Estonian transitive verb classes, object case, and progressive¹

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1. Introduction

The aim of this article is to show the relation between aspect and object case in Estonian and to establish a verb classification that is predictive of object case behavior. Estonian sources disagree on the nature of the grounds for an aspectual verb classification and, therefore, on the exact verbal classes. However, the morphological genitive and nominative case marking as opposed to the morphological partitive case marking of Estonian objects is uniformly seen as an important indicator for an aspectual verb class membership. In addition, object case alternation reflects the aspectual oppositions of perfectivity and imperfectivity that cannot be accounted for by verbal lexical aspect only. This article spells out these aspectual phenomena, relating them to a verb classification. The verb classes are distinguished from each other according to the nature of the situations or events they typically describe. The verb classification is established on the basis of tests that involve only the partitive object case. These tests use the phenomena related to progressive in Estonian.

2. A note on terminology

Several accounts of aspectuality view a sentence's aspectual properties as being determined by more components in a sentence than just the verb alone. More specifically, two temporal factors of situations or aspectuality are distinguished: on the one hand, boundedness, viewpoint, or perfectivity and, on the other hand, situation, event structure or telicity (Smith 1990, Verkuyl 1989, Depraetere 1995). Authors such as Verkuyl (1989) distinguish syntactically two distinct levels of aspectuality. The VP aspectual level, that is, the aspectual phenomena at the level of the verb and its complements, is referred to as telicity, VP- terminativity, or event structure. Together with subjects, this tenseless sentential aspectual level is referred to as "inner aspectuality"; it is described in terms of VP or sentential terminativity. "Outer

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aspectuality" is the level where the aspectuality of the sentence as a whole is taken into consideration. Alongside with telicity, VP-aspectual phenomena are also characterized in terms of Vendler's classification. Vendler's classification distinguishes states (e.g., know the answer), activities (e.g., run), accomplishments (e.g., buy a book) and achievements (e.g., reach the top, see Vendler 1957, Dowty 1979). Two tests emerge more frequently in determining the place in the Vendler classification. Sentences containing state and achievement VPs cannot occur in progressive in English, accomplishment and activity ones can. Accomplishment and achievement VPs can be modified by the time frame adverbial, such as in an hour, the state and activity ones – by a durative adverbial, such as for an hour. The term "telicity" is used with varying content and formal rigor across theories for characterizing verbs, situations, events, and sentences that contain a set endpoint, a goal, a culmination, or a result. State and activity VPs are referred to as atelic. Accomplishment and achievement VPs are referred to as telic. Henceforth, what is called "telic" is a verb with its complements if it can occur in sentences that denote a situation with a set endpoint or a culmination (cf. Comrie (1976:44-45), Depraetere (1995)). Approximately, culmination means a punctual event, a change of state or position, or a result. Without a culmination, a verb with its complements is considered atelic. For instance, "know the answer" is considered atelic, while "eat a cake" is considered telic. In the composition of Verkuyl's inner aspectual terminativity, a sentence's aspectual properties are derived compositionally from the temporal information contained in the verb and from the atemporal properties of its complements (Verkuyl 1989). Therefore, the inner aspectual "telicity" or "terminativity", represented in Verkuyl by the feature [±T]) does not exactly occur in lexical items' or verbs' level but on the VP-level and tenseless sentence level according to the compositional "Plus-principle". In this paper, we do not study the contribution of subjects and therefore concentrate on the VP-aspectuality only. In Verkuyl's Plus-principle, the positive compositional VP-feature [+T] emerges if a verb with the feature [+ADDTO] (basically, a nonstative verb) combines with an argument with the feature [+SQA] (a quantized NP). If any of these features are negative, the compositional [±T] feature is also negative, that is, the VP is atelic and durative. Oppositions of telicity, then, are understood at the level of the VP, as situation type or event structure.

Viewpoint aspect or outer aspect is understood as only (higher) sentential aspectuality. It emerges beyond the contribution of the verb and its

complements in a tenseless sentence. Adverbial modifiers or operators determine the aspectual contribution and the sentence's perfectitivity feature. For example, progressive or adverbials, such as *for an hour*, can change the perfectivity of the sentence. Henceforth, this level is referred to as sentential aspectuality. Verkuyl's idea of the compositionality of aspect has influenced the study of Finnish aspect, where the object NPs morphological case is clearly related to aspectual phenomena. For instance, the account of Kiparsky (1998) of the Finnish partitive case and aspect (more specifically, '(un)boundedness') discusses the compositional nature of the Finnish VP-aspect. As Kiparsky writes, "[a] VP predicate is unbounded iff it has either an unbounded head or an unbounded argument" (Kiparsky 1998:285). The next section takes a look at the Estonian data in the light of these ideas.

