7. K too takes her notebook and accompanies this activity by a verbal explanation: *ota ma võtan ka oma märkmiku* 'wait, I'll get my notebook too' By doing this she in her turn breaks B's ongoing attempt to determine the date of the performance, which they need in order to deduce the time of the rehearsal. Only after the verbal explanation by K for the delay (that she is taking out her notebook) and a short pause (0.3 seconds) the relevant next action of retrieving precise information about the rehearsal time can go on (in line 8). It can thus be seen that the ongoing main activity of determining the time of a rehearsal comes to a standstill during the turn constructional units (TCUs)[7] preceded or initiated by *oota*.

The great majority of the literal usages of *oota* (101 out of 103) in the present corpus occur in positions initiating a pause or an alternative activity, which thus seems to be a typical placement of the item in phone conversations. In face-to-face situations there are numerous non-verbal possibilities for achieving a break in the ongoing conversation, or for indicating a need to carry out some intermittent action, but the option with *oota* can certainly be used even there.

Thinking periods and word searches

Besides carrying out an action that delays the relevant next action, the delay may also be due to the speaker being preoccupied with thinking or formulating, i.e. not immediately able to express herself. *Oota* seems to be used in extensive as well as in somewhat shorter thinking periods.

A case of extensive thinking is presented in Example 3 where P suggests that T would paint her. This suggestion is followed by a long pause (1.5 seconds) and a further extortion *okay?* by P in

[7] *Turn constructional units* are defined in regard to possible turn completions, first by Sacks, Schegloff, and Jefferson (1974:702–703).

line 3. Instead of producing a relevant reply for the suggestion T diverts by initiating some kind of statement in line 5 (*ot fakt on* 'OT, the fact is'). He continues by producing three more tokens of *oota* with short pauses in between and then an account of why the conversation has been put on the hold (*ma mõtlen* 'I'm thinking'). After several restarts (*ee fakt fakt* 'the fact the fact'), another recognition of troubles with the thinking process (*(XX) ma tahtsin öelda* '(what) did I want to say'), and a token of realization or remembering (*aa*), he finally recaptures the initiated syntactic unit and finishes it by saying that he has not used any models in his work. This statement is produced as a response to P's suggestion that T would paint her, a response that was postponed by the thinking process consisting of losing and finding the thread and accompanied by pleas for P to wait.

(3) Painting

1 P: /---/ s teed must maali
then make:2SG I:ELA painting
Then you'll paint me

2 (1.5)

3 P: [nõu]s
agree:INE
Okay

4 T: [aa]

5 T: ot fakt on oota (.) oota (.) oota ma mõtlen(.)
OT fact be:3SG wait:IMP wait:IMP wait:IMP I think:1SG
OT, the fact is, wait, wait, wait, I'm thinking

6 ee fakt fakt (XX) ma tahtsin öelda aa fakt on
fact fact I want:IMF:1SG say:INF AA fact be:3SG
The fact- (what did) I want to say, oh yeah, the fact is

7 see et ee nende: tööde puhul pole: ühtegi
this that this:PL:GEN work:PL:GEN at be:NEG any:PRT
that no models have been used in

8 m@od@elli k@asutatud
model:PRT use:IMS:PPT
these works
(P3A8+B1)

Other examples of extensive thinking periods accompanied by verbal explanations include e.g. *ot ot ot ma ütlen kohe* 'OT OT OT I'll say (it) in a second' (ÜA6), *ota ma mõtlen mis teil veel on* 'OTA I'm thinking what else you have' (P1B3), *ot ot ot ot ot mai saa üldse aru*

enam 'OT OT OT OT OT I cannot understand anything any more' (P2A3).

In cases of extensive thinking the token *oota* could easily be categorized as literal since the interlocutor is expected to wait. (This has been done in Table 1.) On the other hand, the shorter the time of thinking, the weaker the literal meaning in the sense that the extent of the waiting period may become minute. (According to EKS *oota-* means to stay (behind) somewhere for a while, counting on something to arrive or happen in due course – my translation, L.K.). In the shortest cases the interlocutor is not expected to wait for more than the duration of the production of *oota* and possibly other hesitation items.

Example 4 presents a case in point. P makes the call and asks for Kaire in line 1. S says that Kaire is not at home and initiates a syntactic unit *Kaire läks* 'Kaire went', which she is unable to finish immediately. The continuation *suusatama* 'skiing' comes after several indications of hesitation: two pauses, three vocal items (*a, mh, mm*), the particle *nh*, and two tokens of *oota* (*ot, ot*). *Oota* in this word search is thus used in a line with other hesitation phenomena that indicate that the speaker is still aiming to continue and therefore the interlocutor is expected not to enter the TCU other than possibly for suggesting candidate words (Lerner 1996: 261–262).

(4) Gone skiing

1	P:	.h ee tere ma palun Kairet
		hi I ask:1SG KAIRE:PRT
		Hi, could I talk to Kaire, please
2	S:	Kairet ei ole Kaire läks
		KAIRE:PRT NEG be KAIRE go:IMF:3SG
		Kaire is not here, Kaire went
3		(0.7)
4	S:	a mh (.) mm ot ot (nh X) suusa<0tama 0>
		OT OT NH ski:INF
		OT OT NH skiing
(P1A10)		

Oota as a word search and/or hesitation item is of course much less frequent than e.g. pauses and relatively meaningless vocal sounds; the present corpus includes about 10 cases.

Side sequences and digressions

Besides describing one's own actions, carrying out an adjacent activity, or experiencing formulation problems, the temporary standstill in the conversational track may be achieved with the so-called side sequences. *Side sequence* is a term first used by Jefferson, who characterized it as "a break in the activity (---); that is, the on-going activity will resume" (1972: 294), and as "a subsidiary sequence" (1972: 309–320). However, her collection only included kinds of challenges, e.g. wisecracks and misapprehensions, which were completely irrelevant for the ongoing action. In this paper, the term will be extended even to non-challenging matters somewhat pertaining to the ongoing "main" action but still bringing it first to a halt and then to a resumption. In my database one of the most common side sequences involve inquiries about what time, day, date etc. it is.

In Example 5, P suggests that there are two ways to proceed after the present phone call has come to an end: either she or the interlocutor will have to call back. In line 3, T proposes that P would do the calling, and continues with a formulation item (*ütleme* 'let's say') in line 4. The next TCU consists of a question about the present weekday and is initiated by *oota*. Only after P has confirmed T's guess of the weekday the "main" conversational sequence proceeds by T suggesting P to give her a call on Friday, thereby demonstrating the relevance of having to determine the present weekday in the first place.

(5) Calling back

1	P:	.hh aa nd mai teagi kas: e m kas ma jätan
		now I:NEG know:GI QUES QUES I leave:1SG
		I don't know now whether I'll leave
2		oma numbri või ma ĕlistan teile uuesti
		own number:GEN or I call:1SG you:PL:ALL again
		my number or whether I'll call you back
3	T:	no ma mõtlen et te võiks uuesti ĕlistada: k h
		NO I think:1SG that you:PL can:COND again call:INF
		Well, I think you could call (me) back
4		sis ütleme ota täna on täna on
		then say:1PL OTA today be:3SG today be:3SG
		Let's say OTA today it's today it's

5 teisipäev jah=
Tuesday yes
Tuesday, isn't it

6 P: =jah
yes
Yeah

7 T: .h ütleme et kui te elistaks reedel
say:1PL that if you:PL call:COND Friday:ADE
Let's say you call me on Friday
(P8A1)

Naturally, side sequences are not confined to matters of dates or time and can be quite varied. In one case the speaker starts characterizing somebody: *ta on nisune ka:ngesti akt-* 'he is very act-' but then breaks the characterization with a question about whether the interlocutor knows a third person: *ota kas sa (.) kas sa Unn Peeti mäletad* 'OTA, do you remember Unn Peet?' (K2A15). After receiving an affirmative answer he eventually compares Unn Peet with the person he had wanted to characterize in the first place (both of them are apparently exceptionally energetic). This temporary digression from the main topic, involving a background check with the interlocutor, is initiated by *ota*. After the relevant background information has been retrieved the main activity of characterization may continue.

Similarly, *oota* may initiate a disaligning argument that (temporarily) distracts the projected line of action. In example 6, L asks M about a paper they have to read for a class and M says she has got it (in line 1). L's following turn consists of a confirmatory question (*on sul* 'you do?'). M, however, instead of the expected next action of answering, introduces an argument that may undermine her initial claim: since L is obviously in a great hurry, owing the paper but not having it available at the very moment may qualify as not having it at all. This disaligning argument is initiated by *oota*.

(6) The paper

1 M: aa see tekst on küll mul jah
AA this text be:3SG KÜLL I:ADE yes
Oh, I do have this text, yeah

2 L: on sul
be:3SG you:ADE
You do?

3 M: oota aga[8] ma ei tea kas ta mul siin on
OOTA but I NEG know QUES it I:ADE here be:3SG
OOTA, but I don't know if I have it here
(M1A2)

Only after M finds the paper the arrangements of passing it on are made.

In more monologic, e.g. narrative, context *oota* may initiate a digression of the same kind. An example is presented in Hennoste (2000: 2476) where Kr is asked about the end of something s/he has been telling about (line 1). Kr initiates the answer but quits the syntactic unit half-way and states that s/he cannot remember the name of the man. (At the same time, it may be an indication of the ongoing thinking process as described above.) This digression is initiated by *oota*.

(7) The name of the guy[9]

1 M: a kuidas ta lõppes =sis.
A how it end:IMF:3SG then
But how did it end?

2 Kr: ta lõppes sellega =et (.) ota ma=i mäleta
it end:IMF:3SG this:COM that OTA I NEG remember
It ended with- OTA I can't remember

3 mis selle mehe nimi oli [vaata see]
what this:GEN man:GEN name be:IMF:3SG look:IMP this
what the guy was called, you know, this

The present corpus also includes some more monologic digressions. *Oota* can even be used for temporary breaks in a single syntactic unit, e.g. *helista ota omme sa oled seal noh näiteks laupäeva jooksul mulle siia koju* 'call OTA tomorrow you'll be there NOH me sometimes on Saturday here at home' (K2A11). Here the verb-initial syntactic unit is interrupted by *oota,* followed by a description of a relevant background factor (*omme sa oled seal* 'tomorrow you'll be there'). After that the interrupted syntactic unit is continued by

[8] It is interesting to notice that *oota* is relatively often either immediately preceded or followed by *aga/a* (26 times in the present corpus). They can both be used for topic disalignment but *aga/a* most probably implies more contrast with some preceding unit as it also does in the Written Standard (Palmeos 1967:14-15; Erelt et Al. 1993:278-279).

[9] The transcription of this example is according to the source.

several obliques (*laupäeva jooksul* 'during Saturday' *mulle* 'to me' and *siia koju* 'here at home').

In these cases *oota* seems to function as an indication of the need to work something out before the interlocutors can continue their action at hand. Digressions and side sequences temporarily take the speakers to a side-track and halt the main action. Since these actions can be initiated by *oota,* we could conclude that *oota* is used as a kind of conversational stop sign.

In this function *oota* seems to have preserved the semantic component of the imperative *oota,* which urges the addressee to stop the action at hand. On the other hand, at least in more dialogic cases, the semantic component of just hanging on or staying behind (cf. the definition in EKS) seems to have gone lost. The interlocutor is often actively involved in attending to the side sequence. Still, though, there is an expected point in the future when the "main" action will supposedly be resumed.

Repair initiations and clarification requests

We have now seen that *oota* is used as a kind of conversational stop sign in cases where the interlocutors are expected not to move on before some alternative and/or postponing activity (talking to a third person, searching, thinking, attending to the side sequence etc.) comes to an end. In addition, the stop sign quality of *oota* is used to return to or linger at something that has remained unclear.

We can start by looking at a simple other-initiation of repair. In Example 8, R tells M that the file she needs can be drawn with the help of FTP, and continues with a question whether M is able to do that (*oskad tõmmata* 'can you draw (it)?'). In line 3, M initiates a repair about the acronym FTP that she has misheard. Her turn begins with *oota*.

(8) Drawing the file

1 R: vata on (.) on võimalik sealt tõmmata:
see:IMP:2SG be:3SG be:3SG possible there:ABL draw:INF
You see, it's possible to draw (it)

(0.5) ee Effteepeega (.) oskad tõmmata
FTP:COM can:2SG draw:INF
with FTP, can you draw (it)?

3 M: ot mis tähendab (.) mis ess tee pee
OT what mean:3SG what s t p
OT what does it mean, what s t p?
(M1A10)

There are numerous (25) examples of this kind of other-initiated repairs beginning with *oota* in the present corpus (*ota mis suuri kirjanikke* 'OTA what big writers' (P1A4), *ota mis ma teen* 'OTA what will I do' (P5B10), *ota kuskohta* 'OTA where' (K1A10), *oota mismoodi* 'OOTA how' (RA37), *ot ot kes see nüüd on* 'OT OT who is this' (M2AE2) etc.)

Other-initiations of repair are designed to indicate that the sequentially implicated next action cannot take place unless the obstacle is taken out of the way (Schegloff et al. 1977: 379). But a request to clarify some previously treated matter can also be a resource for topic development. In Example 9, a guy (T) has been telling about his experiences at a car repair shop. He has described how the workers get high on smog in the wintertime. Just prior to the excerpt in Example 9 he has explained that in bigger shops there are special tubes for sucking smog. In lines 1–2 he tells P that in this particular shop there was smog all over the place.

(9) Inhaling smog

1 T: =a seal oli: siuke ääääh <@ paksu
A there be:INF:3SG this kind of ugh thick:PRT
But there it was like ugh

2 tossu täis @> .hhh
smog:PRT full
full of thick smog

3 P: oota sul on autol mingi probleem vä
OOTA you:SG:ADE be:3SG car:ADE some kind of problem VÄ
OOTA do you have a problem with your car?
(P3A8+B1)

T's turn in line 1 is designed as strongly evaluative – besides the lexical means (*paks toss* 'thick smog') and a sound imitating the one possibly produced at the place in reality (*ääääh*) he also uses laughing voice, giving P a clue of a proper evaluation of the story. In contrast, without any reaction to the story, P asks whether T has had problems with his car. Her turn is designed as a request for clarification for the immediately previous topic, based on an inference from this very

topic – T has been to a repair shop and most probably has had a reason for being there. At the same time, the turn does not follow the normal course of actions where an evaluative contribution should be attended to (about second assessments, see Pomerantz 1984). Instead, the turn in line 3 achieves a topic development. The disaligning question is initiated by *oota*, again used for stopping the conversational action at hand. This time, though, the issue is not some temporary time-out involving a period of waiting or doing something else but rather a momentary U-turn in the conversational track.

Therefore, it seems fair to conclude that *oota* has here been deprived of another meaning component, namely that of involving a period of action or waiting that starts at the very moment and ends at some future point in time, when the projected main action can go on. When in the case of other-initiated repairs a return to the interrupted action sequence is still possible, in the case of more general questions, statements, etc. about previous topics (like in Example 9), the conversational track is most likely to have changed for good. In the recent examples the semantic component of stopping the ongoing conversational activity dominates in the usage of *oota*, which may already suggest the priority of conversation structural (textual) factors over propositional ones.

Topic retrieval and change

The disaligning nature of *oota* and its usage to achieve a change in the conversational track becomes even more clear when we look at the cases where *oota* initiates a return to a topic that has been talked about much earlier in the conversation, or an initiation of a new topic.

In Example 10, the conversation is seemingly coming to an end in lines 1–4. K and P are opening a conversational closure by promising to hear from each other again (about the opening of closings, see Schegloff and Sacks 1973), and in line 5, K starts saying *bye* (*tšau*). At the same time, P initiates a question about R's studies in Oxford that they had been discussing about half an hour earlier. *Oota* here works as a strong disaligning particle indicating a huge jump from the conversational closure back to one of the earlier

topics. While breaking the closing sequence of the conversation, the *oota*-initiated turn is also an initiation of a new action sequence. [10]

(10) Oxford

1 K: /---/ .h eks sis kuuleme
EKS then hear:1PL
Let's hear then

2 P: <@ kule eks siis kuuleme jah @>
KULE EKS then hear:1PL yes
Well, let's hear then, sure

3 K: no okei=
NO okay
Okay then

4 P: <@ =okei= @>
okay
Okay

5 K: no [tš-]
NO by-
By-

6 P: [oo]ta kauaks sa jääd sinna Oxfordi
OOTA long:TRA you:SG stay:2SG there:ILL Oxford:ILL
OOTA, how long will you stay at Oxford?
(P7A11+B1)

In Example 10, the topic of studying at Oxford has been treated in the same conversation and it could thus be seen as a case of topic retrieval. At the same time, on the basis of examples like this it is easy to imagine a further step of development of *oota* into a simple disaligning particle that does not necessarily have to deal with previously treated topics.

Example 11 is a case in point. The two friends have been talking about various things during their already rather long conversation. Prior to the sequence in the example they have been talking about movies. K has just told P that she has liked Monty Python before, which is why she is thinking of seeing another movie by him (lines 1–2). The next turn by P, though, initiates a completely new

[10] Hennoste (2000:2468) explains a similar example as the speaker's wish not to finish the conversation. Since we do not have access to speakers' minds, the analysis here will be restricted to empirical matters like topic initiations. (Not speculating about the interactants' mental processes is one of the basic principles of conversation analytic method.)

topic about a common friend Helina who was supposed to receive a packet from them. This topic initiation strikes as being very abrupt since K does not get any response for her turn at all. The disaligning turn is initiated by *oota,* which here could easily be translated as *by the way* in English. As such it can also be characterized as a remembering or realization token.

(11) The packet

1 K: ja need on mulle ka päris peale läinud
and this:PL be:3SG I:ALL KA quite please:PPT
And I've liked these too

2 nimodi et mulle tundub et noh miks mitte onju
so that I:ALL seem:3SG that NOH why NEG ONJU
so that I feel like why not, you see

3 P: .h oota sa: Helinalt ei ole m saanud mingit
OOTA you HELINA:ABL NEG be get:PPT some:PRT
OOTA, haven't you got any message from

4 messidžit et kas ta sai meie
message:PRT that QUES she get:IMF:3SG we:GEN
Helina about whether she has received
paki kätte=
packet:GEN hand:ILL
our packet
(P7A11+B1)

Disalignment can be seen to be one of the most frequent features of *oota*-usage in conversation, which is in accordance with the meaning component of stopping the ongoing activity in the original verb *oota-* 'wait' Repair initiations and clarification requests, initiations of side sequences and digressions, or topic retrievals and changes feature in 93 cases.

However, this stop sign itself does not define whether it is a right or left turn, a "no entry" or a detour that will be suggested – *oota* may merely initiate a repair or a side sequence but it may also invoke a long pause or a change in the topic of the conversation, either going back to an old one or forward to something new. It is what immediately follows *oota* that determines the way to go for the interlocutors.[11] If there is a pause, the interlocutor literally has to wait. If something else follows the conversational path and/or the activities of the interlocutors are guided by this following spate of talk.

[11] For an opposing opinion, see Hennoste (2000:2466–2468).

As to the semantics of the examples so far, they have all pertained one of the crucial semantic features of the imperative form of waiting, namely that of urging to stop the projected course of action. The speaker either digresses, indicates the need to figure something out before the projected action can go on, or simply breaks the course of action by proposing a new one. This semantic component of stopping could be a good reason for considering different *oota*s above merely a case of polysemy which has been said to be characteristic of the intermediate stages of grammaticalization (P Hopper 1991: 28). The Principle of Persistence in the grammaticalization process states that "so long as it is grammatically viable some traces of the item's original lexical meanings tend to adhere to it" (P Hopper 1991: 22). On the more advanced stages, though, the relationship tends to be opaque.

Particulized usage

The usages of *oota* that could be considered most grammaticalized, most clearly functional and least lexical do therefore not even involve the urge to stop, i.e. the cases of topic retrieval, development, or change are not accompanied by the need to stop the projected course of action. These are the cases where a sequence has come to an end and the new topically disaligned sequence is initiated by the particle *ota*.

In Example 12, P has invited T to a skating-rink and T has been insisting that he cannot even stand on skates. The lengthy persuasion sequence ends with T's strong refusal and P's explanation in lines 1–2 that she simply thought that T would have liked to join them. In line 3, T once again states that he is not able to skate, which seems to be taken for a topic closure by both participants. After a pause and a laughter syllable P then continues with a variation on the same topic initiated by *oota* – she asks whether T has any friends who could skate.

As compared to Example 8, the question in line 5 in the present example is not designed as if extra information is needed about what the talk so far has been about. P here moves on from intensely persuading T to asking for any potential company. There is also a lengthy pause before her laughter syllable, which supports the argument that the persuading sequence has come to an end. *Oota* in line 5

could therefore be analyzed as not having much to do with the actual stopping of the ongoing action.

(12) Skating

1 P: /---/ ma lihsalt mõtlesin et (0.3) et noh
I simply think:IMF:1SG that that NOH
I just thought that

2 äkki sa tahad ka
ÄKKI you:SG want:2SG too
maybe you want (to come) too

3 T: mhmh:: ei ma kuradi ei oska
MHMH NEG I devil:GEN NEG can
Uhuh, no I damned can't

4 (1.4)

5 P: @ .hhh <@ ota sul: e keegi sõber ka ei oska vä @>
OTA you:SG:GEN some friend too NEG can VÄ
OTA, you don't have any friends who can either, do you?

(P2A6)

Even if it is not nearly straightforward what is an ended sequence and what is not, one could say that in the present corpus there were around 35 sequences that had more or less come to an end when the particle *ota* turned up. At the same time, it should be underlined that *ota* seems to be used specifically for topic retrieval, development, or change, and not for starting just any new sequence. As such it could be seen as a topical junction and carrying a more structural/textual function, while of course preserving its interpersonal function of indicating the structure of the contribution to the interlocutor(s).

Another characteristic feature of *oota* is that in this disaligning function it is very often used at the beginning of interrogative units (70 cases out of 93, or 75%). Thus, the more particle-like usages of *oota* often initiate a question to the interlocutor, thereby possibly preserving some of its original grammatical nature of addressing 2nd person. Naturally, questions are suitable means of topic development. On the other hand, there are even cases of *oota*-initiated declarative units that (re)introduce a new topic, e.g. *ota ma lugesin eile töö juures /---/* 'OTA, I read at work yesterday /---/' (P1A8) or *oota onu juba lindistab* 'OOTA the chum is recording already' (Hennoste 2000: 2468).

When used as a particle *par excellence oota* is completely decategorialized (a term designed by P. Hopper 1991: 22). It has lost or neutralized the morphological markers and syntactic privileges characteristic of the full category Verb: prototypically the particle *ota* cannot take person and number endings or direct objects, and its position as TCU-initial is almost fixed. *Ota* has also lost its ability to form a TCU on its own as the imperative form can, and it has become intonationally bonded to the rest of the TCU – *ota* hardly ever carries any significant amount of stress and is usually pronounced as an enclitic.

Conclusion

In the present paper we have moved from the more literal usages of the imperative *oota* 'wait' to the less literal ones, arriving at cases that are rather topic-disjunctive particles than waiting orders. This continuum of different kinds of usage allows itself to be described in terms of grammaticalization but it does not conform to the original unidirectionality hypothesis (as proposed by Traugott in 1980; 1982; 1989) mainly because of the interactional nature of the item and the linear nature of the model (for similar critique, see Romaine and Lange 1991; Eriksson 1995). At the same time, interaction forms the basis of any process of conventionalization within speech (Hakulinen and Seppänen 1992: 547), and interactional data should thus probably never be disregarded.

Apart from unidirectionality we could trace all of the principles of the grammaticalization process proposed by P. Hopper (1991): divergence (the imperative of *oota* still exists), specialization (singling out just one or a few forms (see the frequency data above)), persistence (some traces of the original lexical meaning adhere to many cases of the particle usage), layering (there are other possibilities for topic development in Conversational Estonian), and de-categorialization (loss or neutralization of morphological and syntactic privileges of verbs). Therefore, it is not easy to see how developments of interactional particles could be excluded from what has been called the process of grammaticalization.

As compared to previous mentions of the particle *ota* in literature (Hennoste 2000: 1800-1801, 2466-2468), this paper has not been an attempt at a top-down predetermined classification of the particle but an action-based sequential account of how the item is

used in phone conversations. As such it hopefully brings some clarity into why *ota* evades the particle categories suggested by Hennoste (2000: 1777).

In present-day Conversational Estonian *oota* often seems to function as a stop sign that preannounces a break, a detour, or a right of left turn. But in its uttermost developments, like on modern freeways, you are sometimes not even urged to stop any more when taking a new junction.

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Vormi *oota* grammatikaliseerumisest eestikeelses vestluses

Leelo Keevallik

Artikkel käsitleb vormi *oota* (algselt käskiva kõneviisi ainsuse 2. isik) kasutamist partiklina tänapäeva eesti ühiskeeles, asetades selle grammatikaliseerumisteooria konteksti.

Grammatikaliseerumine hõlmab traditsiooniliselt arenguid, kus mingi vähem grammatiline üksus muutub grammatilisemaks, kandes seejuures kaotusi semantilises keerukuses, pragmaatilises tähenduses, süntaktilises vabaduses ja foneetilises koostises. *Oota* on ühiskeeles sageli lühenenud (variandid *ota, oot, ot,* lisaks reduplitseerunud kasutus) ning kleepub enkliitikuna järgneva vooruehitusüksuse külge. Partiklina ei ole tal pöördelõppe ega arvutunnuseid, samuti ei saa talle lisada sihitist ega muid laiendeid, ning ka tema algne tähendus on praktiliselt kadunud.

Samas ei allu *oota* areng nn ühesuunalisushüpoteesile, mis väidab, et grammatikaliseerumisel muutuvad propositsioonilised tähendused (tekstilisteks ja seejärel) interpersonaalseteks. Oleks kummaline mitte pidada käskusid olemuslikult interpersonaalseteks. Samas, nagu näitab nii *oota* kui ka soomekeelse *kato* areng, võivad käskiva kõneviisi vormidki omandada tekstifunktsioone: *oota* on tõenäoliselt muutumas teemavahetuspartikliks, *kato* juba arenenud põhjussidendiks.

Käesolev artikkel annab telefonivestluste materjali põhjal ülevaate *oota* kasutusest nii oma algtähenduses kui ka partiklilaadsena. *Oota* on justkui stoppmärk, millega võib sisse juhatada pausi, seletusküsimust, kõrvaljärjendit või ka teemamuutust. Algtähenduses kasutatakse *oota*-vormi telefonivestluses eelkõige vestluspartneri ootamajätmiseks seniks, kuni tehakse midagi sellist, mida telefoni juures teha ei saa. Sel juhul on *oota*l ka sageli laiendeid, nt *üks hetk, natuke*. Lisaks võib *oota* enda või sellega alustatud vooruüksuse abil saata mingit aega nõudvat tegevust: nt *oota ma vaatan seda kalendrit* või *ot ot ot ot ot ot ot* (ise otsib käsikirjas õiget kohta). Aeganõudev tegevus võib olla ka lihtsalt mõtlemine: *oota (.) oota (.) oota (.) ma mõtlen.*

Partiklilaadsemas kasutuses, kui vestluspartnerilt ei oodata enam tegelikult ootamist, esineb *oota* muuhulgas kõrvaljärjendites ja parandusalustustes. Näiteks kui vestlejad püüavad järgmise helistamise aega kokku leppida, siis üks neist katkestab oma ettepaneku poole pealt,

et küsida: *ota täna on täna on teisipäev jah.* Saades jaatava vastuse, jätkab ta ettepanekut helistada reedel. Parandusalustused puudutavad mõnd arusaamatuks jäänud elementi äsjases voorus, nt *ota mis suuri kirjanikke, ota mismoodi, ota kuskohta* jne jne.

Neil juhtudel on veel säilinud mõned *oota* algtähenduse komponendid, eelkõige käimasoleva tegevuse peatamine, aga ka ootamise lõpp-punkt, st mingi ajahetk tulevikus, mil oodatu saabub või juhtub. Kõrvaljärjendid ja parandusalustused lõppevad tagasipöördumisega algse tegevuse juurde. Kuid *oota* on kasutusel ka juhtudel, mis ei eelda tagasipöördumist ning millel ei ole seega enam lõpp-punkti.

Sellist *oota*-kasutust võib leida teemamuutustes, nii väikestes kui ka drastilistes. *Oota*ga võib alustada küsimust käimasoleva teema kohta, mis vestluse veidi rajalt kõrvale viib. Näiteks räägib noormees autotöökojas tossu kaifimisest, aga neiu küsib hoopis: *oota sul on autol mingi probleem vä.* Samas võib *oota* abil sooritada ka palju kardinaalsema teemapöörde, nt üks sõbranna räägib Monty Pythoni filmidest, aga teine küsib selle peale: *.h oota sa: Helinalt ei ole m saanud mingit messidžit et kas ta sai meie paki kätte?*

Kõige vähem algtähendusega seotud on muidugi need juhud, mil pole vaja vestluspartnerit enam peatadagi, st eelmine vestlusjärjend on lõppenud ja alles seejärel toimub teemavahetus *oota* abil. Näiteks kui on liiva jooksnud neiu püüded noormeest uisutama saada, siis pärast pausi küsib ta: *ota sul: e keegi sõber ka ei oska vä.* Sellised näited annavad alust uskuda, et meil on põhjust rääkida iseseisvast partiklist, mille sagedasim fonoloogiline vorm käesolevas korpuses on *ota.*

On Estonian core verbs[1]

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Selecting the material for study, a semantically inclined investigator of language has a choice of proceeding from the two somewhat opposed perspectives: whether to explore the linguistic expressions corresponding to a concept, or the other way round, find out what concepts are conveyed by a linguistic expression. The latter perspectiveis the one adopted in the current study. The subject of this paper is part of a more extensive project Analysis of the operators of the basic vocabulary of the Estonian language', the aim of which is to describe the functional core of the Estonian language (including, in addition to verbs, personal and demonstrative pronouns, adverbs etc.) that has received little attention so far. At the moment, our goal is to compile a list of the main operator words (cf.,Ogden 1933) used in Estonian to connect words. Below, I will focus on the so-called core verbs of Estonian, the main aim is to determine which verbs should be included in the functional core. The theoretical perspectives will be discussed that could be of help when selecting the criteria for the determination of the operators of the basic vocabulary, for example, the grammaticalization theory (Heine et al. 1991) and construction grammar (Goldberg 1995) will be examined. In the second part of the article I will attempt to define the criteria that core verbs should correspond to. In the appendix, I will present examples of the uses of the selected verbs in grammatical functions, schematic meanings and as motivators of constructions.

1. On theories and basic vocabularies

The words in basic vocabularies compiled according to frequency are usually characterized by polysemy, which, indeed, is one of the causes for their frequent occurrence in the first place. The treatment of polysemy from a cognitive perspective is characterized by the principle of the relatedness of meanings and fuzziness of boundaries

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between meanings. It is not possible to draw conclusions about the distribution or centrality of one or another sense of a polyseme on the basis of its occurrence in a frequency list, an in-depth analysis of the word has to be performed for these purposes.

Indeed, these verbs have frequently been studied as polysemous linguistic units, e.g., the English verb *take* by Norvig & Lakoff 1987; *make* by Matlock 1999. a.o. The cause for the high frequency of Estonian *saama* 'get' (as well as English *get*) is that it expresses a great number of cognitively salient conceptual relationships (e.g., POSSESSION), incl. their use in several modal meanings. While one of the selection criteria for the verbs treated in this paper is their high frequency, the other, and perhaps a more significant criterion is their functionality, which derives from the schematicity of meaning, which in turn results from polysemy (see also Sweetser 1988). Evolutionally and explanatorily this phenomenon is best described by the grammaticalization theory. Thus the goal set in the search for core verbs is not their basic level membership, but what comes first is the functionality of these verbs – how many different relations can possibly be conceptualized with this verb (e.g., it is possible to say *julgust andma* 'courage:PART give', although there exists the verb *julgustama* 'encourage' or *haigeks jääma* 'sick:TRA remain' pro *haigestuma'* fall ill').

I term those verbs core verbs, thus avoiding the use ofbasic' in the term so as not to over-emphasize the fact of these verbs being included in the basic vocabulary and to underscore more the properties of the verbs discussed here as operators (cf. Ogden 1933), function words, markers of grammatical categories (cf. Heine 1993), motivators of the evolution of construction meanings (cf. Goldberg 1995).

The functional centre of language use, which could be termed the core, has attracted the attention of linguists for long, and from several different perspectives. A practical purpose is definitely the context of language teaching. From here proceeded Charles K. Ogden, who in the 1930s compiled the minimal vocabulary Basic English, and described his principles of selection and goal as follows, "... the words in question have been scientifically selected to form an International Auxiliary Language, i.e., a second language (in science, commerce, and travel) for all who do not already speak

English." (Ogden 1933: 9). Among Ogden's 850 words 18 are verbs and their Estonian prototypical equivalents are the following:

come	tulema[2]
get	saama
give	andma
go	minema
keep	hoidma
let	laskma
make	tegema
put	panema
seem	tunduma
take	võtma
be	olema (LOC)
do	tegema
have	olema (POSS)
say	ütlema
see	nägema
send	saatma
may	võima
will	Ø

From the cognitive perspective, there is a more interesting approach, discussed, among others, by John Newman (1996: 7): "The significance of these minimal or "core" vocabularies is that they can be seen as reflecting some of the most basic and versatile concepts relevant to human communication." In this framework, the examples discussed usually come from languages that have very few verbs, e.g., the Kalam language belonging to the Papuan language group. Altogether, there are about 25 verb stems in common use registered in Kalam, which in combinations (also with each other) constitute the whole stock of verbs in the language. Thus Kalam is a natural language counterpart of Basic English. The Kalam language includes, among others, equivalents of such verbs as 'do/make' 'say' 'hit' 'put' and 'give' (Newman 1996: 8–9).

A different type of minimal vocabulary is represented by the set of semantic primitives, being compiled by Anna Wierzbicka since the 1970s. Semantic primitive is a relatively basic concept to which other concepts can be reduced. However, it should be emphasized in case of Wierzbicka's list that her purpose is to create a universal,

[2] *-ma* is the infinitive ending in Estonian, *ma*-infinitive is named supine; this is also the dictionary entry form for verbs. Verb stems, where other grammatical inflections attach, are, for example: *tul-*, *saa-* etc.

language-independent Natural Semantic Metalanguage. Wierzbicka has divided her metalanguage into categories, and the verbs included are the following:

in the category of mental predicates: THINK, KNOW, WANT, FEEL, SEE, HEAR, in the category of speech SAY,

in the category of actions, events, movements DO, HAPPEN, MOVE,

in the category of existence and possession (THERE) IS, HAVE,

in the category of life and death LIVE, DIE and

in the category of logical concepts CAN (Wierzbicka 2000).

As we move from basic vocabularies and semantic primitives towards the core, significant assistance is offered by the grammaticalization theory. The grammaticalization process is triggered by linguistic creativity, in the course of which language users, according to their needs, conceptualize abstract domains of cognition in terms of concrete domains (Heine et al 1991. 30–32).

There is a near-universal tendency that the sources of grammaticalization are the source concepts (e.g., body-parts; examples regarding Estonian can be found in Habicht, this volume) and more complex cognitive structures, which have been called source propositions: "These propositions express states or processes that appear to be basic to human experience and can be rendered by means of linguistic predications typically involving two participants

(1) "X is at Y" Locational proposition

(2) "X moves to/from Y" Motion proposition

(3) "X does Y" Action proposition

[...] "(Heine et al 1991, 36)

These propositions are also relevant to the observation of the grammaticalization of Estonian core verbs:

(1) *olema* 'be'LOC (cf., the appendix 1.5.)

(2) *minema, tulema, käima*[3] 'go, come, walk'

(3) *tegema* 'do' (cf., the appendix 10.1.1.)

(More detailed examples of the uses of these Estonian verbs are provided in the appendix.)

The best-known investigator of grammaticalization in Estonian, Helle Metslang concludes (1994: 160) that in Estonian the following

[3] About the meaning schema of the verb *käima*, see Pajusalu, this volume; in Estonian the meaning schema for *käima* is MOVE TO – FROM.

multi-pattern verbs are inclined to grammaticalize: *olema* 'be' (over 100 sentence patterns), *saama* 'get' (over 70), *võtma* 'take' *jääma* 'stay, remain' *minema* 'go', *andma* 'give', *panema* 'put' *tulema* 'come'(approximately 40 sentence patterns), *lööma* 'hit' *käima* 'go, walk' *ajama* 'drive' *tegema* 'do', *laskma* 'let' (around 30 patterns) (statistics from Rätsep 1978: 236). In Huno Rätsep's study (1978), the sentence pattern has been defined as follows: "The verb-centred sentence pattern is the abstract construction of basic word classes and grammatical categories underlying the verb-centred sentence. The construction has to reflect the important syntactic-morphological characteristics of the sentence, brought about by the semantics of the verb." (Rätsep 1978: 18). The construction grammar developed by Adele Goldberg rests on the claim that "... basic sentences of English are instances of constructions – form-meaning correspondences that exist independently of particular verbs. That is, it is argued that constructions themselves carry meaning, independently of the words in the sentence." (Goldberg 1995: 1) This is also a valid claim about Estonian. For example, my research has established the existence of the ANDMA ('give') construction in Estonian [S + V + N:ALL + O], which is acquired on the basis of the verb *andma* 'give' and later on becomes the basis for other constructions of the same type, the so-called 'giving-verbs' see the example groups (1)–(2) (cf. the English ditransitive or double-object construction Subj V Obj Obj2, Goldberg 1995, 1998).

(1)

Ta	**kinkis**	emale	sõrmuse.
he/she	present-PST:3SG	mother:ALL	ring:GEN

He gave his mother a ring as a gift.

President	**saatis**	talle	õnnitluse.
president	send-PST:3SG	he/she:ALL	congratulation:GEN

The president forwarded her his congratulations.

Müüja	**müüs**	poisikesele	suitsu.
shop-assistant	sell-PST:3SG	little boy ALL	cigarette:GEN

The shop-assistant sold the little boy cigarettes.

Into this construction schema, new (loan) verbs also fit, e.g.

(2)

Meilisin (mailisin)	teate	seminarlastele.
e-mail-PST:1SG	message:GEN	seminar-participant: PL:ALL

I e-mailed the message to the seminar participants.

Raamatupidaja	**faksis**	ülemusele	aruande.
accountant	fax-PST:3SG	boss:ALL	report:GEN

The accountant faxed the report to the boss.

On the other hand, the productivity of the construction schema in formation decisions is manifested in the fact that *andma* accepts in the relation all kinds of entities that do not in essence have much in common with the prototypical meaning schema of *andma*, or its components.

(3)

Tuul	**annab**	lainetele	puhkust.
wind	give-PRES: 3SG	wave:PL:ALL	rest :PRT

The wind lets the waves rest.

Thus it can be claimed based on the (albeit scarce) research into Estonian that the thesis of the construction grammar "Simple clause constructions are associated directly with semantic structures which reflect scenes basic to human experience" (Goldberg 1995: 5) seems to be valid for Estonian as well. The analysis of types of simple sentences in Estonian centred on the construction analysis along the lines of the generative grammar of the period, thus semantics came only second in the study by Rätsep (1978). His research into syntax has been named 'word syntax' (Erelt 1997: 16), but it does not categorize any verbs according to meaning, the author notes (Rätsep 1978: 6),"The semantic basis of the structures of verb-centred patterns will be left for future studies to outline."

Acquisition studies also offer ample evidence as to why the verbs discussed here should be included in the functional core of language. These verbs are acquired first (Estonian data in Table 2) and through these, the productive constructions are acquired into which other verbs will be 'fitted'(cf., examples in (1)). Goldberg (1998: 205) presents the following hypothesis: "Constructions that correspond to basic simple sentence types encode as their central senses, event types that are basic to human experience."

Referring to first language acquisition research (Clark, Slobin), Goldberg argues that "... verbs that lexically designate the semantics associated with argument structure constructions are learned early and used most frequently;..." (op.cit. 206). Based on the studies of verb acquisition in a number of languages (e.g. English, Finnish, French, Korean, Japanese; Goldberg 1998: 207) verbs such as *put, make, go, get* are often among the first verbs to be used. According

to Goldberg, (ibid.), the meanings of these verbs are very similar with the meanings associated with argument structure constructions.

Metaphorical transfers from one domain into another are, naturally, not uncommon with other verbs (and other word classes), but the core verbs stand out by their greater schematicity and the resulting wider application of the schema, which is evidenced by the high frequency of these verbs in language. Also, the verbs like *sööma* 'eat' and *magama* 'sleep' which are also verbs expressing basic human activities, occur in figurative meanings, e.g., *oma sõnu sööma* – lit. 'eat one's own words' – to break a promise' *kedagi välja sööma* – lit: 'eat somebody out' – to oust somebody (e.g., by craft)'and *õiget aega maha magama* – lit: 'to sleep off/down the right time' – 'to miss the right time by neglect', *oma raha magama panama* – lit: 'to put one's money to sleep' – 'to blue one's money'

However, in these cases the conceptual schema is of a considerably narrower scope and the transfer is motivated rather by the analogy with the characteristics of the verb's prototypical agent or patient. Let us compare these examples to the usages of the schematic meanings derived from the core verbs of *tulema* 'come' and *minema* 'go'

(4)

Homme	**tuleb**	hea	ilm.
tomorrow	come-PRES:3SG	good	weather

There will be good weather tomorrow.

Lumikelluke	**läheb**	õitsema.
snowdrop	go-PRES:3SG	bloom:INF

The snowdrop is beginning to bloom.

A scientifically grounded attempt at compiling a basic vocabulary of Estonian has been made by Urmas Sutrop (2000, includes an overview of practical basic vocabularies of Estonian). His central object of research has been the colour, temperature, taste and smell vocabulary, the study of which differs from the study of verbs in several aspects. Sutrop (op.cit., 141) lists 23 verbs among the 100 most frequent words based on frequency count, which he terms 'the core of the (basic) Estonian vocabulary'

His list includes almost all the verbs considered Estonian core verbs in the following part of my treatment (excl. *ajama* 'drive'and *laskma* 'let'), and also *ütlema* 'say' *teadma* 'know' *nägema* 'see' *tahtma* 'want' *tundma* 'feel' ja *vaatama* 'look' the inclusion of

which in the core vocabulary I also consider legitimate (in this paper, the verbs of perception and cognition will not be focused on). In addition, the list features the verbs *omama* 'own' *koguma* 'gather' ja *kohtama* 'meet' whose ranking among the top frequent verbs on the Corpus of Written Estonian frequency list (www.cl.ut.ee/ee/tulemusi/sag_lem_1000.kogu) is an error caused by the non-disambiguated lemmas: it is not these verbs that are frequent but the words *oma* '(one's) own' *koht(a)* 'place/about' and *kogu* 'whole' which are similar to the verb stems.[4] In the next sections, I will put forward my suggestions for the Estonian core verbs and provide examples to illustrate my selection.

2. The criteria for defining core verbs. The core verbs in Estonian

2.1. The criteria

I. SEMANTIC CRITERIA
Core verbs:

1) have a grammatical function (appears formally in the reduction or loss of syntactic independence: e.g., the verb *olema* 'be, have' expressing tenses, see the appendix);

2) express general concepts (the verbs are superordinate or basic level terms and can replace many verbs of the lower levels with no significant change in meaning: compare, e.g., *Anna soola!* 'Give (me) the salt!' and *Ulata soola!* 'Pass (me) the salt!';

3) have a construction schema – form-meaning correspondence with schematic meaning functioning as the motivator of aquiring and using the other 'giving' verbs (e.g. the GIVE – schema, see examples in (1), cf., Goldberg 1992 and Rätsep 1978);

4) have a schematic meaning (e.g., the semantic schemas of modal verbs with possible and/or necessary participants, see also Sweetser 1988);

[4] While *omama* 'own' is a verb expressing the category POSSESSION, it is stylistically marked, the relationship of possession is usually expressed by the verb *olema* in the construction *Mul on auto.* 'I:ADE be:3SG car' 'I have a car'- [N:ADE be 3SG/3PL N]. *koguma* 'gather' and *kohtama* 'meet' are not semantically schematic and not notably polysemous.

5) are polysemous (polysemy leads to the generalization and bleaching of meaning, which may lead to grammaticalization, cf. Sweetser 1988).

The semantic criteria vary in their applicability to a particular core verb: in some cases (e.g., *tegema* 'do, make') it is their generality that determines their status as core verbs, in others (e.g., *ajama* 'drive'), the grammaticality criterion prevails. Polysemy has been a factor in the development of all core verbs, and in many instances led to the schematization of meaning to such an extent that an ordinary language user no longer perceives the literal meaning of the verbs (e.g., *olema* 'be, have' in Estonian). In the majority of cases, however, the verb has retained its basic (literal, prototypical) meaning (e.g., for *tulema,* 'to move towards the speaker/conceptualizer' as in *Tule koju!* 'Come home!') as well.

II. FORMAL CRITERIA.

Core verbs are:

1) among the highest-frequency items in language;
2) short, simple words; native words or among the earliest loans.
3) among the earliest acquisitions by children.

My list of core verbs is based on the frequency data from the following corpora (and their subcorpora):

- The Corpus of Written Estonian (see, e.g., Hennoste and Muischnek 2000 or http://www.cl.ut.ee),
- The Corpus of Spoken Estonian (see Hennoste et al. 2000 or http://sys130.psych.ut.ee/~linds/; the data from narratives will be referred to separately, see Lindström and Toomet 2000),
- The Corpus of Estonian Dialects (Lindström et al. 2001, the data used in this article are based on the west, northeastern and Võru dialects).

The use of verbs in narratives provides interesting material for the study of core verbs (for the use of core verbs in narratives as the carriers of deictic projection, see Tirkkonen, this volume), as narratives feature action (and are, consequently, characterized by the frequent occurrence of motion verbs) (Lindström and Toomet 2000). Narratives also make extensive use of verbs of perception and cognition, the inclusion of which among the core verbs is also being considered, but, as stated above, is not covered in this article. I believe that the language use in narratives represents 'internally processed' language material, which makes it an especially inte-

resting source of data for anyone investigating how the language user processes and categorizes language material (see e.g., Talmy 2000).

Table 1 contains the frequency data for the core verbs. As the basis for the calculation of frequencies varies, and the corpora differ in size, the data are not fully comparable, but nevertheless prove the applicability of the frequency criterion for defining core verbs. The table provides information on the occurrence of the core verbs in frequency counts. The first figure shows the ranking of the verb among the core verbs, the figure in brackets shows the general rank of the verb in the frequency count of verbs.

Table 1. The ranking of the core verbs in frequency counts.[5]

	Verb	**The Corpus of Written Estonian,** 30 most frequent verbs	**The Corpus of Spoken Estonian,** 100 most frequent word forms	**The Corpus of Estonian Dialects,** 100 most frequent items (frequent in at least one of the 3 dialects)	**Narratives in the Corpus of Spoken Estonian,** verbs with at least 10 occurrences
1	*olema* 'be, have'	1 (1)	1 (1)	1	1 (1)
2	*tulema* 'come'	3 (3)	2 (2)	4	2 (2)
3	*minema* 'go'	8 (8)	7 (9)	5	6 (7)
4	*saama* 'get'	2 (2)	4 (5)	2	3 (4)
5	*andma* 'give'	7 (7)	–	–	–
6	*võtma* 'take'	9 (9)	8 (10)	–	9 (16)
7	*panema* 'put'	12 (16)	–	6	–
8	*võima* 'may, can'	5 (5)	5 (6)	–	–
9	*pidama* 'must'	4 (4)	6(8)	–	7 (11)
10	*tegema* 'do, make'	6 (6)	3 (4)	3	5 (6)
11	*käima* 'go, walk'	14 (24)	9 (11)	8	4 (5)
12	*jääma* 'remain'	10 (10)	–	–	–
13	*viima* 'take, carry'	15 (27)	–	–	–
14	*tooma* 'bring'	13 (22)	–	–	–
15	*ajama* 'drive'	–	–	–	–
16	*hakkama* 'begin'	11 (12)	–	7	8 (14)
17	*laskma* 'let'	–	–	–	10 (18)

[5] – – the verb did not occur in the particular frequency count.

The second formal criterion is met by all the core verbs (see note 2).

The acquisition data are shown in Table 2. The figure shows the ranking of the first usage of the core verb (its forms) among all the verbs used. A count has been taken of the first 20 verbs, the verbs in brackets represent later acquisitions and their ranks in the general order of verbs.

Table 2. The acquisition of core verbs (data from child language).

Verb	Vider 1995: the lexicon of child aged 2–3	Vija 2000: verb forms of child aged 1;5–2;0
olema 'be, have'	1. on (PRES:3SG)	2. ol'e 'ei ole' (NEG)
tulema 'come'	8. tuleb (PRES 3SG)	3. tuli (PST 3SG)
minema 'go'	11. läheb (PRES 3SG)	10. mine (IMP:SG)
saama 'get'	7 saa 'ei saa' (NEG)	1. eis'saa 'ei ole' (NEG)
andma 'give'	18. anna (IMP:SG)	11. anna 'annab' (PRES 3SG)
võtma 'take'	9. võta (IMP:SG)	9. eta 'võtab' (PRES 3SG)
panema 'put'	4. panen (PRES 1SG)	7. pani (PST 3SG)
võima 'can, may'	(42. võinPRES 1SG)	–
pidama 'must'	12. peab (PRES 3SG)	–
tegema 'do, make'	3. teen (PRES 1SG)	6. tee 'teeb' (PRES 3SG)
käima 'walk, go'	14. käisime (PST 1PL)	12. käisin (PST 1SG)
jääma 'remain'	(26. jääb PRES 3SG)	–
viima 'take, carry'	(59. viime PRES 1PL)	5. pii 'vii' (IMP:SG)
tooma 'bring'	(30. toon PRES 1SG)	–
ajama 'drive'	–	–
hakkama 'begin'	16. hakkan (PRES 1SG)	13. akka 'hakkab' (PRES 3SG)
laskma 'let'	–	–

It is also interesting to look at the cases where children apply schemas in the way not (yet) considered acceptable in adult language (at least in standard language). For example, the language system of a three-year-old child (this example and the following from my own data) produced *triikraud annab kuuma* 'the iron gives heat' to convey the meaning 'the iron is hot (and you can burn yourself with it'), a child aged appr. 4.5 said *ja siis teine hakkab alustama* 'and then the other (player) begins to start' instead of 'and then the other player can start (when the dice shows six spots)' Children also use the expression *vihikuid tegema* 'do exercise books' for 'doing exer-

cises and painting pictures in exercise books' None of these expressions is common in standard Estonian. There is also an example illustrating the application of the possessive construction of the verb *olema* 'be' (N:ADE *olema*:3SG N:NOM) and its prototypical participants (on-POSSESSOR is POSSESSED) when guessing the meaning of a word unknown (here *režiim* 'regimen') to the child:

(5)
Mother:

Printsessid	ka	magavad	lõuna	ajal,
princesses:NOM	too	sleep-PRES:3PL	lunch:GEN	time:ADE
sest	**neil**	**on**	**režiim**.	
because	they:ADE	be-PRES:3SG	regimen:NOM	

'Princesses also sleep at lunch-time because they follow a regimen.

Child (aged 3, after a pause):

Onju	see	resiin	on	see	
isn't it	this	resiin	be-PRES:3SG	this	
ilus	kleit	mis	neil	seljas	on?
pretty:NOM	dress:NOM	that	they:ADE	on	be-PRES: 3SG

"Resine' (the child's variant of *režiim* 'regimen') is the pretty dress they have on, isn't it?'

III. THE UNIVERSALITY CRITERION

There is a near-universal tendency for the equivalent verbs in other languages to serve as 'function' words (expressing a grammatical meaning). In many cases the verbs have grammaticalized. However, an (admittedly brief) comparison of Estonian with some other languages (especially English) shows that languages may differ even with respect to the most basic of the basic vocabulary – a handful of the commonest verbs in the language.

Core verbs 1–10 (see e.g. Table 2) seem to be relatively similar in many languages, but for verbs 11–17 the situation is less clear, even in comparison with English alone, as a brief glance at the relevant dictionary entries would reveal (cf. also the English equivalents in the table).

2.2. Meeting the criteria

In Table 3 I summarize my views of how the above criteria are satisfied by the Estonian core verbs.

Table 3. Characteristics of the Estonian core verbs.

	Criterion / Verb	I.1. grammatical function	I.2. general concept	I.3. motivator of construction	I.4. schematic meaning	II.1. frequent	II.3. acquired among first verbs	III. near-universal correspondence
1	olema	+	+	–	–	+	+	+
2	tulema	+	+	+	+	+	+	+
3	minema	+	+	+	+	+	+	+
4	saama	+	+	+	+	+	+	+
5	andma	+	+	+	+	+	+	+
6	võtma	+	–	+	+	+	+	+
7	panema	+	–	+	+	+	+	+
8	võima	+	–	–	–	+	–	+
9	pidama	+	–	–	–	+	+	+
10	tegema	+	+	–	–	+	+	+
11	käima	+	–	–	–	+	+	+
12	jääma	+	–	–	+	+	–	–
13	viima	+	–	+	+	+	+	–
14	tooma	+	–	+	+	+	–	–
15	ajama	+	–	–	+	–	–	–
16	hakkama	+	–	–	+	+	+	–
17	laskma	+	–	–	–	–	–	+

3. Summary

The paper addresses some theories which are helpful in defining the functional core of a language, focussing on verbs. In the first part I discuss the specificity of the polysemy of the highest-frequency verbs and the approaches taken to these verbs by the theories of grammaticalization, basic vocabularies and construction grammar. I refer to all these theories in establishing a set of criteria for compiling a list of the Estonian core verbs.

In the second part of the paper I summarize my suggestions concerning the criteria for defining core verbs, which are divided

into semantic and formal criteria. I also refer to a third criterion, universality, which, however, will hopefully be investigated more thoroughly in my next, more typologically-oriented research project.

The only more or less justified criterion for defining the coreness of a verb appears to be its high frequency in corpora. Table 1 provides the frequency data from three corpora. The data establish as core verbs *olema* 'be, have' *tulema* 'come', *minema* 'go' *saama* 'get' *tegema* 'do, make' and *käima* 'go, walk' *Võtma* 'take', *pidama* 'must' and *hakkama* 'begin' also appear among the highest-frequency items in at least 3 sources[6] Further, I provide the data concerning the acquisition of these verbs, which show that *olema* 'be, have' *tulema* 'come' *minema* 'go' *saama* 'get', *andma* 'give', *võtma* 'take, *panema* 'put' *tegema* 'do, make', *käima* 'go, walk' *pidama* 'must' *viima* 'take, carry' and *hakkama* 'begin' are acquired among the first 20 verbs. Table 3 shows how the core verbs satisfy the criteria. Examples of the use of the Estonian core verbs in their grammatical functions, schematic meanings and as motivators of constructions are provided in the Appendix.

Appendix

Estonian examples

Some examples of the use of the Estonian core verbs in their grammatical functions (expressing tense, event, modality, aspect; as particles, etc.), schematic meanings (causality, change, generality of concepts, etc.), and as motivators of constructions.[7]

1. olema 'be'

1.1. TENSE (present perfect):

Kus	sa	viimasel	ajal	**oled**	olnud?
where	you:NOM	recent:ADE	time:ADE	be-PRES:2SG	be:PPT

'Where have you been these days?'

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[6] As pointed out above, these data cannot be attached too much weight to: the bases for frequency queries have varied, and some of the corpora used are too small as yet.

[7] All these verbs (except *olema* 'be' which is too schematic, and *võima* 'may' which expresses only modality) occur in a large number of verb-particle constructions, which are not discussed in this article.

1.2. TENSE (past perfect):
Enne tänast **ei** **olnud** Eesti kaotanud ühtegi mängu.
before today's:PRT NEG be:PPT Estonia:NOM lose:PPT no one game:PRT
'Before today's game, Estonia had not lost a single match.'

1.3. ASPECT (the proximative, marking the pre-phase; Erelt 2001):
Me **olime** kohale juba jõudis. lahkumas, kui Jüri
we be-PST:1PL place:ALL already reach-PST:3SG leave:SUP:INE when Jüri:NOM
'We were already leaving when Jüri got there.

1.4. ASPECT (the progressive; Metslang 1994:120 ff.):
Ta **on** koju minemas.
he:NOM be-PRES:3SG home:ILL go:SUP:INE
'He is going home.'

1.5. LOCATION:
Tartu **on** Kagu- Eestis.
Tartu:NOM be-PRES:3SG southeastern Estonia:INE
'Tartu is in southeastern Estonia.'

1.6. POSSESSION:
Tal **on** auto.
he:**ADE** be-PRES:3SG car:NOM
'He has a car.'

1.7 COPULA:
Taevas **on** sinine.
sky:NOM be-PRES:3SG blue:NOM
'The sky is blue.'

2. tulema 'come'

2.1 EVENT (double verb, the EKG II 1995: 22; cf. Givon 1991, Croft 1998):
Tule too mu raamat ära!
come:IMP:SG bring:IMP:SG I:GEN book:NOM away
'Come and bring my book!'

2.2.1. MODALITY (Õim 1965):
Töö **tuleb** ära teha.
work:NOM come-PRES:3SG away do:INF
'The work must be completed.'

2.2.2.
Mul **tuleb** õppida.
I:ADE come-PRES:3SG study:INF
'I have to study.'

2.3. CONSTRUCTION [N V:3SG N:ELA] (Õim 1965, Cf. Goldberg 1995):
Vaesus **tuleb** rumalus**est**.
poverty:NOM come-PRES:3SG stupidity:ELA
'Poverty arises from stupidity.

2.4.1. TENSE (future):
Õhtu **tuleb** huvitav.
evening:NOM come-PRES:3SG interesting:NOM
'It'll be an interesting evening.'

2.4.2. (future + movement towards conceptualizer)
Siia **tuleb** maja.
here come-PRES:3SG house:NOM
'The house will be built here.'

2.5. ASPECT (adverb)
Tulime sealt **tulema**.
come-PST:1PL from there come:SUP
'We went off from there'

3. minema 'go'

(cf. also Pajusalu, this volume, examples 29 AND 30 about CHANGE)

3.1.1. EVENT (the initial phase):
Vesi **läks** keema.
water:NOM go-PST:3SG boil:SUP
'The water came to the boil.

3.1.2.
Auto **ei** **lähe** käima.
car:NOM NEG go run:SUP
'The car won't start.'

3.2. EVENT (double verb in the EKG II 1995):
Mine vii raamatud õpetajale tagasi!
go:IMP:SG take:IMP:SG book:NOM:PL teacher:ALL back
'Go and take the books back to the teacher!'

3.3.1. ASPECT:
Kass läks **minema**.
cat:NOM go-PST:3SG go:SUP
'The cat walked away.'

3.3.2.
Mine **minema**!
go:IMP go:SUP
'Go away!'

3.4.1. CHANGE, CONSTRUCTION [N:NOM V ADJ:TRA]:
Nii ta **läheb** küll paksu**ks**.
so he:NOM go-PRES:3SG surely fat:TRA
'He is sure to become fat this way.'

3.4.2.
Naine **läks** hulluks.
woman:NOM go-PST:3SG mad:TRA
'The woman went mad.

3.5. SCHEMATIC MEANING (cf. also Veismann, this volume):
Läheme ajas tagasi.
go-PRES:1PL time:INE back.
'Let's go back in time.'

4. saama 'get'

(cf. also Pajusalu, this volume, examples 27 AND 28 about CHANGE)

4.1.1. MODALITY:
Ma **saan** laulda.
I:NOM get-PRES:1SG sing:INF
'I can sing.

4.1.2.
Siin **saab** veel palju ära teha.
here get-PRES:3SG yet much away do:INF
'There is much to be done here.

4.2.1. TENSE (future; Metslang 1994: 112 Ex. 51):
Eesti kroon **saab** **olema** seotud Saksa margaga.
Estonian kroon:NOM get-PRES:3SG be:INF tie:PPT German mark:COM
'The Estonian kroon will be pegged to the German mark.'

4.2.2. TENSE (future neutral with respect to the moment of speaking; Cf. Metslang 1994: 165):
Töö **saab** tehtud.
work:NOM get-PRES:3SG do:PPT
'The work will be done.'

4.3.1. EVENT (resultative construction; see Metslang 1994: 150-151; syntactically the passive):
Sain talt teada et
get-PST:1SG he:ABL know:INF that
loeng oli ära jäänud.
lecture:NOM be-PST:3SG away remain:PPT
'I heard from him that the lecture had been cancelled.'

4.3.2.
Laps **sai** isa käest/isalt karistada/kiita.
child:NOM get-PST:3SG father:ABL punish/praise:INF
'The child was punished/praised by his father.'

4.4. EVENT:
Ma **saan** minema.
I:NOM get-PRES:1SG go:INF
'I will get away.'

5. andma 'give'

5.1. MODALITY:
Siin **annab** veel palju ära teha.
here give-PRES:3SG yet much away do:INF
'There is much to be done here.' (Cf. *Siin saab veel palju ära teha.*)

5.2. DEFINITENESS:
Antud küsimuses me oma seisukohta ei avalikusta.
give:PART question:INE we:NOM POSS view:PRT NEGdisclose:INF
"We do not disclose our views on this issue.

5.3. PARTICLE:
Anna ma räägin.
give:IMP I:NOM speak-PRES:1SG
'Let me speak.'

5.4. CONSTRUCTION [S + V + N:ALL + O]:
Tuul **annab** lainetele puhkust.
wind:NOM give-PRES:3SG waves:ALL rest:PRT
'The wind lets the waves rest.'

6. võtma 'take'

6.1.1. EVENT (double verb in the EKG II 1995):
Võtame teeme toad korda!
take-PRES:1PL do-PRES:1PL rooms:NOM order:PRT
'Let's tidy up the rooms.

6.1.2.
Võta söö veel!
take:IMP:SG eat:IMP yet
'Eat more!'

6.2. SCHEMATIC MEANING:
Võtame nüüd järgmise teema.
take-PRES:1PL now next:GEN subject:GEN
'Let's switch over to the next subject now.'

7. panema 'put'

7 1.1. CAUSALITY:
Sibul **paneb** nutma.
onion:NOM put-PRES:3SG cry:INF
'An onion makes you cry.'

7.1.2.
Mari **paneb** oma poja erakooli (õppima).
Mari:NOM put-PRES:3SG her son:GEN private school:ILL (study:INF)
'Mari sends her son to a private school.' (Cf. Rätsep 1978, 198: the four-place pattern for *panema*)

7.2. EVENT (phase verb in the EKG II 1995; also CAUSALITY):
Pane tuli põlema!
put:IMP:SG light:NOM burn:INF
'Switch on the light!'

8. võima 'may, can'

8.1.1. MODALITY:
Ma **võin** ööseks jääda.
I:NOM may-PRES:1SG night:TRA stay:INF
'I can stay for the night (if you want me to).'
'I can stay for the night (because I was allowed to).

8.1.2.
Homme **võib** hea ilm tulla.
tomorrow may-PRES:3SG good:NOM weather:NOM come:INF
'Tomorrow may be a nice day (because the sky is clearing).'

9. pidama 'must' [8]

9.1.1. MODALITY (obligation):
Me **peame** selle ära tegema.
we:NOM must-PRES:1PL this:GEN away do:INF
'We must get it done.'

9.1.2. MODALITY (need):
Ma **pean** ennast kokku võtma.
I:NOM must-PRES:1SG myself together take:INF
'I must make an effort.'

9.2. QUOTATIVE (see Toomet 2000, Erelt 2001):
See aasta **pidi** ilus
this:NOM year:NOM must-PST:3SG beautiful:NOM
suvi tulema.
summer:NOM come:INF
'(I've heard that) the summer should be nice this year.'

[8] Some scholars (Erelt 2001 and the EKSS) argue that there are two verbs *pidama* in Modern Estonian: (1) 'hold, keep, consider' which occurs as *pidasin, pidasid, pidas* in the Simple Past, and (2) the modal verb or post-modal verb with the Simple Past forms *pidin, pidid, pidi*. Only the latter has a grammatical function (Erelt 2001).

9.3. QUOTATIVE EVIDENTIALITY (Cf. Erelt 2001):
Ta **pidi** küll rumal olema, kui ta
he:NOM must-PST:3SG indeed foolish:NOM be:INF if he:NOM
seda juhust ei kasutanud.
this:PRT opportunity:PRT NEG use:PPT
'He must have been a fool indeed not to take this opportunity.'

9.4. AVERTIVE (only in the Simple Past, Erelt 2001):
Ta **pidi** üllatusest peaaegu pikali kukkuma.
he:NOM must-PST:3SG surprise:ELA almost down fall:INF
'He was so surprised that he almost fell down.'

10. tegema 'do, make'

10.1.1. SUPERORDINATE (activity):
Mis sa homme **teed**?
what you:NOM tomorrow do-PRES:2SG
'What are you doing tomorrow?'

10.1.2.
Ma **teen** ikka veel seda artiklit.
I:NOM do-PRES:1SG still yet this:PRT article:PRT
'I'm still working on the article.

10.2.1. SUPERORDINATE (resultative activity):
Ta **tegi** lihtsalt nalja.
he:NOM make-PST:3SG simply joke:PRT
'He was only joking.'

10.2.2.
Selles peres **teeb** mees raha.
this:INE family:INE make-PRES:3SG man:NOM money:PRT
'In this family the husband makes money.

11. käima 'go, walk'

(cf. also Pajusalu, examples 17-24, this volume)

11.1. EVENT (double verb):
Käi too koolist raamatud ära.
go:IMP bring:IMP school:ELA book:NOM:PL away.
'Go and bring the books from the school.'

11.2. SUPERORDINATE:
Nii need asjad **ei** **käi**!
so these:NOM:PL things:NOM NEG walk
'This is not the way the things should be done!'

12. jääma 'remain'

(cf. also examples 25 and 26 for category of CHANGE, in Pajusalu, this volume)

12.1. EVENT (the initial phase):
Kell **jäi** seisma.
clock:NOM remain-PST:3SG stand:INF
'The clock stopped.'

12.2. EVENT (transition):
Jäin mõtlema.
remain-PST:1SG think:INF
'I stopped (an activity, speaking, etc.) to think.'

13. viima 'take, carry'

13.1. SCHEMATIC MEANING:
See jonni ajamine **ei** **vii** sind kuhugi.
This:NOM obstinacy:GEN driving NEG take you:PRT anywhere
'Your obstinacy will not take you anywhere.'

14. tooma 'bring'

14.1. SCHEMATIC MEANING:
Vaatame, mis homne päev **toob.**
see-PRES:1PL what tomorrow's:NOM day:NOM bring PRES:3SG
'Let's see what tomorrow brings.

15. ajama 'drive'

15.1.1. CAUSALITY:
Nali **ajab** naerma.
joke:NOM drive-PRES:3SG laugh:INF
'A joke makes (you) laugh.

15.1.2.
Tuul **ajas** vihmapilved laiali.
wind:NOM drive-PST:3SG rain-cloud:NOM:PL apart
'The wind scattered the rain clouds.'

16. hakkama 'begin'

16.1. TENSE (future related to the moment of speaking, the initial phase, see Metslang 1994, 148, 166 169):
Homme **hakkan** aias koristama.
tomorrow begin-PRES:1SG garden:INE clean:INF
'(I)'m going to tidy up the garden tomorrow.'

16.2.1. EVENT (the initial phase):
Hakkame nüüd minema.
begin-PRES:1PL now go:INF
'Let's get going now.'

16.2.2.
Mul **hakkas** palav.
I:ADE begin-PST:3SG hot:NOM
'I began to feel hot.'

17 laskma 'let'

17.1. CAUSALITY (curative; Cf. Metslang 2000:61-62, 'non-modal causality'.):
Ma **lasen** tal järele vaadata.
I:NOM let-PRES:1SG he:ADE after: look:INF
'I'll ask him to look (it) up.')

17.2. MODALITY+CAUSALITY (Cf. Metslang 2000:61-62):
Mari **laseb** Jüril magada.
Mari:NOM let-PRES:3SG Jüri:ADE sleep:INF
'Mari lets Jüri sleep.

17.3. PARTICLE (Metslang 2000):
Las ta läheb pealegi!
let:PARTICLE he:NOM go-PRES:3SG then
'Let him go then!'

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Eesti keele tuumverbidest

Ilona Tragel

Tuumverbideks nimetan selliseid tegusõnu, mida kasutatatakse grammatilistes funktsioonides ja/või mis väljendavad üldisi mõisteid. Nende tähendus on tavaliselt skemaatiline ning mõned neist toimivad konstruktsiooniskeemi põhjana (omandamise alusena) ja motivaatorina.

Artiklis sõnastangi tuumverbide määratlemise kriteeriumid. Selleks kasutatud teoreetilise baasi hulka kuuluvad mh grammatikaliseerumisteooria (Heine et al. 1991) ja konstruktsioonigrammatika (Goldberg 1995). Eesti uurijatest on arvestatud põhiliselt H. Rätsepa (1978), H. Metslangi (1994, 2000) ja M.Erelti (2001) tööde tulemustega. Kriteeriumid jagunevad semantilisteks ehk sisulisteks ja formaalseteks ning universaalsuse kriteeriumiks. Semantilisi kriteeriume on viis: grammatiline funktioon (nt AEG, ASPEKT), üldmõistelisus (asendatavus: *Ulata soola!* pro *Anna soola!*), konstruktsiooniskeemi motiveerimine (nt nn ANDMA skeem [S + V + N:ALL+ O]), skemaatiline tähendus ja polüseemilisus. Formaalsed kriteeriumid on sagedus (kasutasin Eesti kirjakeele , Eesti suulise kõne – ja Eesti murrete korpuse andmeid), lühidus ja lihtsus ning varane omandamine (andmed eesti lapsekeele uurimuste verbide omandamise järjestusest ning skemaatiliste tähenduste "üle"kasutamisest). Universaalsuse kriteerium on seotud tüpoloogilise perspektiiviga: need verbide vasted on sageli nn funktsioonisõnad paljudes maailma keeltes. See perspektiiv jääb selles artiklis käsitlemata. Taju- ja tunnetusverbide kaasamine tuumverbide hulka jäi seekord samuti arutluse alt välja, kuna nende määramiseks tuleb luua lisatingimusi.

Loetletud tingimuste alusel koostasin eesti keele tuumverbide esialgse loendi, mis koosneb 17 verbist: *olema, tulema, minema, saama, andma, võtma, panema, võima, pidama, tegema, käima, jääma, viima, tooma, ajama, hakkama, laskma.*

Sagedusloendite põhjal kuuluvad eesti keele tuuma *olema, tulema, minema, saama, tegema* ja *käima*, ning *võtma, pidama* ja *hakkama*. Lapsekeele uurimuste (Vider 1995, Vija 2000) andmete põhjal omandatakse esimese 20 verbi hulgas tuumverbidest *olema, tulema, minema, saama, andma, võtma, panema, tegema, käima, pidama, viima* ja *hakkama. tooma, ajama* ja *laskma* kaasamist tuumverbide hulka põhjendan nende grammatiliste funktsioonidega ja skemaatiliste tähendustega.

Artikli lisas esitan näiteid nende verbide kasutamise kohta grammatilistes funktsioonides, skemaatilisates tähendustes ja konstruktsioonide motivaatoritena.

The polysemy of *seisma* 'to stand': multiple motivations for multiple meanings[1]

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1. Introduction

Polysemy is, as it is widely accepted, the multiple related meanings of one word. A topic that has attracted considerable attention over the past few decades is the metaphoricity of polysemy. Mark Johnson, who in his famous book "The Body in the Mind" is "putting body back in the mind" states that polysemy is possible because there exists an underlying image schema that is metaphorically extended, typically from the physical domain to a nonphysical or more abstract domain (Johnson 1987: 107). To the significance of metaphor in polysemy the past few years have added the recognition of the role of metonymy, which is probably even more basic to language and cognition (Barcelona 2000: 4). Metaphor and metonymy are actually not two separate processes, but interact with each other. There are many cases of the metaphorical motivation of metonymy and, vice versa, the metonymical motivation of metaphor (for an overview see Barcelona 2000).

We should not forget, however, that although language is certainly related to cognition, it forms a relatively delimited system. The lexicon of a language has been motivated by the cognitive reality, but, once existing, it may come to influence cognition. Structuralist semantics has investigated thoroughly lexical relations between units of meaning (see, e.g., Cruse 1986). On the one hand, lexical relations are naturally the realisations of cognitive principles. For example, lexical opposition is based on cognitive opposition, on our ability to create and terminate certain conditions (e.g., to kindle and extinguish a fire). On the other hand, while being essentially cognitive in nature, linguistic opposition may make a contribution of its own to meaning. The reflexivity of speech means that each communicative act has been shaped by context, as well as shapes context itself. The same

[1] This work was supported by the Estonian Science Foundation, Grant No.:4405.

applies to language as an abstract whole: it both reflects and influences the way we conceive of reality. The meaning of a word then depends on, but at the same time constitutes, cognitive reality. Lexical relations, similarly, depend on cognitive reality, but also have an effect on meanings. This effect of lexical relations on semantic shifts will be referred to here as the lexical motivation of meaning. I believe, then, that besides being motivated by metaphor and metonymy, meanings may also be motivated lexically.

The different types of motivation are generally not opposing or mutually exclusive. In most cases of polysemy, more than one type has been at work. The network of meanings of a polysemous word is so intricate that it needs to be held together by various kinds of relations. The use of different types of motivation is often redundant, but redundancy characterises all linguistic communication.

A problem that arises in the analysis of any polysemous word concerns the extent to which it is possible to distinguish between the senses of the word (Sandra & Rice 1995, Raukko 1997). Although scholars working in the tradition of cognitive semantics generally agree that meanings are vague and non-fixed, "the actual cognitive-semantic analyses of polysemous words /.../ seem to postulate systems of discrete (though related), different senses of these words" (Raukko 1997: 147). The analysis in this paper is no exception. In the same discussion, however, Raukko provides some comfort: "When polysemy studies refer to 'senses' or 'meanings' of words, these entities should be allowed to exist as methodological tools with no definite commitment to an ontological-physiological reality." (Raukko 1997: 153). What will be referred in this article as the different senses of a word are typical usages that occur with relatively high frequency. Boundaries between these usages are fuzzy, different meanings are not separable and we can never say how many meanings a word has.

This article deals with one polysemous word, the verb *seisma*[2] 'stand', and a few other verbs lexically related to it (*minema* 'go' *käima* 'go' *istuma* 'sit' *lamama* 'lie'), focussing on the range of senses of the word, and on how the senses are motivated – cogni-

[2] I have also carried out a psycholinguistic experiment on the senses of the verb *seisma* (Pajusalu 2001), the results of which have been indirectly used also in this article.

tively, through metaphor and metonymy, as well as through the lexical structure. The senses under consideration relate mostly to the physical domain, the various extensions of the verb into more abstract domains will be the subject of further research. The article focuses on current Estonian usages[3] without considering the possible influences of other languages. The semantic network of *seisma* has been influenced by at least Russian and German, but for a speaker of Estonian it should constitute an integrated system without 'external assistance'

2. The polysemy of the verb *seisma*: a brief overview

Although *seisma* does not rank among core verbs in Estonian (Tragel, this volume) nor among the 100 most frequent items in standard Estonian (see Sutrop 2000[4]), it is one of the most important verbs in the lexical structure of Estonian. The EKSS (the Dictionary of Written Estonian) lists 7 senses with example sentences on slightly more than two pages (EKSS: 379–381)[5] A simplified overview of the senses will be provided below, along with example sentences that could be regarded as typical instances of the particular meaning.

of a person, to be in a vertical position

(1)
Poiss seisab keset tuba.
boy stand-3SG middle room-GEN
'The boy is standing in the middle of the room.

[3] When the state of an entity is referred to as 'standing' in this paper, it means that the verb *seisma* can be used with these entities in Estonian. For example, when I say that 'jam stands differently from a bus' it means that *seisma* can be used with both 'jam' and 'bus' in Estonian.

[4] The results presented in Sutrop (2000) are based on the frequency list of the Corpus of Modern Written Estonian, see http://www.cl.ut.ee/ee/tulemusi/sag_lem_1000.kogu

[5] Some of the example sentences used in this article derive from this source.

of an object (with or without legs), to be in a vertical position

(2a)
Laud seisab akna all.
table stand-3SG window-GEN under
'The table stands under the window.'

(2b)
Kraana seisab ehitusplatsil.
crane stand-3SG building site- ADE
'The crane stands on the building site.

to be situated or located

(3a)
Uksel seisab mingi silt.
door-ADE stand-3SG some sign
'There is a sign on the door.'

(3b)
Tööriistad seisavad kuuris.
tool-PL stand-3PL shed-INE
'The tools are kept in the shed.'

to remain in a state or location

(4a)
Jää seisab tiigil kevadeni.
ice stand-3SG pond-ADE spring-TER
'The ice will remain on the pond until spring.'

(4b)
Hea moos seisab mitu aastat.
good jam stand-3SG several year-PRT
'Good jam keeps for several years.'

to be stationary / in the state of being stopped

(5a)
'The bus is standing *Buss seisab peatuses.*
bus stand-3SG stop-INE
at the bus stop.'

(5b)
Mootor seisab.
engine stand-3SG
'The engine is turned off.

to protect someone or something[6]

(6)
Mehed seisavad oma õiguste eest.
man-PL stand-3PL POSS right-PL.GEN front-ELA
'Men stand for their rights.'

to be, consist in, concern

(7)
Asi seisab selles, et ...
thing stand-3SG this-INE that
'The fact (of the matter) is that ...

For each of these senses, the EKSS lists also non-literal meanings. As it is not possible to discuss all the meaning nuances of the verb *seisma* in a single paper, the main concern of this article will be the domain of physical objects, and many metaphorical extensions into more abstract domains, as illustrated in examples (6), (7) and (8), will be left out of discussion:

(8)
Ta seisab oma teadmiste poolest teistest kõrgemal.
3SG stand-3SG POSS knowledge-PL.GEN by other-PL.ELA high-COMP
'S/he stands out among the others with her knowledge.'

An analysis of the senses and the example sentences listed in the EKSS reveals that the first five senses form an integral semantic field, intuitively centred around the kind of standing involving an entity which is in a vertical position, is located somewhere, and does not move with respect to this location (which does not mean that the entity has to be motionless – for example, a standing person may scratch himself behind his ear). Being located and being stationary is clearly typical of all kinds of standing (some special cases will be discussed below), but for being called standing the position of referred entity can't be in contradiction with verticality.

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[6] This sense of *seisma*, which will not be discussed in this article, may be a realization of the image schema STRAIGHT. In Estonian, as in many other languages, truth and justice are metaphorically related to the STRAIGHT-schema (Õim 2000). It has also metonymic motivation: a strong person stands straight, while a sick and weak person stoops.

2.1. The standing of a human being

Psycholinguistic experiments with the English word *stand* have shown that the image schemas most relevant to the human activity of standing (from the aspect of bodily experience) are BALANCE and VERTICALITY (Gibbs et al. 1994: 237). BALANCE is one of the first thoroughly studied image schemas in cognitive semantics, discussed, for example, in some detail by Johnson (1987: 73–100). He treats it both as an experience and as a concept, and observes how the meaning of balance emerges in bodily experience and how this experience gives rise to different metaphorical elaborations of the basic BALANCE schemas. In the experiments carried out by Gibbs and his associates, BALANCE has been defined as follows: "Balance refers to your sense of symmetry and stability relative to some point within your body" (Gibbs et al. 1994: 237).

VERTICALITY is also a relatively clear image for a human being. It is part of human bodily experience, and it "refers to the sense of an extension along an up–down orientation." (Gibbs et al. 1994: 237).

I do not know of any similar experiments with the speakers of Estonian. One could hypothesize that the perception mechanism involved is near-universal, as people stand in the same way. At the same time bodily experience clearly cannot be the only factor contributing to meaning – if it were, the meanings of words would be the same for different languages. The way we conceive of any bodily action or perception depends also on the other concepts in the same domain and on the lexical structure of the language.

In Estonian, the main posture verbs are: *seisma* 'stand' *istuma* 'sit' *lamama* 'lie' *kükitama* 'squat' *kummardama* 'stoop' and *põlvitama* 'kneel' Other positions have not become lexicalised and are described by means of adverbials (e.g., *varvastel seisma* 'stand on tiptoe'). *Lamama* has a number of synonyms, in some of which the body part on which a person is lying has become lexicalised (e.g., *külitama* 'lie on one's side', *kõhutama* 'lie on one's belly', *selitama* 'lie on one's back'). With some other synonyms, it is difficult, if not impossible, to say how their meaning differs from that of *lamama* (e.g., *pikutama, lebama, lesima, lamasklema, lebasklema*) (Õim 1991: 242).

Comparing, for example, the meaning of *seisma* with the verb *kükitama* 'squat' we see that both BALANCE and (although in a

somewhat less typical form) VERTICALITY are similarly relevant to *kükitama*. Thus it appears that in the lexical structure of Estonian it is important that the person who stands supports his body on straight legs, whereas the body itself must also be more or less upright. Standing has fuzzy boundaries with the concepts SQUAT (legs are bent, but the the weight is carried by feet and the position of the body is still vertical) and STOOP (the body is bent and supported on legs, but the position is not vertical); with the concepts SIT and LIE – VERTICALITY and straightness are perhaps less relevant here than the way of supporting the body, the BASE[7]: a standing person uses legs, a sitting person, buttocks, and a lying person, his back, side, or belly for support. KNEEL belongs also to this group (the weight is supported on knees).

It is difficult to say how much exactly the legs or body have to be bent before we stop calling the posture standing. With sitting, lying and kneeling the boundaries are less fuzzy[8] – if, for example, the body is supported on legs and buttocks, the posture is not referred to as sitting, but as standing with support. Using legs for support should, however, be regarded as a typical, not as a necessary feature for standing, as people can stand also on their head (when doing a headstand) or arms. By contrast, one can sit, lie or kneel only when the weight is supported on buttocks, back/side/belly or kneels, respectively.

2.2. The standing of other entities

What constitutes standing for an inanimate entity? Depending on the characteristics of the entity, the following features of standing may be relevant: verticality, immobility as remaining stationary and immobility as being non-functioning.

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[7] Borneto (1996) has used the schema of BASE for the way of supporting the body and claimed that BASE is relevant for *stehen* 'stand' but not for *liegen* 'lie'

[8] Zhang (1998: 14) points out in a footnote that having fuzzy boundaries is not the same as having no boundaries at all. Fuzziness should be seen as a scalar concept – we can speak of more or less fuzzy boundaries.

2.2.1. Verticality[9]

First, it should be pointed out that not all entities are positioned in a way that the vertical dimension could be viewed as relevant – consider, for example, a sign on the door (3a), ice on a pond (4b), and a car engine (5b). Cases where the vertical dimension does exist fall into one of the following three categories:

(a) The position of plants (the examples in the EKSS involve *kastan* 'chestnut' *nisu* 'wheat' and *tammesalu* 'oak grove'(EKSS V: 380)) and plant-like objects, in case of which the longest dimension is at right angles to the base. For plants, this typically means their growing position – i.e., being vertical with respect to the ground, for parts of animate beings or other tall objects, being at right angles to the surface that bears their weight or that they grow from. This is how an hedgehog's spines, the hair on one's body, or an erect penis[10] stand.

(b) The typical position in which an object is ready to be used; this is how a bucket (ready to contain water); a bicycle (ready to be ridden), car or bus (ready to be driven, see (5a)); a house (ready to be lived in), etc. stand. Some usable objects may of course have legs (e.g., a table, see (3a)), and some may be visually tall (e.g., a crane, see (3b)), but these attributes are secondary to the 'ready-for-use' position. To an extent, this group is even in conflict with the previous group: according to (a), a bus, for example, should be seen as standing when it is positioned vertically on one end. This shows the tendency of people to categorise (at least basic-level) concepts primarily according to function.

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[9] Unlike in some other languages, such as Russian (and, to an extent, in English – consider the verb *lay*), the position of the object has not become lexicalised in the Estonian verb *panema* 'put, place' (Cf. Russian *polozhitj* 'place in a horizontal position' and *postavitj* 'place in a vertical position').

[10] This is the only usage where the verb *seisma* typically occurs without a grammatical subject, as in *Vanamehel ei seisa enam.* 'The old man can't get an erection any longer.', lit. 'For the old man (it) does not stand any longer' A relatively rare type of markedness appears in this taboo-related sentence construction: the specific feature is the loss of the subject, i.e., something being missing, not added.

(c) The position of an object in case of which the longest dimension is vertical, but the vertical position is not relevant to use; this is how a scythe stands, when it has been leant against the wall and a book stands on the shelf (as these objects are actually used in motion, their position is not relevant to use).

2.2.2. Being stationary or located

Entities that do not have a position relevant to the vertical dimension may also stand – in this case the verb *seisma* shows that the entity is stationary, is not working or is located somewhere.

Being motionless is relevant to entities typically in motion, such as clouds or water. Of such entities, standing means primarily that they are not moving. Similarly, vehicles may stand, e.g. buses stand at bus-stops, trains at the station or ships at the port.

Locatedness is relevant to entities which do not typically move or do not have a vertical dimension. A sign stands on the door, and text stands in the book. *Seisma* may also refer to an entity's usual location, as in

(9)
Aiatööriistad seisavad kuuris.
gardening tool-PL stand-3PL shed-INE
'Gardening tools are kept in the shed.

2.2.3. Being non-functioning

The cognitive prototype here could be the heart, which *töötab* 'works' when a person is alive, but *seisab* 'stands' when a person is dead. One of the figurative expressions for dying is *süda jäi seisma* 'one's heart has stopped (lit. become standing)' The functioning and non-functioning of heart as a pulsating organ probably explains why the verb *seisma* is typically used to indicate the non-functioning of various mechanisms and systems of mechanisms.

(10a)
Kell seisab.
watch stand-3SG
'The watch has stopped.

(10b)
Mootor seisab.
engine stand-3SG
'The engine has stopped/is turned off.'

(10c)
Tehas seisab.
factory stand-3SG
'The factory has stopped.'

3. Lexical relations as a factor in motivating the polysemy of the verb *seisma*

3.1. The motion verbs related to the verb *seisma*

3.1.1. The opposition of the motion verbs and *seisma*

Seisma is primarily opposed to motion. A motion event is analyzed by Talmy as having four components: besides Figure and Ground, there are Path and Motion. The component of Motion refers to the presence *per se* of motion or locatedness in the event. The motion component refers to occurrence (MOVE) or non-occurence (BE $_{LOC}$) of motion, specifically of translational motion. It does not include "self-contained" motion like rotation, oscillation or dilation. (Talmy 2000: 25–26.)

The most frequent motion verb in Estonian is *minema* 'go' There is a number of verbs expressing different types of motion, such as *sõitma* 'go, of a vehicle or by a vehicle' *lendama* 'fly' *ujuma* 'swim', *jooksma1* 'run, of a person or animal', *jooksma2* 'run, of liquids' (see Leino 1993 for the semantics of the verb *juosta* 'run' in Finnish, which is almost identical with the polysemy of the Estonian verb *jooksma*), etc.. *Seisma* is opposed to each of these verbs when they express the state of motion (i.e., the destination of motion is not given in the sentence). Verticality (VERT) is relevant only if the particular environment allows of different postures, i.e., if another position verb can be used as opposed to standing. For example, a person can stand in water only with his legs supported on the bottom, while a parachutist can stand (i.e. not move) in the air in a variety of positions – an upright position is practically impossible in the air anyway. Ships can also stand (i.e., not move) in water, the opposite of this standing would be the motion verb *sõitma* 'of a vehicle, go' Verticality is relevant to the verbs *ujuma* 'swim' (-VERT) and *jooksma1* 'of a person, run' (+VERT), and irrelevant to the verbs *sõitma* 'of a vehicle, go' and *lendama* 'fly' Correspondingly, verticality is not relevant to *seisma* as opposed to *sõitma, lendama* and *jooksma2*, which can be described as *seisma*

BE LOC ((14)–(16)). *Seisma* as opposed to *minema, ujuma ja jooksmal* is always vertical ((11)–(13)).

In the cases where verticality is relevant to the motion verb, the opposite verbs may also be *istuma* 'sit' and *lamama* 'lie' In the sentences below the relevance of verticality to motion or the absence of motion has been indicated by the abbreviation VERT (is vertical) or VERT (is not vertical), the irrelevance of verticality has been indicated by 0/VERT[11]

(11)
Mees läheb mööda teed. MOVE+VERT
man go-3SG along road-PRT
'The man is going along the road.
← → Mees seisab. BE LOC+VERT
man stand-3SG
'The man is standing.'
← → Mees istub/lamab. BE LOC + -VERT
man sit-3SG/lie-3SG
'The man is sitting/lying.

(12)
Mees ujub. MOVE + -VERT
man swim-3SG
'The man is swimming.
← → Mees seisab vees. BE LOC + VERT
man stand-3SG water-INE
'The man is standing in the water.'
← → Mees istub/lamab vees. BE LOC + -VERT
man sit-3SG/lie-3SG water-INE
'The man is sitting/lying in the water.'

(13)
Mees jookseb. MOVE + VERT
man run-3SG
'The man is running.'
← → Mees seisab. BE LOC +VERT
man stand-3SG
'The man is standing.
← → Mees istub/lamab. BE LOC + -VERT
man sit-3SG/lie-3SG
'The man is sitting/lying.'

(14)
Buss sõidab. MOVE+ 0/VERT
bus move-3SG
'The bus is moving.

[11] The feature 0/VERT is relevant only in comparison with other senses.

← →	Buss seisab. bus stand-3SG 'The bus is standing.'	BE LOC +0/VERT

(15)

Helikopter lendab. helicopter fly-3SG 'The helicopter is flying.'	MOVE + 0/VERT
← → Helikopter seisab õhus. helicopter stand-3SG air-INE 'The helicopter is hovering'	BE LOC +0/VERT

(16)

Vesi jookseb jões. water run-3SG river-INE 'Water runs in a river.'	MOVE + 0/VERT
← → Vesi seisab järves. water stand-3SG lake-INE 'Water stands in a lake.	BE LOC +0/VERT

A lexeme peculiar to the field of motion verbs in Estonian is the verb *käima* 'go, walk' which in one of its senses (*käima 1*) is neutral with respect to the manner of motion and may express any kind of to-and-fro movement (i.e., the moving figure returns to the starting point), recurrent or non-recurrent (17). The verb *käima* expresses at once the Motion and the Path, the Path being formulated as TO (LOC) FROM, where LOC is the place where the moving figure turns around and returns to the previous location (the combination TO (LOC) FROM is actually missing from Talmy's list of Motion-aspect formulas in Talmy 2000: 53–54).

In one of its established senses, *käima* is used to denote the scheduled movement of public transport (one of the senses distinguished by the EKSS is 'run regularly, ply' (18)). There is no opposition between *seisma* and this usage of *käima*, primarily because the latter includes the element of spatial goal (LOC).

(17)

Käisin	eile	poes.	MOVE TO (shop) FROM
walk-PST-1SG	yesterday	shop-INE	

'I was to the shop yesterday.'

(18)

					MOVE TO (a certain destination) FROM
Buss	käib	iga	kümne	minuti	tagant.
bus	walk-3SG	every	ten	minute-GEN	after

'There are buses every ten minutes.'

In the other sense (*käima 2*), *käima* expresses only movement on foot, or in case of a non-human entity, slow movement. This sense of *käima,* similarly to other verbs of movement used without a destination, is in opposition with *seisma.*

(19)

Mees	käib	tänaval.		MOVE + VERT
man	walk-3SG	street-ADE		
'The man is walking along the street.'				
← →	Mees	seisab	tänaval.	BE LOC + VERT
	man	stand-3SG	street-ADE	
	'The man is standing on the street'.			
← →	Mees	istub/lamab	tänaval.	BE LOC + -VERT
	man	sit-3SG/lie-3SG	street-ADE	
	'The man is sitting/lying on the street.'			

(20)

Pilved	käivad	madalalt.		MOVE + 0/VERT
cloud-PL	walk-3PL	low		
'Low clouds are rolling (across the sky).				
← →	Pilved	seisavad	paigal.	BE LOC + 0/VERT
	cloud-PL	stand-3PL	place-ADE	
	'Clouds are not moving.'			

In a sense analogous to the recurrent TO+FROM movement, *käima* can also be used with engine-like objects whose functioning involves pulsation and monotonous sound (e.g., a watch, engine) (the sense 'function' in the EKSS). It is possible to speak of the metonymic motivation of meaning here as a part of the mechanism actually moves to and fro in space (MOVE TO(LOC)FROM).

The relevance of metonymy is also indicated by the fact that although the cognitive prototype of this kind of functioning at first glance appears to be the functioning of the heart, we cannot use the word *käima* for the heart. And indeed, we cannot see the movement of the parts of the heart in space. Although a part of the mechanism moves, the mechanism as a whole is stationary – this *käima* thus expresses the state of motion, not goal-oriented motion. This usage of *käima* is opposed to *seisma,* which in this sense expresses non-functioning (10 a–c). Although one can claim a metonymic motivation also here (the absence of motion refers to a part of the mechanism), this is realized primarily through the opposition *käima* ← → *seisma.*

(21)
Mootor käib.
engine walk-3SG
'The engine is running.'
← → Mootor seisab.
engine stand-3SG
'The engine has stopped.

(22)
Kell käib.
watch walk-3SG
'The watch is working.'
← → Kell seisab.
watch stand-3SG
'The watch has stopped.'

3.1.2. The synonymy of the motion verb *käima* and *seisma*.

In one of its senses, *seisma* means 'to be habitually located' (3b), and in this sense it is, surprisingly, synonymous with the motion verb *käima*.

(23a)
Tööriistad käivad kuuri.
tool-PL walk-3PL shed-ILL
'The tools are kept in the shed.'

(23b)
= Tööriistad seisavad kuuris.
tool-PL stand-3PL shed-INE
'The tools are kept in the shed.'

(23c)
= Tööriistad on tavaliselt kuuris.
tool-3PL be-3PL usually shed-INE
'The tools are usually in the shed.

Although the adverbial occurs in different cases in (23a) and (23b) (*kuuri* and *kuuris*), the meaning of the two sentences is practically the same. This can be easily accounted for: if an object is usually kept in one place, but used in another place, the location of the object can be expressed through either of the schemas MOVE+TO (use) FROM or BE $_{LOC}$

Similarly, the verbs *käima* and *seisma* may be used to describe other habitual states which require simultaneously a TO-FROM change and a stable condition, as in (24). The 'habitual state' sense of both *käima* and *seisma* is also metonymically motivated, as the former indicates the TO-FROM movement of a part of the object (in

(24) the part is the tumbler of the lock), and the latter the non-motion of the part (BE $_{LOC}$) during a certain period of time.

(24a)
Uks käib ööseks lukku.
door walk-3SG for night lock-ILL
'The door is kept locked at night.'

(24b)
= Uks seisab öösel lukus.
door stand-3SG night-ADE lock-INE
'The door is kept locked at night.

(24c)
= Uks on tavaliselt lukus.
door be-3SG usually lock-INE
'The door is usually locked.'

The phenomenon appears similar to the lexical relation described by Cruse as indirect converses, which means that two different words describe the same event from different reference points and the other parts of the sentence change their grammatical roles, as in *give:receive* (Cruse 1986: 233–240). In the case of *seisma* and *käima* in (23a–b) and (24a–b), the grammatical change affects not the syntactic roles, but the cases of the time and place adverbial.

3.2. The change-of-state verbs opposed to the verb *seisma*

Estonian change-of-state verbs include *muutuma* 'change', specific change-of-state verbs like *haigestuma* 'fall ill' *halvenema* 'worsen' etc., and with three core verbs: *jääma* 'remain', *saama* 'get' and *minema* 'go'[12] I have discussed the relations between these three verbs elsewhere (Pajusalu 1994). Therefore, only a simplified description will be provided here.

Jääma expresses negative changes (in terms of judgement, as well as quantity).

(25)
Ta jäi haigeks.
3SG remain-PST-3SG ill-TRA
'He fell ill.

[12] For a further description of these polysemous verbs see also Tragel (this volume).

(26)
Kõik jäi vaikseks.
all remain-PST-3SG silent-TRA
'Silence fell.'

Saama expresses active changes involving a human being, especially in situations where a person has achieved something by means of an intentional activity, or internal resources (e.g., when fighting with a disease).

(27)
Ta sai professoriks.
3SG get-PST-3SG professor-TRA
'He became a professor.'

(28)
Ta sai terveks.
3SG get-PST-3SG well-TRA
'He got well.

Minema expresses passive changes involving an animate being (the EKSS explains it as 'said of physical, physiological and mental changes involving an animate being') and changes of inanimate objects. It is a realization of the universal conceptual metaphor CHANGE IS MOTION (a part of the EVENT STRUCTURE METAPHOR (Lakoff 1993)), which, according to Radden, is usually metonymically motivated (Radden 2000: 120).

(29)
Ta läks näost punaseks.
3SG go-PST-3SG face-ELA red-TRA
'His face reddened.

(30)
Moos läheb halvaks.
jam go-3SG bad-TRA
'The jam will go off.'

Seisma has been used in opposition with many change-of-state verbs. Today most of these usages sound outdated, although they cannot be considered impossible. One of such oppositions has produced the established sense 'to keep, of perishable foods' (4b). This sense is motivated lexically by the opposition *minema–seisma* as in (11). There is also metonymic motivation: if jam does not go off, it remains stationary, as it does not need to be eaten within a short period of time.

3.3. The verbs of position related to *seisma*

The use of the verbs *istuma* 'sit' and *lamama* 'lie' to describe the position of a person has been briefly discussed above (examples (11)–(13), and (19)). Compared to standing, both *istuma* and *lamama* describe stationary, non-vertical positions: BE $_{LOC}$ + -VERT.

The verb *istuma* can also describe inanimate entities in cases where neither VERTICALITY nor BASE is relevant.

(31)
Auto istub poris.
car sit-3SG mud-INE
'The car is stuck in the mud.'

(32)
Laev istub madalikul.
ship sit-3SG shoal-ADE
'The ship has run aground.

Both sentences describe a situation where an entity for which movement can be described as a natural attribute, is temporarily unable to move. It is a metaphorical elaboration of the prototypical usage of *istuma*, highlighting the inability of the car or the ship to move. In the list of image schemas presented in (Gibbs et al. 1994: 237), the relevant one might be RESISTANCE, but in this context the more general version – possibility to move (POSS MOVE) – would probably be more appropriate. So we can define the meaning of *istuma* in (31)–(32) more exactly as BE $_{LOC}$ + POSS MOVE. This metaphorical elaboration is very likely to have been motivated by bodily experience: we all know that before he or she can move, a sitting person first has to stand up. So there is something that has to be done before s/he can walk or run. In the same way a car has to be pulled out of mud and the ship off the bank before they can move.

The bodily experience of sitting is also related to comfort: in our culture people typically sit on chairs made to fit the shape of the human body. A sitting person perceives the fit between the body and the seat (FIT). This experience underlies the metaphorical elaboration in (33).

(33)
Pistik istub täpselt pesas. BE $_{LOC}$ + FIT
plug sit-3SG exactly socket-INE
'The plug fits into the socket.'

Returning finally to *seisma,* the comparison with the verb *istuma* shows primarily that a feature relevant to the meaning of *seisma* is the possibility to move (POSS MOVE).[13] Although this is important also for animate beings, for them standing could mostly be defined through position. All other moving objects stand when they could also be moving. There are situations which could be described by either *seisma* or *istuma,* depending on which aspect of the situation the speaker wishes to emphasize. For example, a situation involving a ship in port can be referred to by (34) if the speaker wishes to describe the fact that the ship has stopped at the port, or by (35) if the speaker wishes to describe the position of the ship. If a hat fits (i.e., sits tightly) on a person's head, (36) may be used, if it fits the person (i.e., looks nice), (37), although the situation may actually be the same.

(34)				
Laev	seisab	sadamas.		BE LOC + POSS MOVE
ship	stand-3SG	port-INE		
(35)				
Laev	istub sügavalt		vees.	BE LOC + FIT
ship	sit-3SG	deeply	water-INE	
(36)				
Müts	seisab	hästi	peas.	BE LOC + POSS MOVE
hat	stand-3SG	well	head-INE	
(37)				
Müts	istub	hästi	peas.	BE LOC + FIT
hat	sit-3SG	well	head-INE	

4. Conclusions and discussion

In summary, we can say that the meaning of *seisma* in the physical domain can be described as

BE LOC + POSS MOVE

if we define the working of an engine or a clock as moving, too. This formula can be applied to all the senses of *seisma* in the physical domain. However, for some senses verticality is of the crucial value. If meaning is motivated primarily by bodily experience, the usage of

[13] In German "the inherent dynamic factor in the scene /.../ requires the selection of *stehen*, as opposed to the totally static locative *liegen* (Borneto 1996:487).

seisma in the sense of the human activity of standing, involving verticality, should be regarded as primary. However, we should not forget that we live and act as social beings with certain communicative needs and practical experiences (see also the discussion in Õim 1996). Linguistic behaviour is determined not only by the cognitive reality, but also by *habitus* (the term was proposed by Pierre Bourdieu (e.g. 1990)). Therefore, considering the communicative needs of a human being, it would be more reasonable to assume that the primary usage of *seisma* is the one involving reference to an object which could move but remains stationary (e.g., a mammoth in the field, or water in the lake). We could hypothesize here (although finding etymological proof would be, admittedly, difficult, if not impossible) that the stem *seis-* may be related to the demonstrative stem *se*[14] and *seisma* may have been originally a deictic verb of referring, to which the bodily experience of motionless standing has been added only later[15]

Having considered many senses of the verb *seisma*, we have seen that the network of meanings is held together by different types of motivation: metaphor and metonymy, which have been widely discussed in cognitive semantics, but also lexical motivation or motivation through a lexical relation, a less frequently discussed topic in the cognitive paradigm. The most influential lexical relation is probably opposition, establishing a strong link between the opposites, which may remain unbroken even when one or both of the words are used in their non-literal meanings.

And last but not least: when someone says *mootor seisab*, lit. 'the engine stands', the speaker may mean or at least presuppose that 1) it can work (in a situation when the engine is in the car); 2) it can be moved (in a situation where it is out of the car, e.g. standing in a

[14] Although *seisma* has been traditionally reconstructed as **sańća*, front vowels have also been considered possible; the same stem appears in cognate languages with the meanings 'stand' 'stay' 'remain' 'sit' and 'put, place' (SSA III: 165). Thus, neither a phonetic nor semantic connection with the demonstrative *se* can be ruled out.

[15] Pentti Leino has discussed the verb *jooksma* 'run' along similar lines: although it may seem at first that the primary meaning relates to the running of a human being, the etymological analysis of the word shows that the primary meaning is more likely to be the running of water in a river (Leino 1993:154).

garage). Can both of these aspects be described as part of the meaning of the word *seisma*? Or are they just pragmatic presuppositions that depend on our experience, not only bodily but also practical experience? Or, as Sandra and Rice (1995: 99) have put it: ...does the richness in usage types belongs to the domain of lexical meaning or to the domain of sentence meaning (i.e., the product of lexical meaning, contextual information, and pragmatic inference)? The main question of semantics is still open.

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Sõna *seisma* polüseemiast

Renate Pajusalu

Viimase paarikümne aasta jooksul on palju räägitud polüseemia metafoorilisest ja metonüümilisest motiveeritusest. Kuid oma roll sõna tähenduste polüseemilise võrgustiku tekkimises ja koospüsimises on ka leksikaalsetel suhetel. Käesolev artikkel vaatleb eesti keele verbi *seisma* polüseemiat füüsilises valdkonnas ja selle verbi suhteid mõnede teiste sagedaste verbidega. Vaatluse alt jäävad välja metafoorilised laiendused muudesse valdkondadesse.

seisma põhitähendused on EKSS-i järgi esitatud näidetes (1–7), neist (1–5) on kasutusel füüsilises valdkonnas. Need viis tähendust

moodustavad ühe semantilise välja, mille keskmes tundub intuitiivselt olevat vertikaalasendis objekt, mis asetseb kuskil ega liigu oma asukoha suhtes.

Inimese seismise jaoks on olulised kujundskeemid VERTIKAALSUS, TASAKAAL ja (TOETUS)PÕHI. Selles kasutuste rühmas vastandub *seisma* a) vähem vertikaalset asendit väljendavatele verbidele *kükitama* ja *kummardama* ning b) erineva toetusalusega verbidele *istuma, lamama* (koos selle paljude sünonüümidega) ja *põlvitama*. Muude objektide seismine on seotud kas nende täisnurkse asendiga aluse suhtes (näit taimede puhul) või kasutusvalmidusega (näit maja, samuti näited 3a, 3b, 5a). *seisma* võib tähistada ka lihtsalt liikumatust selliste objektide puhul, mis tüüpiliselt liiguvad (buss peatuses, samuti (9)), või mittetöötamist nende puhul, mis tüüpiliselt töötavad (näited 10a–c).

seisma vastandub paljudele liikumisverbidele, kusjuures nendes vastandustes säilib alati vertikaalsuse relevantsus: kui *seisma* kasutuses on vertikaalsus oluline (+VERT), siis on see oluline ka selle vastandverbi puhul (-VERT); kui *seisma* puhul vertikaalsus oluline ei ole (0/VERT), pole see ka vastandi puhul oluline (vt näit 11–16 ja 19–20). Ka metonüümiline motivatsioon on relevantne ühtviisi nii *seisma* kui ka selle vastava vastandi puhul (21–22).

seisma võib mõnevõrra üllatavalt olla ka liikumisverbi sünonüümiks, seda juhul kui *seisma* ja *käima* väljendavad sama olukorra erinevaid aspekte (23 a–b ja 24 a–b).

seisma on opositsioonis muutumisverbidega paljude arhailise varjundiga kasutuste kaudu, kuid peale selle ka tähenduse 'säilima' kaudu (31).

Muude asendiverbidega võrreldes selgub, et *seisma* tähendusse kuulub võimalus liikuda, võrreldes näiteks verbiga *istuma* (32–34). Ka siin on võimalikud *seisma* ja *istuma* kasutused reaalmaailma sama olukorra kohta sõltuvalt vaatenurgast (35–38).

Verbi *seisma* tähendusvõrgustik püsib koos tänu metafoorilisele ja metonüümilisele motivatsioonile, aga ka leksikaalsetele suhetele, st leksikaalsele motivatsioonile.

Deictic projection in Estonian

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1. Introduction

The current paper is based on Karl Bühler's projection theory. The main theoretical sources used are the reprint of Bühler's *Sprachtheorie* from 1990 and the study of Mayan deixis by William Hanks (Hanks 1990). In the latter, Hanks provides a description of the tripartite model of Bühler's deictic projection, and applies it to the Mayan languages. Gisa Rauh's analysis of different usage types of deictic expressions (Rauh 1983) is also largely based on Bühler's theory. How deictic projection functions is discussed in detail in the studies that focus on the linguistic phenomena which involve projection, such as narrative (see, e.g., Labov 1972) and report (e.g., Kuiri 1984).

In 1999, an in-depth study of deixis was published in Estonian: Renate Pajusalu's Ph.D. dissertation *Deictics in Estonian.* As this is the very first Estonian-language treatment of deixis, the scope of the study is very broad. In the chapter of her dissertation entitled *Deixis and discourse,* Pajusalu has also described deictic projection (Pajusalu 1999: 43–45).

The present paper can be tentatively divided into two parts. The three first sections briefly introduce the notion of deictic projection, and the linguistic and cognitive factors of its occurrence. Subsequently, I will present Bühler's types of projection alongside with my analysis of Estonian-language data. The spoken-language data used for the analysis were obtained from the Tartu University Corpus of Spoken Language. The examples in the present paper come from a total of ten everyday conversations.

2. The concept of deictic projection

The central notion of deictic projection is *origo* or the deictic zero. Deictic projection is the speaker's linguistic-cognitive manipulation with *origo*, the deictic centre (Bühler (1934) 1990: 46).

This manipulation is brought about by one of the main functions of deixis: deixis is essentially a device for connecting text and context, involving both the physical realities converging in context and the discourse world created by discourse. From the standpoint of discourse as a whole, the dynamics or constant change of the deictic field (ground) is especially important. One of the reasons for the change in deictic field is deictic projection (Pajusalu 1999: 42).

Here, changing of the deictic field takes place as a result of projecting or transposing the deictic centre. The most common definition of deictic projection is that it is the extraction of temporal, spatial and personal deixis (the three components of the deictic field) and the objects related to it (together or one by one) from the real context of utterance (Rauh 1983: 45, Pajusalu 1999: 43). Actually, here only a part of the occurrences of deictic projection are defined. The opposite direction of projection is possible as well: transposition of the spatial-deictic centre into the speech situation.

3. Situational factors of deictic projection

In addition to the division of deictic projection into spatial, temporal and personal deictic projection, one of the bases for systematizing the occurrences of projection is its deictic context. According to Bühler, deixis can be divided into three, based on the nature of the context: *demonstratio ad oculus et ad aures*: reference to what can be perceived immediately in the physical situation of the moment of speech; *anafora*: reference to what exists in the flow of text; *Deixis am Phantasma*: reference to the world of memory and imagination (Bühler 1982 (1934): 27–28)). In the first type of deixis, the deictic expressions can be associated with gestures (Rauh 1983: 44).

In Bühler's theory, the third deictic context is marked for deictic projection; he clearly describes as deictic projection only the use of deictic expressions to refer to the world of imagination (Bühler (1934) 1990: 149–157). Bühler also presents the hypothesis that we should look for the origins of deictic projection first and foremost among the ways people orient themselves in the surrounding physical reality. Bühler claims that the technique of referring to the world of imagination is analogous to the deictic mapping of immediate reality (Bühler (1934) 1990: 152–154). This hypothesis rests on cognitive psychological grounds, which will be discussed in the next section.

4. Cognitive factors of deictic projection

What peculiarities of human perception enable humans to perform such a linguistic manipulation as the transposition of *origo*? As outlined in the previous section, Bühler is looking for an answer in what could be called an individual's primary contact with the surrounding space (Bühler (1934) 1990: 145).

The existence of a universal orientation mechanism in humans and animals has been known to researchers for long, and it has been termed *cognitive map* (Bryant 1991: 13). *Cognitive map* is a broad term denoting the spatial images that an individual creates of the surrounding environment. It has been proven that with little experience and no conscious effort, people are able to form a functional cognitive map even of a very complex physical environment. The cognitive map retains the physical characteristics of distance and direction (Bryant 1991: 13). Although the cognitive map reflects distance and direction, it is not a "snapshot" of immediate reality (Bryant 1991: 19). To form a cognitive map of some space, it is not always necessary to immediately explore this space. With equal success, people can create a cognitive map on the basis of a photo or verbal description (Bryant 1991: 20).

As perception is one of the main devices for the humans to explore the world and interact with it, cognitive models are formed and delimited by how a human perceives the world (Bryant 1991: 40). The main characteristic of the innate apparatus of perception is its bodily origin: a human being uses his body as a frame upon which the whole system of spatial referring is constructed (Bryant 1991: 14), using the body as a model. Bühler calls this framework *tactile body image* (Bühler (1934) 1990: 153).

The most significant aspect of the body-model theory is its almost constant application in all kinds of spatial reference. The claim has been supported by the two experiments by David Bryant (Bryant 1991). The experiments demonstrated that an individual normally draws on his bodily memory and experience even when immediate observation of the surrounding objects is possible. Most of the subjects, who were able to observe the surrounding space immediately, still chose to determine the location of objects in the space without leaning on the reality for support (without turning their head/ body right /left, up /down, etc. (Bryant 1991: 54).

Bryant describes the phenomenon as controversial: on the one hand such an on-line interaction with the surrounding reality is preferable because it is not necessary to survey the surrounding space constantly in order to find the objects, but it is possible to locate them quickly on one's cognitive map. On the other hand, such a process – creating, storing and updating the cognitive map – requires constant mental effort (Bryant 1991: 45).

Presumably, the phenomenon of tactile body image is transferred to some extent to other deictic fields as well, as these are supposedly – according to the common view, at least the temporal field is – based on the analogy with the spatial field (Fillmore 1997: 74).

Deictic projection as the transposition of the speaker's deictic centre is possible and natural thanks to the fact that the tactile body image keeps the individual in contact with his body in any situation of referring (cf., an individual with a mental disorder or under hypnosis, in whose case we can speak about real spatial, person and temporal transposition) (Bühler (1934) 1990: 143–144).

5. Bühler's three projection types in Estonian conversations

As mentioned above, Bühler in his theory of deictic projection understands as projective three forms of reference to the world of imagination, *Deixis am Phantasma* (Bühler (1934) 1990: 149). I will describe below these types of deictic projection outlined by Karl Bühler (mainly based on the review by William Hanks (cf. Hanks 1990: 216–219)). I will analyse the possible occurrences of these types in Estonian conversations, supplementing my analysis with views by other authors.

5.1. Type 1: Projection from the speech situation to the world of imagination

The speaker projects himself into what is spoken about, describing objects and events as happening in time and space different from those of the reality. The deictics transpose the *origo* of the speaker into the time, space and surrounds of the story (Hanks 1990: 217). Such deictic changes occur in narrative and report.

5.1.1. Deictic projection in narrative

Narrative is essentially a bounded unit of discourse with regular internal structure. Parts of the macro-structure of narrative are accompanied by a characteristic spatial deictic projection, the so-called historical present (*praesens historicum*). The historical present is the present tense used to refer to past events (Schiffrin 1981: 45).

In the description of temporal deictic projection in narrative (and report), an important distinction should be made between the so-called tempus deixis (tense forms) and temporal deixis (temporal deictics). A verb in the discourse can function as a tempus deictic. This means that a past- or present-tensed verb in narrative or report carries important deictic information (Young 1988: 29).

The point of view from which events are seen is usually not stable in narrative (Laitinen 1994: 106). Research demonstrates that in the most common construction the historical present is located in the middle part of the narrative (Laitinen 1994: 91). When to proceed from the parts of narrative macrostructure, then the most common occurrence of the historical present is in the complication section of narrative, which expresses the course of events, action. The complication section is preceded by the abstract, which broadly summarizes the ensuing narrative, and orientation where the time, place, persons and the behavioural situation are expressed. Another section of narrative is evaluation where the story-teller's attitude towards the story becomes evident. The evaluation reflects the reasons for the narrator's telling of the story in the first place (Labov 1972: 370), and can be external or internal (Schiffrin 1981: 50). In the coda, the narrator returns to the moment of telling, and what was told in the story is connected to the present moment (Labov 1972: 365).

In the complication part of the narrative, the events are described in the order they took place in reality (Labov 1972: 360). An example from the corpus of spoken language:

(1)
Kr: mina **mõtlen** (think: 1SG) seal omi mõtteid=ja (.) **vaatan** (look:1SG) et mingisugune (.) auto **peatub** (stop: 3SG). (.) ei tee sellest autost väljagi, mutkui: **seisan** (stand: 1SG)=edasi. siis se (.) onkel **küsib** (ask: 3SG) käest et=õ (.) kas teid hõigatakse. (.)mina **vaatan** (look: 1SG), ei sellist autot ma (.) küll ei tea, ühtegi $ tuttavat sellisega ei sõida $ (0.5) ütlesin, et vaevalt. (0.5)

Kr: I **am thinking** my own thoughts there and I **see** that some car **stops**, I do not pay attention to this car, just **keep standing** there, then

that chap **asks** from me that, are you being called out, I **take a look**, no, this car I don't recognize, no-one I know drives this kind, I said that not likely.

As can be seen, almost all tempus deictis in the complication section of this narrative are in the historical present. Such a tempus deictic construction of complication section is actually not very common. Usually, the historical present alternates with past-tense narration within the complication part (Schiffrin 1981: 51).

(2)
M: **tulen**(come:1SG)=s mina uuesti politseisse kviitungiga. (.) **käisin** (go:1SG:IMF) mina vahepeal Tartus, **võtsin** (take:1SG:IMF) selle kviitungi sis ära sealt, **lähen**(go:1SG:IMF)=s mina tagasi politseijaoskonda, (.) /..../ **istusin** (sit:1SG:IMF) seal niimodi **vaatasin** (look:1SG:IMF), (.) mingi rahvas marsib mööda /.../ **võtab** (take:1SG) võtmed taskust välja **hakkab** (start 1:SG) mingit kabinetiust lahti tegema.

M: I **come then** again to the police department with the receipt, meanwhile I **went** to Tartu, **took** the receipt then from there, I **go** then back to the police department. /.../ so I **sat** there, **saw** that some crowds march by/.../ **takes** the keys out of his pocket and **starts** opening an office door.

As evident in example 2, the temporal perspective, from which the speaker is relaying the events, alternates quite frequently. However, this alternation within the complication part is not at all random, it is quite regular and has a certain function.

According to Wolfson the switches between present and past tense forms functions to structure the narrative. The change marks the boundaries of episodes: events, place of action and participants alternate in synchrony with temporal changes, alternation of tense forms separates one event from the other. (Laitinen 1994: 92). Schiffrin supports this view by examining the corresponding alternation of tense forms primarily from the aspect of the structure of narrative sentences: verbs in one tense form have a tendency to occur next to one another, in clusters. Examining the grammatical environment of the utterances with clustered tense forms, she concluded that the tense-form remains the same

a) in the case of subordinate tense clauses (Shiffrin's example: *When he kissed me I felt his beard*). The subordinate clause can precede or follow the main clause without changing our interpretation of what occurred. The clauses do not denote different events here: an event is described in the main clause, and the subordinate

clause adds background information to what was described, in the tense synchronic with the tense in the main clause (Schiffrin 1981: 52);

b) in the case of coordinate verb phrases. (Schiffrin's example: *He suddenly turned around and punched me*). Coordinate verb phrases always denote one inseparable event-phase. The order of clauses cannot be switched without changing our interpretation of what has occurred (Schiffrin 1981: 52–53). It is the coordinate verb-phrases that distinguish between the events in the example (2): *käisin* ja *võtsin* 'went and took' *istusin* ja *vaatasin* 'sat and saw' *võtab* ja *hakkab* 'takes and starts'

The switch between the present and past tense forms can take place outside the complication section of the narrative, for example in the orientation part of the narrative, although this is untypical (Schiffrin 1981: 51):

(3) orientation
J: seal linnas. (1.0) me **kõnnime** (walk:1PL) onju seal Raeko-japlatsis. (1.0) ja=mingid mingid kaks noormeest **tulevad** (come:3PL) vastu onju.
complication
J: (0.8) ja=siss (1.0) eh (.) noh mina **hakkasin** (start:1SG:IMF) seda /---/)

orientation
J: there in town we **are walking**, right, there in the Town Hall Square, and some some two guys **are coming** from the opposite direction, right,
complication
J: and then, uhm, well, **I started** this /---/)

The verbs kõnnime '(we) are walking' and *tulevad* '(they) are coming' which describe the situation preceding the upcoming events are carrying the temporal deictic projection in this example.

The fact that tempus deictic projection occurs in the untypical orientation part in this example, and the action-based complication part is presented in the past tense, indicates the use of the historical present to shape the narrative rhythm. Having completed the tempus deictic projection already in the orientation, it is not logical textually to continue with the historical present in the ensuing complication.

Sometimes the historical present occurs in the part of narrative that Liina Lindström tentatively calls the culmination of narrative. This is the narrative part preceding resolution, and here the action of the complication part reaches its climax. In some narratives it is the

culmination, the (unexpected) point, that is commonly presented, and the resolution part is left out. (Lindström 1999: 24). When the whole complication is presented in the past, then in the culmination the historical present is used to mark a surprising or unexpected turn in the chain of events (Laitinen 1994: 100). Often, the unexpected conclusion, the point of the story is what someone said, or then thought or experienced in connection with the unexpected event. Thus, in the culmination of the narrative there is often the so-called direct report:

(4) complication
EK: ja=siss (1.0) eh (.) noh mina **hakkasin** (start:1SG:IMF)seda noormeest vaatama, se hakkas ka mind vaatama. (.) **vaatsin vaatsin** (look:1SG:IMF) n va- noh (.) **kõndisime** (walk 1PL:IMF) ise edasi noh saad aru=va. (0.5) saad aru jah.((keegi köhib vaikselt)) (0.5)
culmination
ja=sis see (.) noormees **ütleb** (say:3SG) (S2) @ vautš @

complication
EK: and then, uhm, well, I **started** to look at this guy, and he started to look at me too. I **looked and looked**, well, we **walked** on, you see, you see, right ((someone's coughing))
culmination
and then that guy **says**: 'vautš'

Direct report intensifies the sense of immediacy of the past utterance, thought or experience. The speaker can present the speech or thought of the person being reported in its original form, as if the moment of production of the report and that of the reported utterance coincided. Such occurrence can be explained by the fact that direct report gives the speaker a chance to include an element of evaluation in the narrative. With a direct report, the speaker can underline the characteristic features of the particular event: whether it is comical, tragic, ironical or of different nature. This device carries a strong evaluative potential (Young 1988: 45). Schiffrin, therefore, calls direct report internal evaluation (Schiffrin 1981: 59).

When we observe the rest of the deictic makeup of narrative, it appears that in almost all cases of tempus deictic projection the temporal and spatial deictic corresponds to the time and space of the speech situation. In the narratives of my data only one case of spatial projection could be found:

(5) complication
M: tulen=s mina uuesti politseisse kviitungiga. (.) käisin mina vahepeal Tartus, võtsin selle kviitungi sis ära **sealt**, lähen=s mina tagasi politseijaoskonda, (.)

M: I come again to the police with the receipt, meanwhile I went to Tartu, took the receipt then from **there**, I go then back to the police department,

In this example the projective space deictic is ***seal*** 'there', which M uses to refer to the town of Tartu. The conversation, however, takes place in Tartu, as evident in the orientation section of the narrative: *kviitung oli mul **siin** Tartus, sest dekanaat nõudis sedasama kviitungit mult.* (.)'the receipt I had with me **here** in Tartu, as the dean's office demanded the same receipt from me' Here the space (*seal* 'there') and tempus deictic (*tulen, lähen* 'come, go') fields of the narrative connect, the two tempus deictics and the space deictic are both projected. It is likely that the tempus deictic projection is the main force carrying projectivity in the narrative, representing the change of point of view as a whole.

5.1.2. Deictic projection in a report

The context where report occurs is not always the complication or culmination of the narrative. In addition, report often occurs in a discourse with no fixed structure, which includes a reference to the world of imagination. A report means a reproduction of either one's own or others' utterances or thoughts-experiences (Young 1988: 26).

A report can be usually divided into a reporting clause and a reported clause (EKG II: 293). The first part of the report introduces the reporting part of the utterance, signals that someone's words are going to be reported (Young 1988: 26). The reported part is the main part of the utterance, where all changes take place (Young 1988: 26). In the reporting clause the report is mainly signalled by the reporting verb (Laitinen 1998: 101).

In the case of the different forms of deictic projection of the report it is most important to distinguish how the original discourse has been relayed. There are two forms of relaying original discourse that include deictic projection: direct report and mixed report (Young 1988: 26).

I will mark with S1 (situation 1) the temporal, spatial and person deictic context corresponding to the speech situation, and with S2 (situation 2) the temporal, spatial and person deictic context corresponding to the world of imagination.

5.1.2.1. Deictic projection in direct report

The speaker repeats the original discourse exactly or at least presents it as if it were an exact reproduction. In reality, verbatim reports in everyday conversations are rare for memory reasons (Young 1988: 26).

A direct report preserves the grammatical characteristics of the original discourse (word order, mood) and the deictic centre of orientation. The deixis of the report corresponds to S2. The deictic structure of the whole reporting utterance corresponds to the deictic coordinates of the person quoted. This means that the reporter preserves the point of view of the person being quoted (Young 1988: 27).

In terms of deictic projection this means the projection of the deictic centre, mentioned above (see p.1). This means that the person, spatial and temporal deictic centre as a whole has been projected from the speech situation into the world of imagination:

(6)
B: siis tuleb (.) @ noh näed **nüüd** (→S2) **ma** (→S2) **pean** (→S2) **siin** (→S2) oma soengut korrastama ja **ma** (→S2) ei saa muidu=ju @

B: then comes: well you see **now** (→S2) **I** (→S2) **must** (→S2) fix my hair **here** (→S2) and **I** (→S2) cannot otherwise, can I

As can be seen, in this example all deictics mark S2, a level different from the speech situation. As far as B signals with the reporting clause *siis tuleb* 'then comes' that a report will follow and she is not going to report her own words (*tuleb* 'comes' 3rd person singular) then the temporal deictic of the report *nüüd* 'now' + the tempus deictic *pean* '(I) must', the person deictic *ma* 'I' and spatial deictic *siin* 'here' are all to be interpreted from some other person, spatial and temporal perspective. They are projected outside of the speech situation, and do not coincide with its deictic field.

Naturally, not all direct reports have so many deictic markers in their reported clause. Projection of the deictic centre cannot be measured only against operating with person, temporal and spatial deictics in the reported part of the utterance.

(7)
J: sis=ta=üts a=võibolla **ma** (→S2) **lähen** (go: 1SG) (→S2) juba neljapäeva **õhtu**=onju

J: then he said, well, perhaps **I** (→S2) **will go** (→S2) already Thursday night, you know

In this example the only marker of deictic projection is the changed person deictic *ma* 'I' and the tempus deictic *lähen* 'will go', connecting to it temporally and formally. As in this example also the preceding clause and the reported clause person deictics differ and the tempus deictics *üts* (= ütles) 'said' and *lähen* 'will go' express different time-levels, it clearly indicates that the utterance represents a direct report of someone else's speech.

The person deictic projection is indeed the strongest signal denoting whether we have a direct or mixed report and therefore a person deictic can be found in most reports. Essentially, the projection of deictic centre means primarily person deictic projection (Pajusalu 1999: 44). It is the changed person-deictic point-of-view that the other elements of a unit of reference originate from: when the speaker has already projected her point of view into the person being quoted, she will start to perceive everyting said by that person through his eyes, so to say, in the same time and space. When the speaker reports his own words, then person deictic projection cannot be formally distinguished, only the spatial and/or temporal components are being projected. In this case as well, spatial and temporal deictic referring still proceeds from the person who appears in the reported part of the utterance, not in the speech situation.

This process is most evident when the speaker reports his own words and there is another person involved in this report, for example, if a dialogue that had happened in S2 is reported:

(8)
(a) J: j=sis=ku=**ma** (→S1) =ütsin =kule kas **ma** (→S2) saan **suga** (you:COM) (→S2) paar sõna rääkida
(b) J: **ma** (→S1) =ütsn=mis siis et=noh=et **anna** (give:IMP) (→S2) sis **mulle** (I:ABL) (→S2) teada

(a) J: and then when **I** said (→S1)said look can **I** (→S2) have a word with **you** (→S2)
(b) J: **I** (→S1) said what then, well, **let** (→S2) **me** (→S2) know then

In example (8) J is reporting a dialogue between him and an acquaintance. From this dialogue, I have included here J's self-reports where reference is made to his conversational partner. In utterance (a), J refers to his partner with the deictic *sina* 'you' and in utterance (b) with *anna* 'give' 2nd person singular imperative. At the same time, there is a dialogue situation in S1 as well, where J has two con-

versational partners, to whom J should refer with *sina* 'you' if referring to one another were to occur (it does not here).

J refers to the conversational partner in S1 with a projected deictic, as the *sina* 'you' in the reported part does not correspond to the deictic context of S1. Thus in the reported parts of the utterances we have a different role-relationship than in the reporting parts of the utterances. 'A different role-relationship' does not mark only the change of the referent, the object of reference of *sina* 'you' in the preceding and reported parts of the utterances. What changes is the relationship between 'me' and 'you' the 'I' is different in the preceding and reported clauses as well (the so-called split personality of the 'I' of the narrative and the situation of narration). The person deictic field in the reporting clause of the utterance corresponds to S1 and in the reported clause to S2.

There are two major devices used to signal a direct report or an upcoming projection of the deictic centre: changed intonation (Pajusalu 1999: 45) and a reporting verb in the present tense (cf. example (9)) (Laitinen 1998: 101). The reporting verb in the present tense is one of the most definite signals of the commencing projection of the deictic centre.

In my data, the most frequent verb in the preceding part of the direct report is *tulema* 'come' in the sense of *ütlema* 'say' (cf. *go* and *olla (et)* in English and Finnish conversations (Laitinen 1998: 101–102)). *Tulema* 'come' is nearly always in the present tense, which can thus be considered a definite signal of deictic projection.

(9)
(a) B: sis=**tuleb** (come:3SG) (→S2) (.) @ kuta kuta oi=mu jalg on nii hai:ge onju. @
(b) M: ja siis **tuleb** (come:3SG) (→S2) onju teeb siis lõpuks tegi siis ühe töö=ja=siis (0.8) @ ma ei näe mitte midagi, ARVO KURAT (-) he he MIS SA TEED SEAL MAHA onju, ega ma näen küll onju. $

(a) B: then **comes** (→S2): 'how come, oh, my leg hurts so much, you know'
(b) M: and then **comes** (→S2) well he then takes a test finally, and then: 'I can't see anything, Arvo damn it, huh huh, quit copying from your neighbour, you know, I can still see you know '

5.1.2.2. Deictic projection in mixed report

Mixed report is mainly a report structure of oral speech. It is a report falling in between direct report and indirect report (which does not

include deictic projection), *oratio mixta* (Kuiri 1984: 23). David Young has termed this type of report *free indirect speech* (Young 1988: 28).

The characteristic feature of a mixed report is that in the same utterance both the deictic elements corresponding to S2 as well as the deictic elements corresponding to S1deictic context can be found. There is no regularity in operating with the deictics at a particular moment. What unit of reference is projected into the world of imagination varies with use (Kuiri 1984: 122):

(10)
M: lõpuks üts Moraatov mulle=et **tal** (he:ADE) (→S1) tõesti pole täna (→S2) **aega**, et **ta** (→S1) ilgelt vabandab onju. aga et äkki **ma** (→S1) saan **homme** (→S2) mingil ajal tulla, et sis **ta** (→S1) teeb selle tõendi valmis.

M: in the end Moraatov told me that **he** (→S1) really **today** has(→S2) no time, that **he** (→S1) is sorry like hell you know but perhaps **I** (→S1) can come **tomorrow** (→S2) some time, and then **he** (→S1) will prepare the certificate.

In example (10) a temporal deictic projection into the world of imagination is clearly present, other elements of the unit of reference (here persons only) are not projected.

Tempus deictics are very weak elements in a report and usually cannot carry out the S1→ S2 change alone. Therefore, it can happen that the tempus deictics of the original utterance occur unchanged, creating an impression of a direct report, but yet are not able fix it (Kuiri 1984: 100):

(11)
S: ta ütles et tal **ei ole** (be:NEG) mõned asjad välja tulnud, mis **pidid** (must:3PL:IMF) tulema ja sis.

S: he said that some things **have not** materialized that **were** to have and then

It is impossible to decide in case of example (11), whether S has completed temporal deictic projection or not. There is nothing in this utterance to firmly indicate either mixed or indirect report. What makes determining difficult is the fact that in Estonian the preservation of the tempus of the reported clause is not a guarantee of direct report (EKG II: 295). The Latinate *consecutio temporum* ('agreement of tenses') is not a rule in many other languages either, e.g., Finnish, German or Swedish (Kuiri 1984: 99). Thus it cannot be claimed in

the case of example (11) that S has completed a temporal deictic projection while reporting, and that the indirect report would have read: *Tal* ***ei olnud*** (be:NEG:IMF) *mõned asjad välja tulnud, (mis pidid tulema).* 'Some things **had not** materialized (that were to have)'

One possible regularity in projecting the components of a unit of reference is that the person deictic projection is unlikely in a mixed report for the reasons mentioned above: other elements of the unit of reference proceed from the changed person deictic point of view. It would be difficult to imagine how, the person deictic projection having occurred, the other deictic components of the utterance would still correspond to S2.

5.2. Type II : Projection from the world of imagination into the speech situation

The speaker describes objects and events originating in some other time and space as if existing in the I-here-now reality (Hanks 1990: 218).

This type of projection has been termed analogue deixis. This term was brought into deictology by the German linguist Klein (*analogische Deixis*) (Rauh 1983: 50). In case of analogue deixis it is possible to speak about spatial projection. The spatial centre of orientation is projected from the imaginary space into a concrete object, which functions as an analogue. The following are cases of analogue deixis (list by Rauh based on Klein):

• a map may function as an analogue to the city, when the speaker defines the location of the addressee by uttering *You are here* (+gesture);

• the human body may function as analogue to the body of another individual, e.g., in the utterance *The bullet hit him here*, in which the deictic is accompanied by the speaker's gesture pointing at some part of the body;

• the human body may function as an analogue to some other object, e.g., in the utterance *I saw an old-fashioned car this morning. It had a spare wheel right here* (+ a gesture pointing to the right hip), in which case the speaker and the hearer make the human body parts correspond to car parts (Rauh 1983: 50).[1]

[1] In broad terms, the so-called action deixis could be classified under this category. Its primary expressions in Estonian is the proadverb *nii* (so),

In this type only spatial projection occurs, and the deictic siin 'here' is always combined with a pointing gesture (Rauh 1983: 50).

In the conversations analysed, one example of analogue deixis was found, the so-called map projection:

(12)
(a) P.T: ((hüüab lähenevatele inimestele)) KAS **SIIT** SAAB ROKK SITISSÄ. (2.41)
(b) M.S: =ei ole (.) ta on kuskil (.) ta jäi minu=meelest **siia- siia**poole külge **siia** nüüd nurka=aga. (1.10) sest me lähme praegu kui kaardi järgi? ((võtab välja väikese Kihnu kaardi))
(c) M.S: ((näitab kaarti)) me nüüd **siit** siit seda teed tulime,
(d) > me oleme **siin** < metsa serva pääle minekul. (.)
(e) M.S: aga ma=ei tea kas too jääb siis **sinna** või jäi **siia** ta jäi [**siia** külge kuhugi jäi lennujaam on] **seal**
(f) K.K: ta jäi minu=meelest [ikka] **siia** üles.
(g) P T: [**siia**]

(a) P T: ((calls out to the approaching people)) can we get to Rock City **from here**?
(b) M.S: is not, it is someplace, to my mind it is towards this, this side [lit. to the side near here], now in this corner, but, because we are going now as if following the map? ((takes out a small map of Kihnu island))
(c) M.S: ((points at the map)) we now came **from here**, this road
(d) we are **here**, approaching the edge of the forest.
(e) M.S: but I don't know if that was then about **there** or was it here, it was this [here] side someplace, the airport is **there**
(f) K.K: it was to my mind still up **here**
(g) P.T: (to) **here**

In example (12) we have a situation of asking for directions. P.T. and K.K. are asking M.S. and N. S. for directions to Rock City (a tourist attraction on Kihnu Island). In the course of the conversation it becomes clear that M.S. and N. S. are also strangers to the surroundings. The only source of orientation in this situation is the map.

In example (12) the spatial deictics of utterances (a) and (b) *siit* 'from here' *siiapoole* 'to this [here] side, over here' and *siia* '[to] here, over here' involve the immediate speech situation. Utterance (c), however, clearly includes map projection, among other things, the transcriber's remark *points to the map* refers to this as well. In this sentence, there is a spatial projection to the map world. When

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e.g. *Tee nii!* 'Do so!' (+gesture) (Pajusalu 1999: 32-33). It is namely the action deixis that Hanks uses to characterise the second type of projection (Hanks 1990: 218). These cases will not be considered here.

the projection has occurred, further referring in utterances (c) to (g) is done by analogy to the referring internal to the speech situation. For example, in the utterance (c) M.S. marks with the demonstrative *siit* 'from here' the part of the road that he and N.S. had taken, in utterance (e) M.S. locates the object mentally either *siia* 'here', near her mental location (*või jäi siia* 'or was here') or away from it, denoting the location of the object with the demonstrative *seal* 'there' (*aga ma=ei tea kas too jääb siis sinna* 'but I don't know if that will then be there'). The fact that referring is still taking place in the map world, is attested to by the words accompanying the deictics in utterances (e) and (f) when the object's location is determined: *külge* 'to the side' and *üles* 'up' which refer to the physical characteristics of the map.

The most problematic aspect of example (12) is the deictic structure of utterance (b), where contradictory evidence appears at the same time. On the one hand, the words used by M.S. in defining the object, *külge* 'to the side' and *nurka* 'to the corner' refer to his use of map-projective referring, as these words, again, refer to the physical characteristics of the map. Also, M.S. says *sest me lähme praegu kui kaardi järgi?* 'because we are as if going according to /following the map', which could be an explanation to the end that the preceding definition did not include the speech situation. At the same time, the transcriber remarks that M.S. takes the map out only following this utterance, which means that the preceding definitions did not involve projection. This linguistic situation illustrates clearly the phenomenon of cognitive mapping, which is described in the section on cognitive factors of deictic projection. M.S. and N.S. had studied the map at some time prior to the current moment, and had acquired some knowledge about the location of the objects located on the island. It means that M.S. has "completed" the map projection already earlier, has formed a cognitive map of the surrounding reality based on the physical map. M.S. is unexpectedly asked to orient himself in the reality, the coordinates of which he has obtained through map projection. Thus M.S. transfers the knowledge obtained by projection into the immediate speech situation.

I did not find any other examples of this projection type. Still, there was one questionable example.

(13)
P: mhmh (.) mis sul **siin** on? (.) sihuke triip nagu.
K: ma=i=tea. (.) võibolla olen kogemata siis võibolla (-) (.) [süganud] võibolla ennast aga

P: uhm what have you got **here**? such a scrape like.
K: I don't know. perhaps I have accidentally then perhaps, scratched myself perhaps but

What can be questioned about example (13) is whether P uses the demonstrative *siin* 'here' to point to an area of her own body or K's body. The transcriber has supplied no information about the direction of the gesture (which is obligatory here). If P points with the gesture to an area of her own body analogous to where K has such a scrape, then *siin* 'here' would be clearly projective, but not in the opposite case. The emergence of the described dilemma shows that a demonstrative pronoun possesses deictic power only when accompanied by a gesture. Thus here half of the projectivity of the utterance is realized by the gesture.

Example (13) is problematic also because both the speaker and the object of reference both belong to the immediate speech situation – consequently there is no classical projection: world of imagination → speech situation. However, if P's utterance is projective, such a projection taking place within the indexical frame of the speech situation again illustrates (see also the analysis of utterance (b) in example (12)) the phenomenon of a cognitive map. More exactly, this example serves to support the claim that people rely on their bodily memory even in cases when immediate observation of the referred object is possible (see the section *Cognitive factors of deictic projection*).

5.3. Type III: Changing the indexical frame

When in the two previous types the deictic projection consisted in the movement of *origo* from the deictic context of the speech situation into the deictic context of the world of imagination or the other way round, then here the speaker and the object of reference form an imaginary common field. While the deictic centre of this field is the speaker's *origo*, its indexical frame is not that of the speech situation, but an independent one. Changing the indexical frame essentially means expanding the indexical frame of the speech situation to encompass such entities which exist in reality, but cannot

be immediately perceived by the individual, but only imagined (Hanks 1990: 218).

The characteristic feature of this type is the ability of the person completing the projection to point with his had or finger to the direction where the referred entity is located in his mental picture (Bühler (1934) 1990: 152).

The variability of examples including this type of spatial projection seems to depend on whether the projecting deictic is used in discourse to mark an entity or the location of that entity. This means that in some cases the purpose of the conversation is to define the location of some entity:

(14)
(a) M: tunnete ära=h (2.0) ((vaatab seinal olevaid maale))
(b) P.T: ei tunne ((vaatab maali, siis M-le otsa))
(c) M: ee=lähete välja. (.) sis=ee vaadake, kui maja vasta seisate vasakule poole. (.) epa klupi vanasti oli. (.) **siin samas Toome mäel**. ((näitab kätega))

(a) M: can you recognize it? ((looks at the paintings on the wall))
(b) P.T: no I don't ((looks at he painting, then at M))
(c) M: umm you go out, then, umm look, when you stand facing the house, the 'EPA' club used to be **right here on Toome hill**. ((gestures with hands))

In example (14) a museum patron (at the Tartu History Museum) P.T., and the museum guide M are conversing about what has been depicted on the paintings in the exhibition hall. It appears that P.T. does not recognize the building on the painting, and M is trying to verbally direct him to it. The process of giving directions can be seen in its entirety in utterance (c).

During the whole utterance (c) it is not the object of reference itself that is mentioned, but the surrounding objects that would help P.T. identify (the location of) X. Projective in utterance (c) is the spatial deictic reference *siin samas (Toomemäel)* 'right here (on Toome Hill)' M has expanded the indexical frame, so that it encompasses the referred object, which does not exist in the speech situation but in M's imagination. The changed indexical frame connects the referential networks of the immediate speech situation and those of the world of imagination.

Although the History Museum (where the speakers are located) and X are both situated on the Toome Hill, the actual spatial proximity of X and the speakers is of little significance for enfolding them

in a common referential space. The so-called common denominator of the object of reference and the speakers can be any entity, for example, the whole town of Tartu or whole Estonia) – the opposition of distance and proximity is extremely relative in this sense. Therefore, the only criterion for distinguishing between the speech situation and the world of imagination can be the immediate perceptual contact (here vision) between the speakers and the object of reference. In example (14), the gesture accompanying the definition *siin samas* 'right here' does not point to the proximity of the interlocutors and the object of reference, but is most likely a sign to the hearer that a projection has occurred, 'the object is now with us, in the common space of reference, so that it is possible to point at it with a gesture '(Cf. in the case of a definition *siin samas Tartus/Eestis* 'right here in Tartu/Estonia' or even siin samas meie planeedil 'right here in our planet' the gesture will still be relevant.)

As said above, the characteristic feature of the projective reference in (14) is the fact that here the object in focus is not referred to directly, but through its location. It is not the object of reference that is in the centre of attention in (14), but its surroundings, context. Based on the referring strategy of this utterance, the following reconstruction could be presented *X on siin samas Toomemäel* 'X is right here on Toome Hill': or, underlining projectivity even more clearly *X on siin* 'X is here': spatial definition in the so-called sentence-emphatical position. This projection is conditioned rather by a psychological factor: with the definition siin samas 'right here' M points to the paradoxic proximity of the object depicted on the painting in the physical reality.

In the following example there is a slightly different spatial projection.

(15)
(a) M: (-) kas te **siin** rahvamuuseumis olete käinud.
(b) PT: jaa (.) **seal** me käisime

(a) M: (-) have you been to the national museum **here**
(b) PT: yes we went **there**

In example (15) the object of reference is the Estonian National Museum in Tartu, in Kuperjanov street. The object is situated outside of the speech situation.

In example (15) the contentof reference is the object itself, not its location. The marking of location is present, realised by the

deictic *siin* 'here' but compared to example (14) it is in a secondary position, in the centre of attention is the object. Therefore it could be said that the deictic projection occurring in the utterance (a) of example (15) is not as "spatial" as in example (14). While in the latter the projection was caused by a psychological factor, in (15) it is rather connected to discoursal or textual factors. This is caused by the changing informational status of the object of reference in discourse (Pajusalu 1999: 45). In utterance (a) M introduces Estonian National Museum as a new object of reference into the discourse, and when referring to it, adds the deictic *siin* 'here' to the name of the object of reference. When an entity is introduced into the discourse, it immediately rises into the focus of attention and is denoted by the proximity deictic marker siin 'here' as the entity in focus is also "closer" In utterance (b), however, the referred object is already known and P.T. refers to it with the proadverb seal 'there, as to an entity outside of the speech situation.

Although this is the formal structure of the deictic projection in example (15), in utterance (a) there is still the extension of indexical frame to the outside of the speech situation, as in the previous example. As in this case it is the object of reference (*siin on X* 'here is X') that is in the focus of attention, not its location, then the boundaries of the expanded space of reference, i.e., the common denominator of the interlocutors and the object of reference, are not as clear as Toomemägi 'Toome Hill' in example (14).

The two examples included under this projection type illustrated spatial projection, but a similar change (expansion of the indexical frame) can occur in the temporal deixis of an utterance as well.

(16)
(a) (L: et siis saab pikendada [jä]tkuvalt)
L: ahaa. aga kas seda saab siis nüüd kohe ka teha **$praegu** hh$.
(b) L: ennemalt ei old ju neid (.) niisuguseid kuuse ehteid nagu **praegu** on.

(a) (L: that then it can be extended continuously)
L: I see, but can this be done then right away **now/at present**.
(b) L: earlier there weren't those, such Christmas decorations as there are **now/at present.**

Time definitions expressed by the deictic praegu 'now' in utterances (a) and (b) are clearly different. Compared to utterance (b), the deictic in utterance (a) is more concrete, as it is possible here to fix the moment in time that the speaker has marked with the deictic

praegu 'now' With the temporal deictic, the speaker here marks the time of speaking (this is referred to by the temporal adverb *kohe* 'right away, at this moment'). The time-definition conveyed by the deictic *praegu* 'now' in utterance (b) is more diffuse. *Praegu* 'now' is synonymous here with the notion *tänapäev(al)* 'nowadays', the referent of which cannot be as clearly fixed as in the case of *praegu* 'now' in utterance (a). It is evident that the referred time-period does not encompass only the immediate moment of speech, but extends out of it (both forward and backward on the Past–Future axis).

Building on the analogy of spatial deixis, it could be suggested that in the utterance (b) of example (16) the temporal indexical frame of the utterance is expanded. In utterance (a) the temporal deictic *praegu* 'now' refers to the immediate moment of speech. This means that the referent is part of the speech situation. In the utterance (b), however, the deictic praegu 'now' also encompasses – in addition to the immediate moment of speech (the speaker's *origo*) – entities not perceived by the participants as belonging to the speech situation. In example (16) there is no gesture accompanying the projecting deictic, but it is most likely that in the case of extending the temporal indexical frame of the utterance a speaker can also combine the deictic with a gesture signalling the occurrence of deictic projection.

6. Conclusion

The current paper discussed deictic projection, one of the main sources of the dynamics of the discourse deictic field.

The analysis of Estonian conversations based on Karl Bühler's (1934) treatment of deictic projection as consisting of three types demonstrated that

- in a report the person deictic projection means the projection of the whole deictic centre, other elements of the unit of reference proceed from the changed person-deictic point of view. In a narrative the tempusdeictic projection is the main force of projectivity;
- in the projection of the second type (analogue deixis) there is spatial projection, in the third type (change of indexical frame) both spatial and temporal projection can occur. In case of the second type, gesture carries half of the utterances projectivity, and therefore always accompanies the deictic. At the same time, in the case of the third type the speaker can use the gesture to signal to the hearer the

occurrence of deictic projection (both spatial and temporal deictic projection);

• the most frequent type of projection in the conversations analysed was the first type, i.e., the projection of narrative and report, which is also the most regular and most readily analysed projection. The reasons behind this observation can lie in the fact that the mechanisms of the narrative and report deictic projection are more linguistic in nature, whereas the roots of the other two projection types seem to lie deeper in the human cognitive structure.

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Deiktiline projektsioon eesti keeles

Mari-Epp Tirkkonen

Käesolev artikkel vaatleb Karl Bühleri kolme deiktilise projektsiooni tüüpi eesti keele suulistes vestlustes (aines on pärit Tartu Ülikooli suulise kõne korpusest).

Bühler käsitleb projektsioonina kolme kujutlusmaailma, Deixis am Phantasma viitamisvormi. Nende kolme viitamisvormi eripäraks on see, et kõigil kolmel juhul on kõneleja origo ehk deiktiline nullpunkt ja kõnesituatsioon nihestatud suhtes.

Esimesel juhul projitseerib kõneleja deiktilise nullpunkti kõneldava sisse. Deiktikud siirdavad kõneleja origo jutu aega, ruumi, ümbrusesse Näiteks: kaks tuttavat istuvad kohvikus ning üks neist ütleb: Ma seisan metsas, üksi. Siin on väga vaikne. Äkki kuulen ma raksatust. On näha, et verbid seisan ja kuulen ning ruumideiktik siin ei kajasta mitte vahetu kõnesituatsiooni, vaid kujutlusmaailma ruumi- ja ajasuhteid. Seda tüüpi projektsioonil on kaks esinemiskonteksti: narratiiv ja referaat.

Teisel juhul kirjeldab kõneleja mingist teisest aegruumist pärit objekte ja sündmusi mina-siin-praegu-tegelikkuses eksisteerivana. Seda tüüpi nimetatakse analoogdeiksiseks: deiktiline orientatsioonikese on projitseeritud kujutluslikust objektist konkreetsesse, mis toimib analoogina, näiteks lausungis Nägin täna hommikul vanamoelist autot. Varuratas oli sel siin (+ parempoolsele puusale osutav žest), mille puhul kõneleja viib inimkehaosa vastavusse autoosaga (deiktiku siin abil).

Kolmandal juhul moodustavad kõneleja ja viiteobjekt kujutlusliku ühise välja, mille deiktiliseks keskmeks on küll kõneleja origo, kuid mille indeksikaalne raam (ehk viiteruum) on laiendatud ümber selliste entiteetide, mida inimene vahetult ei taju, vaid võib ainult kujutleda. Näiteks lausungis Siin toas on hiir märgib ruumideiktik siin laiendatud indeksikaalset raami, juhul kui kõneleja ise ei ole toas, vaid näiteks toa kõrval asuvas köögis. Sel juhul tõmbab kõneleja toa, köögi, enda ja kuulaja(d) ühtsesse viitamisruumi, tähistades selle piirid deiktikuga siin.

Deiktilise projektsiooni juured ulatuvad inimese primaarsesse kontakti teda ümbritseva ruumiga, sellesse, kuidas inimene teda vahetult

ümbritsevas ruumis orienteerub ning seda tajub. Nimelt on inimtaju peamine omadus see, et ta lähtub kehast: inimene kasutab oma keha n-ö raamistikuna, millele ehitab üles kogu viitamissüsteemi, lähtudes oma kehast kui mudelist. Inimene rakendab oma kehamudelit pidevalt, igasuguse viitamise puhul. Keelelise manipulatsiooni origoga, selle siirdamise (ilma et see nõuaks inimeselt mingit füüsilist voi vaimset pingutust) teebki võimalikuks see, et kehamudel hoiab inimese igas viitamissituatsioonis kontaktis tema kehaga.

Gestures in communication and their use for pointing and referring in space: Estonian examples

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1. Introduction

The Roman rhetorical tradition acknowledged the importance of gesture and considered the appropriate use of gesture an important part of the "actio" of a speech. Quintillian devoted a large portion of one of the four books of his *Institutio Oratoria* to a discussion of the proper use of gesture by an orator. Mainstream modern linguistic theories have adopted a condescending or downright antagonistic attitude toward gesture. Due to a Cartesian dualistic bias towards the strict separation of body and mind, and to the concentration on the enterprise of accounting for linguistic competence rather than linguistic performance, the gestures occurring in connection with spoken language have generally been ignored as irrelevant (Hirsch 1995: 14). This situation is however changing. Linguists are working together with communication scientists, anthropologists, psychologists, and others studying the actual use of spoken language in a variety of everyday situational contexts.

2. Peirce's trichonomy

In contrast to Descartes, C. S. Peirce realized that knowledge or cognition has three basic semiotic dimensions: iconic, indexical, and symbolic. Peirce claimed that these three dimensions of cognition were grounded in intuitions of similarity, causality, contiguity in space-time and part-whole, and arbitrary conventional connections between objects (abstract or concrete) of attention. In Peircian semiotics the iconic and indexical dimensions of signs are primarily non-verbal, the symbolic dimension is primarily verbal (Hirsch 1995: 14).

Many classifications of gestures "arise" from Peirce's sign trichonomy. When referring to an object, a sign can be an icon, index or symbol. Peirce calls this trichonomy the most important classifi-

cation of signs. In modern semiotics the sign–function relationship (or the sign–object relationship) has become a crucial issue. The index seems to be the most complex type among these three types of sign. Indices are indicating signs. Indication is the simplest and the basic type of semiosis. But indexical signs also play a role in very complex sign process, such as verbal communication.

In Peirce's work, the index appears, together with the icon and the symbol, as a member of one of the numerous triads abundant in the world of our experience. Just as indexicality is conceivable, but is not a sign, until it enters the sign relation, iconicity has some kind of being, but does not exist, until a comparison takes place. In this sense, if indexicality is a potential sign, iconicity is only a potential ground. In sum, then, iconicity begins with the single object; indexicality starts out as a relation. The problem, therefore, consists in determining what kind of relation it is (Sonesson 1996: 129).

This brings us to another, rather common, confusion: that between indices and indicators. The term chosen by Peirce certainly suggests that all indices, like the pointing index finger, or an arrow, serve to pinpoint a particular object, to isolate it and bring it out of the, typically spatial, context in which it is ordinarily enmeshed; and this is indeed what Peirce claims (CP 3.361; 4.56). However, if we use the term *indicator* to describe signs which are employed to single out an object or a portion of space for our particular attention, it may be argued that they are not necessarily indices in Peirce's sense, and that they are not, in any event, sufficiently characterized by being so classified (cf. Sonesson 1989b: 50ff, 60f; Goudge 1965: 65ff). Thus, certain indicators, such as pointing fingers and arrows, do presuppose a relation of contiguity with what they point to; but this is not necessary, or even possible, in the case of many verbal indicators, most maps, and the photographic options depending on film, lighting, and frame described as indexical in the semiotics of photography; for, in these cases, the indicative gesture is merely recreated at the level of content. At least Peirce would also describe some of these examples as not "genuine" indices. On the other hand, real indicators, such as fingers and arrows, are equally contiguous to a number of objects which they do *not* indicate, for instance to the things which are at the opposite side of the arrow-head, in the direction to which it does not point (Sonesson 1989a: 47).

The lack of definitions suggests that Peirce tended to over-extend the notion of sign. In his later days, however, he realized that all his notions were too narrow: instead of sign, he should have talked of mediation, which should be understood as branching, that is, as a crutch (Cf. Parmentier 1994). Some of Peirce's examples, and many of those suggested later, are however of another kind, for, instead of presupposing a regularity known to obtain between the "thing" which serves as the expression of a sign, and another "thing" which is taken to be its content, they transform something which is contiguous, or in a relation of factorality, to the expression, into its content. These signs may therefore be termed *performative indices*. With contiguity, they give rise to such phenomena as the pronoun 'you' the finger pointing to an object, the weathercock (as marking the here-and-now of the wind), the clock of the watch-maker's (as marking the emplacement of the shop); and with factorality, they may produce the pronouns 'I', 'here' 'now' the finger pointing out a direction, etc.

3. Problem with classification of gestures

There have been various competing classifications of gestures in the literature, though the terminology has often been somewhat misleading (see, for example McNeill 1985; Feyereisen and de Lannoy 1991). Typologies of gesture often involve two broad crosscutting dimensions: *representationality*, and *convention* or *autonomy* (Haviland 1996: 11). The first dimension has to do with whether and how the bodily movements that accompany speech depict or represent the referential content of what is being conveyed by an utterance. Some gestures seem tailored to the "meaning" of speech, via various semiotic modalities, whereas others, for example, appear to be more closely aligned to the rhythm of talk.

D. McNeill and his associates have developed an influential classificatory scheme which distinguishes between "iconic" and "metaphoric" gestures which bear a relation of resemblance to aspects of utterance content, "deictic" gestures which index both concrete and abstract referents, and "beats" which seem to be non-representational (Haviland 1996: 40). The scheme is elaborated and compared with competitors in McNeill (1992). McNeill and others distinguish between four types of gestures, which have been shown to occur with narrative discourse (McNeill 1992).

1. Iconics depict, by the form of the gesture, some feature of the action or event being described; such as 'he climbed up the pipe' accompanied by the hand raising upwards to show the path (Cassell, McNeill, McCullough 1999: 5). 'An iconic gesture is one that in form and manner of execution exhibits a meaning relevant to the simultaneously expressed linguistic meaning. Iconic gestures have a formal relation to the semantic content of the linguistic unit' (McNeill 1985: 354). He also says that 'Iconic gestures are typically large complex movements that are performed relatively slowly and carefully in the central gesture space' (1985: 359). He also claims that such gestures accompany 'only sentences classified as narrative' (1985: 359).

2. Metaphoric gestures are also representational, but the concept being depicted has no physical form. An example is 'the meeting went on and on' accompanied by a hand indicating rolling motion. Some common metaphoric gestures are the "process metaphoric" just illustrated, and the "conduit metaphoric" which objectifies the information being conveyed, representing it as a concrete object that can be held between the hands and given to the listener. 'Metaphoric gestures are like iconic gestures in that they exhibit a meaning relevant to the concurrent linguistic meaning. However, the relation to the linguistic meaning is indirect. Metaphoric gestures exhibit images of abstract concepts. In form and manner of execution, metaphoric gestures depict the vehicles of metaphors' (1985: 356).

3. Deictics spatialize, or locate aspects of the story being narrated in the physical space in front of the narrator; such as 'Adam looked at Chuck, and he looked back' accompanied by a hand pointing first to the left and then to the right.

4. Beat gestures: small baton like movements that do not change in form with the content of the accompanying speech. A beat is a 'simple and rapid hand movement of a type that usually accompanies words whose importance depends on multisentence text relations' (1985: 354). Beats are not iconic in nature.

One of the crucial and confusing problems with this classification is posed by McNeill's dividing "iconic" and "metaphoric" gestures into different sub-types in one article, and regarding them as one sub-type in the other. 'There are two further sub-types of iconic gesture: conduit gestures and metaphoric gestures' (McNeill 1985: 354). However, as G. Beattie and H. Shovelton have already pointed

out, iconic gestures may be small and fast, operating in a restricted space (Beattie and Shovelton 1999: 14). Let's turn to more subtle and flexible classification of gestures. The deliberating manner on classification of gestures we can see in the works of A. Kendon. All writers recognize that gesture may function, as an utterance, autonomously, independently of speech, and most have proposed a special class of gesture to cover this. It has also been recognized that a gesture that occurs in conjunction with speech may relate to what is being said in a variety of ways. Thus, most draw a distinction between speech-associated gesturing, which somehow provides a direct representation of some aspect of the content of what is being said, and gesturing that appears to have a more abstract sort of relationship (Kendon 1986b: 31). D. Efron (1941/ 1972), for example, distinguishes as "physiographic" those speech-related gestures that present a sort of picture of some aspect of the content and as "ideographic" those speech-related gestures which, he says, are "logical" in their meaning and which portray not so much the content of the talk as the course of the ideational process itself. This is one of the best typologies. Ekman and Friesen (1969) present Efron's ideas in a more systematic way, but some of the subtlety of Efron's original discussion is lost (Kendon 1998). Ekman and Friesen have also recognized gestures of "beats" under the term "batons" Even "beats" or "batons" may be metaphorical. As Eli Rozik has pointed out, a particular kind of hand gesture, "batons" is crucial to understanding human dialogue in real life and in the theatre. He has showed that their main function is to indicate the nature of speech acts, and in this capacity hand gestures function in the metaphorical mode (Rozik 1992: 129).

Many gestures seem to consist of more than one phase. All gesturing that occurs in association with speech and which seems to be bound up with it as part of the total utterance is referred to as *gesticulation* (Kendon 1986b: 31). The particular kinds of relationship between gesticulation and the speech it is associated with are discussed on their merits, and no classification of this is attempted in advance. Gestures which are standardized in form and which function as complete utterances in themselves, independently of speech, are referred to as *autonomous gestures* (this includes the forms that are quite often referred to today as *emblems*) (Kendon 1986b: 32).

4. Gesture and speech

Events narrated by the speakers are often accompanied by hand gestures. These are used to depict actions and also to portray the spatial structuring of situations. Kendon has developed the view that gesture, like speech, serves as a vehicle for the representation of meaning. In organizing a *unit of action* the individual will make use of whatever vehicles for meaning representation there are available. These include spoken language, but also included is the possibility of representing meaning through visible action, which is called gesture (Kendon 1986b: 33).

As Kendon (1998) has pointed out, this "strand" of activity (which we also refer to when we use the term 'gesture' or 'gesticulation') has certain characteristics, which distinguish it from other kinds of activity (such as practical actions, postural adjustments, orientation changes, self-manipulations, and so forth). These include:

(1) Gestures are "excursions": the phrases of action recognized as 'gesture' move away from a "rest position" and always return to a rest position (cf. Schegloff 1984).

(2) "Peak" structure: Such excursions always have a "center" (recognized by naive subjects as the "business" of the movement, what the movement actually "does" or what it was "meant for"). This has also been referred to (since Kendon 1980) as the "stroke" of the gesture phrase.

(3) Well boundedness: the phrases of action identified as gesture tend to have clear onsets and offsets. This is in contrast to orientational changes or posture shifts which sometimes can be quite gradual and have no "peak" structure.

(4) Symmetry. If you run a film of someone gesturing backwards it is remarkable how difficult it seems to be to see the difference from when you run the film forwards. This suggests that gesture phrases have symmetry of organization that practical actions, posture shifts (and of course spatial movements, etc.) do not have.

An important part of the "kinetics" research is the study of how exactly gesture phrases are organized in relation to speech phrases. Kendon (1972, 1980) has showed that there is consistency in how gesture phrases (which he tried to define in terms of the perceptually marked "stroke" – which is analogous to the central syllable of the David Crystal's (Crystal and Davy 1969) "tone unit" – and the "preparation" and "recovery" phases of action) are patterned in rela-

tion to the phrases of speech (viewed as intonation units, breath groups – specifically David Crystal's "tone units"). Kendon has showed that in continuous discourse, speakers group tone units into higher order groupings and so we can speak of a hierarchy of such units, and gesture phrases may be similarly organized. For example, over a series of tone units linked intonationally or by an absence of pauses into a coherent higher order grouping, the co-occurring gesture phrases are also linked (Kendon 1998). There remains a controversy about the way in which gesture as an activity is related to speech. Some investigators appear to consider it simply as a kind of "spill-over" effect from the effort of speaking, others see it as somehow helping the speaker to speak, yet others see it as determined by the linguistic choices a speaker makes as he constructs an utterance. An opposing view is that gesture is a separate and distinct mode of expression with its own properties, which can be brought into a cooperative relationship with spoken utterance, the two modes of expression being used in a complementary way (see Kendon 1998).

Any utterance is produced in some sort of social situation, it is produced under the guidance of some pragmatic aim, it plays a role in the interactional setting, it has a content that is being conveyed, etc. Gesture may represent some aspects of the content. Depicting a path of movement, a mode of action, depicting relations in space between objects or entities – these are what McNeill (1992) has called "iconic" gestures. The content that is represented may not be descriptions of actual or possible actions, events, spatial relationships, but may be "as if" entities, actions, spatial relationships that serve as metaphors for concepts at any level of abstraction (cf. McNeill 1992; Calbris 1990; Kendon 1993). Kendon realizes that the more abstract and metaphorical the content the gesture pertains to, the more likely we are to observe consistencies in the gestural forms employed. To the extent that metaphors are socially conventionalized we may find that gestures used to represent metaphorical concepts will also show social conventionalization.

Many gestures have a pointing component, and many seem to be "pure" points. These gestures are under closer investigation in this paper. What is pointed to can be actual objects in the world that surrounds the participants (actual object pointing), objects that can have a physical location, and do, but are not immediately present (removed object pointing), objects that can have real locations in space,

but which are not present – which are given locations for the purposes of current discourse (virtual object pointing), but also things that cannot in fact have any sort of object status at all and can have no location (metaphorical object pointing).

Pointing gestures – or rather, gestures which have a clear pointing component (Kendon 1998) – offer themselves as a relatively simple kind of gestural action where, by examining the combinations of movement, body part and handshape types employed, we might rather readily gather data that can bear on the issue of "compositionality" in gesture. Kendon has presented an example of two people standing and looking at the mountain panorama. One is explaining the names of the mountains to the other. By extending his arm full length, he directs with the index finger his recipient's attention to the various peaks. But as he does so, within the frame of each successive pointing gesture, he moves his hand in a way that suggests sometimes a curved contour, sometimes a more jagged one. He thus combines depictive movement with pointing (Kendon 1998).

However, gestures are not simply symbols, entities for carrying meaning about something else, but physical actions with their own distinct properties – for example, they occur at specific moments in time and at particular points in space (Goodwin 1986). For the purposes of this paper, the pointing and referring gestures in space may be coded as iconic gestures. I would like to refer to A. Merrison study (1994) on this issue of iconic gestures. "Iconic gesture – "Representational" gesture visible to the listener. Used for objects, directions, positions, distances, affirmation and negation (e.g., "drawing" the rout/ landmarks in the air; pointing in the directions of the compass; showing estimated distances between thumb and forefinger; thumbs-up for affirmation)" (Merrison 1994: 95). In this article the working definition of gesture is similar to Kendon's or Haviland's: the pointing gestures are representationality gestures and they accompany speech to depict or represent entities in the space as well as the referential content of what is being conveyed by an utterance.

5. Towards cognitivity

In one analysis, McNeill has examined what he called gestures (defined in a way quite similar to Kendon's notion of the Gesture Phrase) in terms of the relationship they exhibited with the conceptual structure of the concurrent speech. He has found a close fit

between the occurrence of a gesture and the occurrence of a speech unit expressing whole concepts or relationships between concepts. In further analyses McNeill (1979) reports that the "peak" of the gesture (that is to say, the most accented part of the movement which Kendon calls the "stroke") coincides with what was identified as the conceptual focal point of the speech unit. McNeill has suggested that each new unit of gesture, at least if it is of the sort that can be considered representational of content, appears with each new unit of meaning. Each such gesture manifests, he suggests, a representation of each new unit of meaning the utterance presents (Kendon 1986b: 35). In his later works McNeill (1999) extends these ideas. He has put forward some positions about relations of gestures and speech. (1) Speech and gesture comprise a single system of meaning representation. Gesture does not derive from speech, or speech from gesture. Both derive from a deeper *idea unit* source that they represent co-expressively. (2) Imagery is part of utterance meaning. This does not mean that utterances automatically refer to imagery but imagery grounds categorial content. Dialectic implies that categorial content equally affects imagery, as the form of imagery changes in different linguistic systems. (3) Content motivates form in gesture. (4) The speech-gesture system shows that dynamic imagistic representations arise during speaking. These representations are part of the speaker's online thinking for speaking (McNeill 1999: 2).

McNeill's most important ideas are based on the works of Vygotsky (1962) and Slobin (1987). The underlying idea units are inferred from the totality of communicative events with special focus on speech-gesture synchrony and co-expressivity. Following Vygotsky (1962), an idea unit is assumed to be a *minimal* psychological unit; that is, a smallest unit that retains the essential properties of a whole, in our case the whole of an image and a linguistically-codified meaning category, such as McNeill and his associates see in the speech-gesture window. They use the gesture's semantic content and its synchrony with spoken linguistic segments to infer the speaker's thought units. Dan Slobin (1987) has introduced a new concept of linguistic relativity – thinking for speaking. He defines it as follows: "'Thinking for speaking' involves picking those characteristics that (a) fit some conceptualization of the event, and (b) are readily encodable in the language" (Slobin 1987: 435). As McNeill explains,

the expression, 'thinking *for* speaking' suggests a temporal sequence: thinking first, speaking second (McNeill 1999: 6).

Though there is no space for a broader discussion about the linguistic and psychological research trend, it may be said that the idea goes back to Vygotsky, and ultimately to Marx. As we know, according to Vygotsky, all fundamental cognitive activities take shape in a matrix of social history and are products of socio-historical development (Luria 1976). That is, cognitive skills and patterns of thinking are not primarily determined by innate factors, but are the products of the activities practiced in the social institutions of the culture in which the individual grows up. Consequently, the history of the society in which a child is brought up, and the child's personal history are both crucial determinants of the way in which that individual will think. In this process of cognitive development, language is a crucial tool for determining the child's way of thinking because advanced modes of thought are transmitted to the child by means of words (Murry Thomas 1993).

Vygotsky's life goal was to create a psychology that would be theoretically and methodologically adequate for the investigation of consciousness. Since the analysis of consciousness is also a critical point in Marxist theories, it is not surprising that Vygotsky uses many of Marx's ideas about the relationship between consciousness and practical activity at the societal level and then applies them to problems in the psychological analysis of consciousness. Vygotsky and Marx share several basic assumptions about the relationships between consciousness and activity. First, they both insisted that the analysis of consciousness must start with practical activity. Consciousnesses are constructed through a subject's interactions with the world, which are attributes of the relationship between subject and object. Second, the basic components of an analysis of practical activity must be interpreted in a functional form. Third, consciousness changes as the organization of practical activity changes, entailing that an adequate study of consciousness must be historical or genetic. Finally, new levels of the organization of practical activity and consciousness presuppose different principles of organization and development (Lee 1986: 67). Vygotsky's greatest importance probably lies neither in his Marxism nor his psycholinguistic work, but rather in the profound and unique way he introduces a communicative dimension to Marxist conceptions of practical activity, thereby pro-

viding the foundation for a semiotic and functionalist psychology. This line of thought makes his contributions valuable not only among psychologists, but also among such semioticians as Charles Sanders Peirce, Roman Jakobson, Mikhail Bakhtin, and Benjamin Whorf (Lee 1986: 66). Let's turn back to gestures, space and cognitivity.

6. Space and cognitivity

Many researchers have tried to describe how cognitivity is related to embodiment. Varela, Thompson and Rosch (1991: 172) present very much the same argument in their attempt to study cognition not as the recovery of a pregiven and labelled outer world (realism) or a pregiven inner world (idealism) but as embodied cognition. Image schemata are not abstract relations between symbols and the external world, the reality, but they organize our experience and understanding on the level of physical perception and movements (Armstrong, Stokoe, Wilcox 1995: 51–52). Human cognition appears to comprehend certain relatively distinct major cognitive systems, which include language; perception in general or in its several modalities like vision, hearing, kinesthesia, etc.; a cognitive system for cultural structure, etc., as L. Talmy (1996: 231) has pointed out. Each major cognitive system has certain properties of organization; many of them are comparable across systems, which means that the systems overlap to some extent. The organization of language is perhaps unique among the cognitive systems, and language has evolved later than the other systems, which include hand gestures. Perhaps these systems overlap, too. I mean that the conceptual structure of language largely overlaps with the structures of the visual, kinesthetic, reasoning and understanding systems, less so with the systems of affective and cultural structure. Kinesthesia is probably one of the earliest perception systems.

According to Spencer, each culture builds up its image of time on the basis of its image of space. In order to explain spatial cognitivity, it is important to study the referential and pointing gestures that accompany speech. Spatial changes can be characterized, as well as experienced, through the bodies that move through space along a path or trajectory (Radden 1992: 17–19). In the experiment described in this paper, the imaginary journey of the subjects, the journey in a person's mind, does not take place in real time. A human being uses

as if unreal space – an imagined journey. It is the space imagined by the human being – a collection of individual items whose constancy is secured by the journey. We can categorize spatial change in accordance with process as motion. For example, a verb of motion may encode the origin and manner of a movement (e.g., "to rush out of"), but not the path that is supplied by the gesture. Without the verb, however, the gesture may not be recognized as the representation of a path. It could also represent the outline of an object, for instance (Streeck and Knapp 1992: 12–13).

It's surprising that neither Greek nor Latin has an exact equivalent to 'space' The Greek *topos* means 'place' 'body location relative to another body' The Latin *spatium* – from which the English and French space-names are derived – means first of all 'interval' or 'distance between two bodies' The Greek *khora* is closer to the modern 'space' than *topos*. But *khora* also means 'place', 'spot' or 'surroundings' rather than 'space' It's interesting that *khora* sometimes means 'interspace' (or 'space between'), too. The Aristotelian philosophy of space is a theory of *topos*, not a theory of *khora* (Wright 1996: 105).

There are two different views on the relationships between space, time, language and thinking. According to the first position, we think about space in the category of time. The other is an opposite position: we think about time in terms of space. Our civilization finds it difficult to think in terms of space, and so always negates it, substituting the category of time (Frank 1986). The founder of psychoanalysis, Freud, noticed that the experience of space is largely linked to the unconscious. Just as temporality is foreign to the unconscious, he wrote, so space is non-existent for the conscious (Nunberg and Fedren 1979: 285). In his renowned book, Edward T. Hall has similarly argued that space remains for most of us *The Hidden Dimension* (1966). These positions have found elaborating and essential support primarily within the theory of overall embodied cognitivity. Language constrains space and the objects within space, both semantically and in cognitive respects. This idea is derived from L. Talmy (1983).

Like time, space is not a concrete object accessible to perception. It is defined as a product of the interconnections established between multiple elements simultaneously present in a field. Space is thus a plural notion, since forms of grouping will differ for different

types of material or psychological elements. Concrete spaces have a structure different from that of mathematical, logical sets of psychological groupings. For instance, the interrelations between the members of a family, a city, or a region, described from different points of view, would present different types of spatial configurations.

It is easy to understand why thinking in terms of space – that is, maintaining a multitude of elements together and interrelated in the mind – is much more difficult for human beings than thinking in terms of time. Temporality is established by the simple succession of one element after another within the parameters of "before–now–after" But space relates to the ever-changing possibilities of interrelationships between a multitude of entities, sharing or not sharing some similar characteristics.

Psychology of perception has investigated how human beings construct their concept of reality. A first observation recalls that the sensorimotor and perceptual relations with reality constitute the necessary basis for any further conceptual development in human beings. A second outlines a rather paradoxical fact concerning the notion of space defined as being made up of the three dimensions of height, width, and depth. Only the first two dimensions of space can be traced back directly to perceptual correlative data in reality. The construction of the dimension of depth does not seem to be based on such a connection with specific sensorial stimuli. The depth dimension is not "seen" as such, like height and width, but is only a construct of the perceptual process. In other words, the percept of depth appears as the product of internal mental mechanisms working on the experience of reality (Saint-Martin 1992).

It follows that space cannot be described in the same way as our perception of an object, or part of an object, which we then call 'a tree' or 'a color' The first-acquired human spatial constructs of reality are based upon a non-Euclidean geometry – namely, topology, which carries a very different set of intuitions (or meanings) about matter, relationships, and space. The first spatial organizations deal with a reality quite close to the body, and partly internal to it; subsequent organizations concern reality perceived at greater distances. The Euclidean representation of space is elaborated later, within and upon the basis of topological relations.

Always "hidden" from the senses, the plane of meaning, interpreting human experience in the world, refers to various mental and

emotional operations. Basically nonverbal, semantics finds an external representation through the grammatical potentialities of various languages, some being verbal and others nonverbal (Saint-Martin 1992).

"But in man's world – the world as man sees it and describes it in everyday language – he is, in the most literal sense, the measure of all things. Anthropocentrism and anthropomorphism are woven into the very fabric of his language." (Lyons 1977: 690) The English (as well as Estonian) system is anthropomorphic in the sense that it takes the essential co-ordinates of up/down, front/back, left/right, from the oriented human frame. It is egocentric in the sense that the primary usage of this system seems to be deictic ('at my side' 'at my front', etc.) – i.e. it has ego as relatum; as a secondary usage, we can transfer the center of the co-ordinates onto an object, assign it a 'front' 'back' and 'sides' etc., so that we can use that object as a relatum.

That is no doubt why many deictic terms are normally supplemented by gesture. It is one of the best possible solutions to the problem of angle-specification as gestures constitute an analogue system (offering indefinite subdivisions of arc) while any linguistic solution will be digital (offering only a small set of broad angles or points). Although a gestural system offers excellent design features for face-to-face communication, it will fail totally where visual contact cannot be established. Moreover, it provides a solution to the communication problem but not to the conceptual problem, namely, how an individual should conceive of angles, remember them, and find objects or destinations utilizing them (Levinson 1991: 8). Levinson has also found that although the gestures of course accompany speech, gestures preserving the fixed bearings of the stimulus often occur without explicit mention of the cardinal directions, suggesting that the gestures reflect an underlying spatial model, at least partially independent of language (Levinson 1996: 124).

7. What may gestures denote?

In some respects, gestures are considered to have the property of expressing the content of consciousness as words do (Wundt 1900/1973). This means, in contemporary terms, that gestures and words both relate to the mental representations that constitute thinking (Kendon 1986a; McNeill 1985, 1999). Some psycholinguistic research shows that speech and gesture are probably

neurophysiologically related (cf. Feyereisen and de Lannoy 1991; McNeill 1992). McNeill (1992) has however started to move in a more semantic direction and has studied the use of illustrative and metaphoric "imagistic" gestures in connection with speech.

As I pointed out earlier, in connection with ideas about thinking for speaking, the gesture and the synchronous language entity may denote the same underlying ideational unit. According to McNeill (1999: 2), the contents of the gesture and the synchronized speech need not be identical, and usually they are not. They have related but not identical meanings, which McNeill calls 'co-expressive' So, if the gesture and its synchronized co-expressive linguistic segments express the same underlying idea unit, they need not express its identical aspects. I understand that such paired use of gesture and speech can refer to their inherent uniformity or even to inherent parity. Is the idea unit something like a language of the mind? A language of the mind is not something which emerges as a distinctive level of cognitive organization from the interaction of a population of neurons within the brain. Rather, a language is something that we use, and its usage is inherently connected to the embodied nature of our interactions with the environment (Teng 1997: 2).

7.1. Substituting role

The studies of how gesticulation is related to the speech it accompanies have indicated that it is organized separately, but brought into coordination with speech because it is being employed in the service of the same overall aim. The detailed rhythmic coordination of gesticulation with speech arises at the level of motor acts. The forms that gestures assume are organized directly from original conceptual representations in parallel with linguistic forms, but independently of them (Kendon 1986b: 35). Gesture and speech must be considered separate representational modes which may nevertheless be coordinated and closely associated in an utterance because they may be employed together in the service of the same enterprise. A. Kendon has shown (1986b) that the utterer is able to employ gesture and speech together, but in a differentiated way, each modality playing a role complementary to the other in the production of a well-designed utterance. A gestural element may be used in alternation with speech. Sherzer (1973), in his analysis of the use of the pointed lip gesture among the Cuna Indians of Panama has shown how this gesture

would often be used to stand in for deictic words or for labels for objects or places being referred to. He argued that it should be given a place in the lexicon of the spoken language. I found similar results from the data (though I have never seen a gesture like the 'lip gesture' in Estonia in the referring position; the gesture has appeared as an *emblem*, and means something improper). In this paper I labelled these pointing gestures *communicators*, which substitute the word in spatial relations. There is no doubt that spoken language has been elaborated into a communicative code of extraordinary flexibility and generality. Gestures may have important implications for theories of mental representation. It is seen that since gestural expressions are fully integrated with aspects of speech, they must be planned for together at the outset. It means that however ideas are stored in our heads, they must be stored in a way that allows them to be at least as readily encoded in gestural form as in verbal form. There are scholars who maintain that ideas are represented in an abstract propositional format which is the same as the format used to encode verbal information (e.g., Pylyshyn 1973). On the other hand, there are those who believe that the representation of ideas is modality-specific and that visual ideas are encoded in terms of structures that are spatial and that are analogous transformations of the things they represent (e.g., Shepard 1978). Anderson (1978) suggests that the observation that gesture is deployed as an integral part of utterance shows that any theory of representation that gives primacy to a representational format modeled on spoken language structures will not do. A close examination of how gesture and speech are deployed in an utterance makes it clear that meanings are not transformed into gestural form via spoken language formats. They are transformed directly and independently. Thus such meanings, no matter how they are stored, are stored in a way that is separate from the formats of spoken language, however abstractly these may be conceived (Kendon 1986b: 42).

7.2. Anticipating role

Many researchers have suggested that gesture may appear before the segment of speech in which the same idea is encoded (see e.g., Butterworth and Beattie 1978; Kendon 1980; Hadar and Butterworth 1997). Gesticular Phrases (Kendon 1980: 224) appear at a very early stage in the process of utterance. The way in which the content of an

utterance appears to be manifested in the Gesticular Phrase suggests that the process of utterance has its origin in the organization and manipulation of mental representations of images and actions directly and not, initially, in the organization of forms that can be derived only from verbal language.

In the scientific literature, there currently exist two main theories about the hand gestures which accompany speech and about exactly what these hand movements are doing. First of all, let us refer to David McNeill's (1979, 1985) central thesis that 'Gestures share with speech a computational stage; they are, accordingly, parts of the same psychological structure. The metaphor of a shared computational stage captures the processing aspects of speech: that sentences and gestures develop internally together as psychological performances. The metaphor of a common psychological structure captures the idea that speech and gesture respond to the same forces at the same time' (McNeill 1985: 350). This theoretical perspective differs radically from the more traditional theory of speech and gesture, which maintains that gestures represent quite separate channels of communication conveying different information from the related speech (Argyle 1975). In McNeill's theory, speech and gesture cooperate to present a single cognitive representation (McNeill 1985).

This theory contrasts with the other main contemporary theory, namely, that of Butterworth and Hadar (1989). They also use empirical observations on natural speech and gesture, but the story that they tell from this empirical data seems to be quite different. They cite the early research by Butterworth and Beattie (1978), who presented an example highlighting other possible relationships between speech and iconic gesture.

'when certain problems can be raised'
[hand starts to rise on the word 'certain']

The iconic gesture here does not seem to convey any additional semantic information to that conveyed in the linguistic utterance, and in McNeill's terms, to get the full cognitive representation that the speaker has in mind, only the linguistic part of the message really needs to be taken into account. In other words, the gesture appears to be redundant. But what is interesting about this example, according to the researchers, is that the gesture (the hand rising) begins a good

deal in advance of the lexical item with which it is associated (i.e., the word 'raised'), actually being uttered (Bettie and Shovelton 1999: 3). This seems to show that 'the speaker knew what the word would be, or at least had a pretty good idea, well before he uttered it' (Butterworth and Beattie 1978: 348).

Butterworth and Beattie (1978) then presented some empirical evidence to show that this temporal asynchrony between gestures and speech was common in samples of spontaneous speech, and that hand gestures were associated with low-frequency unpredictable lexical items – the lexical items most difficult for speakers to access in the course of linguistic production (see Goldman-Eisler 1958; Beattie and Butterworth 1979). Their conclusion was that 'Gestures are products of lexical preplanning process, and seem to indicate that the speaker knows in advance the semantic specification of the words he will utter, and in some cases has to delay if he has to search for a relatively unavailable item' (Butterworth and Beattie 1978: 358).

Morrel-Samuels and Krauss (1992) have also produced empirical evidence to support Butterworth and Beattie (1978) regarding the temporal asynchrony between gestures and the associated lexical items. They found that 'gesture onset preceded voice onset by an interval whose magnitude was inversely related to the lexical affiliate's rated familiarity (Morrel-Samuels and Krauss 1992: 615). The more familiar the lexical item, the smaller the temporal asynchrony. They suggest that 'the hypothesis that gestures do facilitate speech production is at least plausible' (Morrel-Samuels and Krauss 1992: 620). From the data I also found that the pointing gestures might image (to denote) the most important concept in the sentence that followed.

As Kendon already pointed out (1986a), meanings are not transformed into gestural form by way of spoken language formats. They are transformed directly, and independently. But, some point of contact should exist between gestures and language. This point of contact could, however, also be seen as a *flow of the information.* Miao (1996) has presented some basic assumptions about information processing, which may help to work on gestural research connection with language and overall human cognition.

8. Method

In the following sections I concentrate on the pointing and iconic gestures that accompany speech in the context of spatial relations. I examine the data according to the theoretical considerations outlined above. Many studies of iconic gestures are based on the retelling of cartoon stories. On the one hand, we need exact experiments. On the other hand, as Beattie and Shovelton (1999) have pointed out, we need the studies of gestures in everyday conversation, too. In this paper, the pointing gestures were studied together with Estonian (Finno-Ugric) verbal expressions. The examples come from an experiment where the subjects had to go on an imaginary journey and describe it to another person, the "guest" En route the "guest" was shown some historic and cultural sights. The subjects did not know that the goal of the experiment was to investigate the gestures. They worried about their knowledge of history. All of them know the region of the town well enough to image the journey and to describe it. Each "guide" "went" from the starting point to the destination in 10 minutes (narrative time). 11 subjects were videotaped. Two aspects were analyzed: (1) the gestures that indicated space, spatial relations, or spatiotemporal relations, (2) the concomitant words or phrases. The gestures that indicated spatial relations were studied together with the concomitant Estonian-language expressions. The aim of this experiment, which involved face-to-face interaction, was to understand space-relation gestures and coverbal speech in face-to-face interaction.

9. Results

It appears that for some concepts the interlocutor must add a gesture to make oneself fully understood. It seems that people automatically pick up information that is only present in gestures. The data indicate that people often use words like 'this' 'here' 'there', 'this over there' and 'on the left' or 'on the right' to express which object can be seen on the way. Estonian 'that' (Est. 'too') never appeared, though three subjects were born in Tartu, in region where 'that' (Est. 'too') should be familiar. The other subjects came from the west and the center of Estonia. In the west and center of Estonia 'that' (Est. 'too') does not exist in spoken language or in the dialects. The pointing gestures which had an independent meaning and which subs-

tituted the word I named *communicators*, the gestures indicating 'this over there' 'this over here' etc., which appeared *before* the most important concept of the sentence *points* and *pre-points*.

(1) "Groping"

Conversation often begins with "groping" each other, and only after such an introduction people get more relaxed and gestures appear in the conversation (see also Tenjes 1996: 178). In this case the gestures also appeared not just at the beginning of face-to-face interaction but some time later when the interactants had already got used to each other.

(2) Communicators.

It appears that the pointing gestures which indicate spatial relations perform a strongly communicative role. It means that subjects pointed to the left or to the right, etc. with ('to the left, you can see' + motion to the left) or without concomitant words ('here' + motion to the left/right). The extra meaning is communicated by means of the gesture. As Levinson, Haviland et al. have showed, many deictic terms are supplemented by gesture. The pointing gesture has an independent meaning and it substitutes the word which marks the spatial relations. It is very common. Some examples will be given below.

Examples

(1) (See figure 1.)

Siin	on	ülikooli	tenniseväljaku-d[1].
here	be-PRES-3SG	university-SG-GEN	tennis+court-PL-NOM

Siin	saa-b	mängi-da	tennis-t.
here	can-3SG	play-INFINIT	tennis-SG-PRT

'Here are the university's tennis courts. Here one can play tennis.'

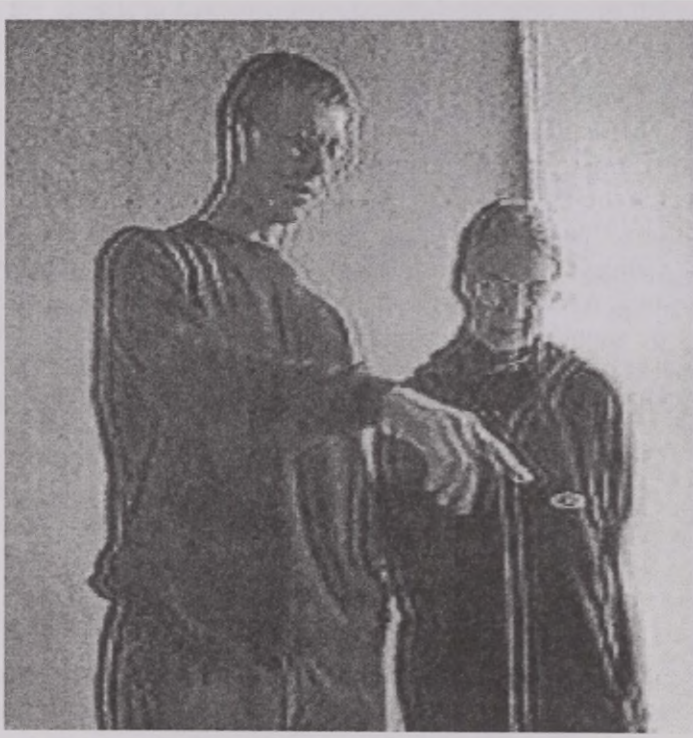

Figure 1.

[1] The underlined part of the utterance indicates at what moment the gesture was made.

(2) (See figure 2.)

Ja	siis	see	väike	maja	siin	on
and	then	this	little	house-SG-NOM	here	be-PRES-3SG

humanitaarraamatukogu.
humanities+library-SG-NOM

'And then this little house here is the library of the humanities.'

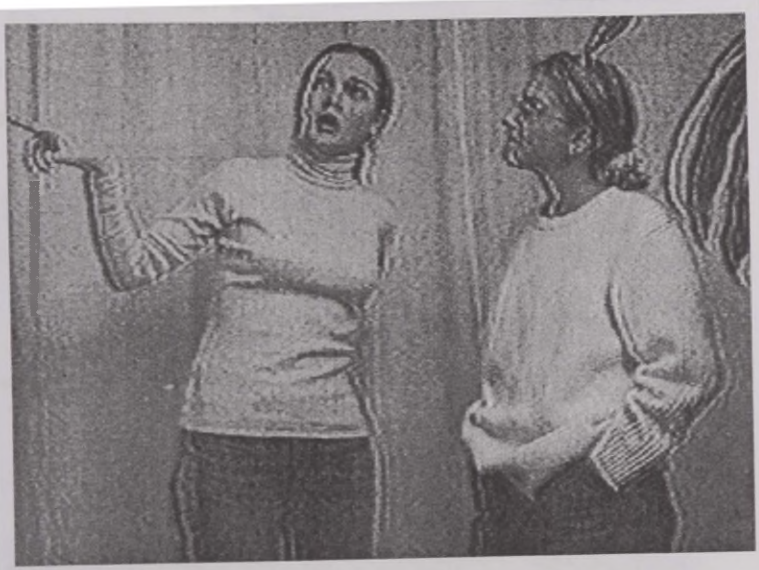

Figure 2.

(3) (See figure 3.)

Jakobi mägi. Ja siia jää-b
Jacob-GEN hill-SG-NOM and over-here stay-PRES-3SG

nüüd "Krooks". See on kella
now "Krooks" it be-PRES-3SG clock-SG-GEN

kaheteistkümne-st kella kuue-ni
twelve-SG-ELA clock-SG-GEN six-SG-TER

hommiku-l ava-tud ja päris selline ... lahe koht.
morning-SG-ADE open-PRT and quite such ... cool place-SG-NOM

'Jacob's Hill. And the "Krooks" pub is over here now. It is open from twelve until six in the morning and it's a rather ... cool place.'

Figure 3.

Thus, in face-to-face interaction the pointing gestures have strongly communicative value in the context of direction with regard to the egocentric coordinate system ('left', 'right', 'here', 'there').

(3) Points and pre-points.

The gesture indicating 'this over there', 'this over here', etc. appeared very often *before* the most important concept of the sentence. The concept mostly denoted an object or the shape of a path. According to Kendon, the depictive movement combines with pointing. So the hand starts to point the direction, and moves simul-

taneously to denote the shape of the crucial concept ('from here' + image the street below or 'look down' + shape of the bridge or 'here' + shape of the statue).

Examples[2]

(4) (See figure 4.)

		↔ ↔		
Siit	alt	lähe-b	läbi	Lossi
from here	from below	go-PRES-3SG	through	castle-GEN

tänav.
street-SG-NOM

'Lossi Sreet is below us.'

Hand (forefinger) points 'from here' and at the same time starts to image the street below.

Figure 4.

[2] The arrows show the main type of the hand movement.

(5) (See figure 5.)

				↓	
Kui	te	nüüd	siit	mäe-st	alla
when	you	now	from here	hill-SG-ELA	down
			⌈ ⌉		
vaata-te,		vaat	sealt	paista-b	
look-PRES-2PL		look!	from there	be seen-PRES-3SG	

Kuradisild.
devil+bridge-SG-NOM

'When you look down from this hill now, look, you can see the Devil's Bridge over there.'

Hand refers to 'look down' and at the same time starts to image the shape of the bridge.

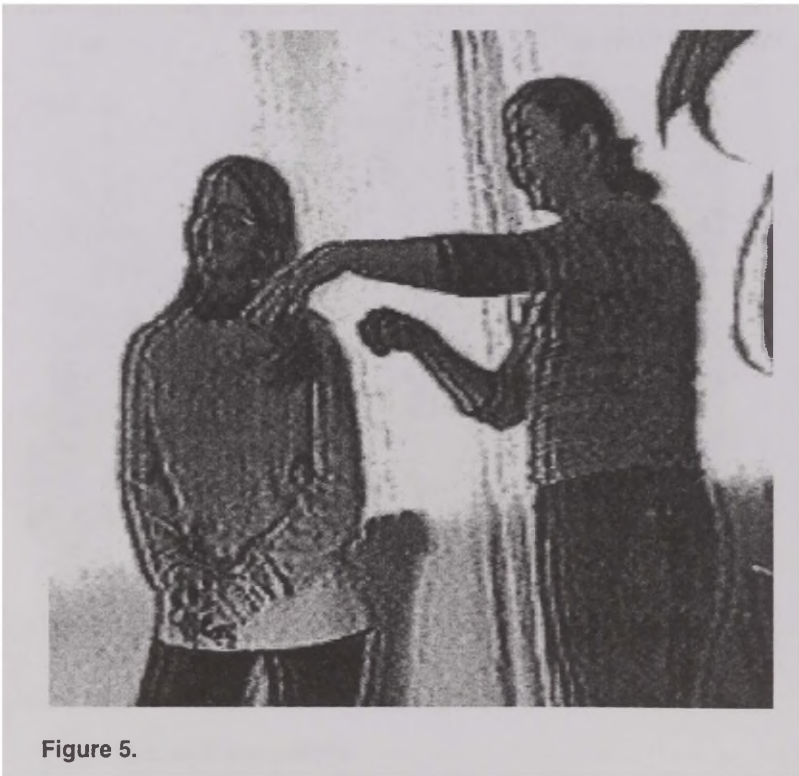

Figure 5.

(6) (See figure 6.)

Vene	aja-l		seis-i-s	siin ...
Russian-GEN	time-SG-ADE		stand-PST-3SG	here
selle	ees	muidugi	suur	Lenin.
this-GEN	in front	of course	big	Lenin

'During the Russian time... a big Lenin was of course standing in front of this.'

Hand (forefinger) points 'here' and at the same time images the shape of the statue.

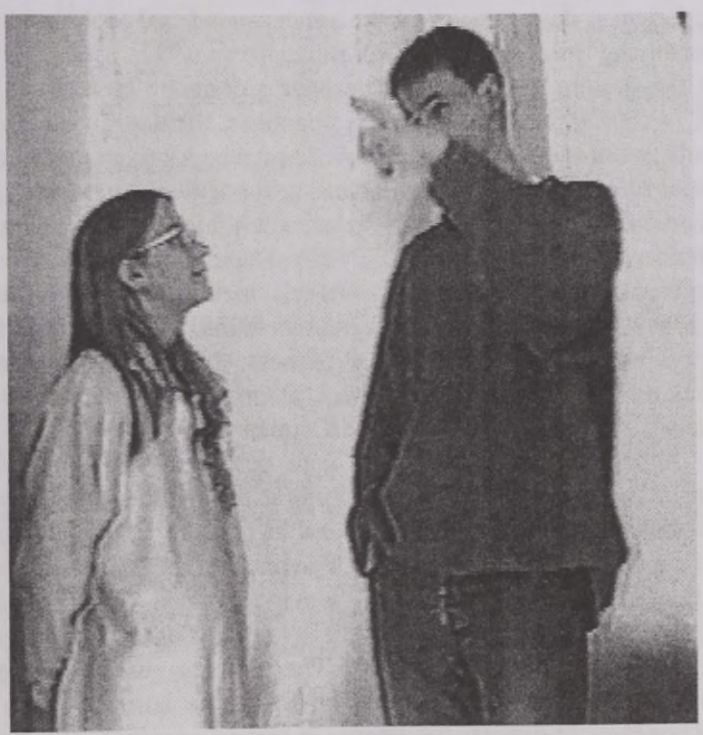

Figure 6.

10. Conclusion

This study indicates that

(1) the gestures also appeared not at the initial stage of face-to-face interaction but some time later;

(2) the pointing gestures which indicate spatial relations have a strongly communicative role and they may substitute the word which marks the spatial relations;

(3) referring gestures have *two simultaneous roles*: (a) to point to the spatial relations and (b) to image (to denote) *the most important* concept in the sentence that *followed.* There is a clear semantic link between the gesture and the single underlined word in the accompanying speech (Hadar and Butterworth 1997: 152). It means that the gesture and the language have a common base. But is it a unit? According to overall human cognition, the underlying connection between the gesture and the word may be a *process* or a certain type of *information.* As Bouissac has said poetically, gestures can be construed as embodiments of information between intending and understanding minds (Bouissac 2000). There should be an overlapping area between gestures and concepts. It shows connections in the deep psychological level in the human mind. Heterogeneity is an ancient property of human consciousness, and this mechanism requires the presence of at least two systems that would not be ultimately translatable into each other (Lotman 1999).

According to Spencer, the more developed the entirety, the more it has *divided* into parts according to function. Secondly, the more developed it is, the more *integral* its parts are to the functioning of the entirety (Wright 1996: 33). It seems that this statement can be postulated for both gestures and human language. To what degree does a gesture depend on the peculiarity of language? To what extent can we speak about universality? The pointing gestures in spatial relations do not seem to depend on a specific language. The unit point or *the unit process* lies deeper in human cognition. What could be innate about the language ability could have a non-linguistic character. Spatial information is encoded both in spoken language and the concomitant iconic gesture. Similarly to linguistic units, the gestures are also symbols, that is, pairs of meaning and form. Exactly what kind of meaning is conveyed by gestures remains an open question. One might say that in a broader perspective the gesture is

the important link between perception, conceptualization, and language development.

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Žestid suhtluses ning nende kasutamine osutamisel ja viitamisel ruumis. Eestikeelsed näited

Silvi Tenjes

Antud uurimistöös on tähelepanu all osutavad ja viitavad žestid, mis kaasnevad kõnega ruumisuhete kontekstis. Teoreetilises osas käsitletakse žestide klassifitseerimisega ja määratlemisega seotud probleeme. Osutavaid ja viitavaid žeste pole lihtne üheselt määratleda. Osaliselt on need ikoonilised žestid (sh nt ingl *referring gestures* – 'viitavad žestid'), osalt lihtsalt osutavad (nt ingl *pointing gestures* – 'osutavad žestid'), mida klassifitseeritakse pigem eraldiseisvatena. Sellega seoses käsitletakse teoreetilises osas põgusalt C. S. Peirce'i klassikalisi seisukohti märgi ikoonilisest ja indeksilisest dimensioonist. Edasi on võrdlevalt vaatluse all eelkõige D. McNeill'i ja A. Kendoni žestikäsitlused, aga ka teised autorid. Võrreldakse McNeill'i ja A. Kendoni žestide jaotust ning osutavate žestide käsitlust seoses kõnega. Peatutakse ka D. McNeill'i kognitiivsete seisukohtade lähtealustel (Võgotski, Slobin). Ruumi ja kognitiivsuse seosed on vaatluse all laiemalt. Teoreetilise osa lõpus püütakse leida žestide seoseid mentaalse representatsiooniga.

Lähtudes eelnevatest teoreetilistest seisukohtadest, uuritakse osutavaid žeste koos eestikeelsete verbaalsete väljenditega. Näited on eksperimendist, kus katseisikud pidid "mõttes" läbima teatud teekonna ja kirjeldama seda teisele isikule, "külalisele" Teekonnal tutvustati "külalisele" teele jäävaid ajaloolis-kultuurilisi vaatamisväärsusi. Katseisikud

ei teadnud, et uuritakse žeste, nad muretsesid eelkõige oma ajalooliste teadmiste pärast. Kõik tundsid kirjeldatavat piirkonda linnas niipalju, et teekonda ette kujutada ja sellest rääkida. Filmiti ühtteist (11) katseisikut. Analüüsiti (1) žeste, millega osutati ruumis, ruumiseostes või ajalis-ruumilistes seostes; (2) milliste sõnadega või fraasidega žestid kaasnesid. Seega, uuriti ruumisuhteid tähistavaid osutavaid žeste koos kaasnevate eestikeelsete väljenditega.

Uurimus näitas, et 1) žestid ilmnevad mitte kohe vestluse algul, vaid mõni aeg hiljem; 2) osutavatel žestidel, mis tähistavad ruumisuhteid, on tugev kommunikatiivne roll ja nad võivad asendada sõna, mis tähistab ruumisuhet; 3) osutavatel žestidel on *kaks rolli samal ajal*: a) osutada ruumisuhetes ja b) kujutada (viidata) *kõige olulisemale mõistele* lauses, mis *järgneb*. Ruumiline info on kodeeritud nii kõneldavasse keelde kui kaasnevasse ikoonilisse žesti. Peab olema kattuv ala žestide ja mõistete vahel. See näitab seoseid sügaval inimmõistuse või inimvaimu psühholoogilisel tasandil. Vastavalt inimese üldisele kognitiivsusele võib aluseks olev seos žesti ja sõna vahel olla *protsess* või teatud liiki *informatsioon*.

Appendices

Appendix 1: Transcription and glossing conventions

boldface	focussed linguistic units
underlining / `word	stress or emphasis
	truncation
=	latching or continuation of the same speaker across intervening lines
[ ]	overlaps
(.)	micropause
(0.5)	pause length in tenths of a second
:	lengthening of a sound
@	a laughter syllable
mhemhe	laughter
<@ smile @>	
$ smile @	smiling quality
<0 inbreath 0>	words pronounced with ingressive airflow
.hh	breathing in, the estimated relative length corres ponds to the number of h-s
hh	breathing out, the estimated relative length corres ponds to the number of h-s
mhh	same as above but with closed mouth
(XXX) or (---)	difficult to hear what was said but the number of syllables can be judged, X or corresponds to one syllable
(guess)	transcriber's best guess of what was said
/---/	something has been left out in the example
	falling intonation
,	fall not to low
?	raising intonation
< text >	slower talk
> text <	faster talk
* text *	lowered volume
CAPS	loud volume
((comment))	comments
capital letters	name, particle, or an abbreviation of a grammatical category
GI	clitic *-gi* (a phonological variant of the clitic *-ki/-gi*)
( )	the item was not there in the original

Appendix 2: List of abbreviations

ABL	ablative
ADE	adessive
ADJ	adjective
ADV	adverb
ALL	allative
COM	comitative
COMP	comparative
COND	conditional
ELA	elative
GEN	genitive
ILL	illative
IMF	imperfect, past indefinite
IMP	imperative
IMS	impersonal
INDEF	indefinite
INE	inessive
INF	infinitive
INFINIT	infinite
LOC	locative meaning
N	noun
NEG	negative
NOM	nominative
O	object
PL	plural
POSS	possessive meaning
POSTPOS	postposition
PPT	past participle
PREPOS	preposition
PRES	present tense
PRT	partitive
PST	past tense
QUES	question particle (*kas*)
S	subject
SG	singular
SUP	supine
TER	terminative
TRA	translative
V	verb
1, 2, 3	person

Appendix 3: List of contributors

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