3. Basic phenomena and Estonian verb classifications

This section introduces some facts about Estonian object case that relate, on the one hand, to VP aspect and, on the other hand, to sentence aspect. First, the object cases and their relation to the aspectual properties of sentences are presented (3.1), mainly in the form of a comparison between Kiparsky's study on Finnish and some concepts of Verkuyl and of earlier Estonian sources. Second, the section views Estonian verb classifications, where transitive verbs are grouped according to their object case (3.2.). Third, the problems with establishing the verb classes that are predictive of object case behavior are presented in subsection 3.3.

3.1. Object case alternates.

The pattern of object case marking in Estonian resembles that of Finnish in many respects. In Finnish, objects are case marked with accusative or partitive. Having established the boundedness features of the verbs and objects in the VP, Kiparsky (1998:286) characterizes the case marking pattern of Finnish objects as shown in the Table 1 (details are left out):

	[+B] object	[-B] object	
[+B] verb	kirjoitti kirjeet (Acc.)	kirjoitti kirjeitä (Part.)	
	'wrote the letters'	'wrote letters'	
[-B] verb	kirjoitti kirjeitä (Part)	kirjoitti kirjeitä (Part)	
	'was writing the letters'	'was writing letters'	

Table 1. Boundedness and Finnish case marking in Kiparsky (1998).

The exact definition of the morphosyntactic feature [±B] can be found in Kiparsky (1998:285). This feature does not characterize the same set of verbs as the feature [±ADDTO] of Verkuyl, which pertains basically to nonstative verbs, including telic verbs; Kiparsky's [+B] verbs correspond mostly to telic (but not only) verbs. Kiparsky's test for [-B] predicates is that of combining predicates with "some more" or other degree modifiers. For instance, "some more books" and "some more water" are acceptable; therefore, the plural and mass "books" and "water" have the feature [-B]; "some more book" or "some more two books" fail the test; therefore, singular and quantized NPs' feature is [+B]. For comparison's sake, let us assume that it is the "boundedness" feature as defined in Kiparsky that plays a crucial role in Estonian object case marking. Then, Kiparsky's (1998:286) Table 2 would characterize Estonian object case marking as follows:

	[+B] object	[-B] object
[+B] verb	genitive/nominative	partitive
[-B] verb	partitive	partitive

Table 2. The adaptation of Kiparsky's table (1998) for Estonian object case marking.

The Estonian objects are case-marked with the morphological genitive (singular), nominative (plural) and partitive cases (singular and plural). Now follow the Estonian illustrations to Table 2. Thus, genitive marks singular NPs and nominative marks plural NPs in sentences (1) and (2) respectively.

- (1) Mari ostis raamatu.

 M.nom buy.3sgpast book.gen

 'Mari bought a/the book.'
- (2) Mari ostis raamatud.

 M.nom buy.3sgpast book.nompl

 'Mari bought (the) books.'

In earlier Estonian sources, these sentences are referred to as perfective (Metslang 2001), resultative (Rätsep 1978, Tauli 1968), or bounded (Erelt et al 1993). In Kiparsky (1998:285), the equivalent predicate *ostaa* 'to buy' is listed as bounded. The singular count noun object is also bounded in sentence (1); therefore, the data fit well in Kiparsky's table. Despite the lack of a definite article and the seeming "bareness", the object NP referent can be considered bounded in sentence (2) on the basis of many observations made in earlier sources. Plural objects with nominative case marking are frequently referred

to as "understood to be bounded", "definite" or "specific" (cf Tamm 1999). Compositionally, the VP aspectual feature in sentences (1) and (2) is [+T], or bounded. However, consider the following sentence (3) with the partitive object and imperfective interpretation:

(3) Mari ostis raamatut.

M.nom buy.3sgpast book.part

'Mari was buying a/the book.'

In terms of Kiparsky's account of boundedness, even if the predicate "to buy" and the object are both bounded in sentence (3), the VP predicate can be unbounded and the object case partitive. Unboundedness and the partitive case of the object can have two lines of analysis on the basis of Kiparsky (1998): first, in terms of coercion and second, assuming the existence of two (or dual) lexical entries of the predicate "buy" in Estonian. The latter means that the Estonian verb ostma 'to buy', contrary to its equivalent in Finnish, does not belong to the class of [+B] verbs. Instead, it belongs to the dual class of verbs that have two entries, ostma 1 [+B] and ostma 2 [-B]. Partitive case occurs then only with ostma 2 [-B], where the VP boundedness feature can be negative despite the positive boundedness feature of the object argument. If, however, the first line of the analysis were followed – the one where the predicate is associated with the feature [+B] only - then the VP unboundedness would be analysed as coercion, that is, a shift from bounded to unbounded. Thus, the partitive case is the element that induces unboundendess at the VP level. Coercion is motivated by the internal structure of the event denoted by the predicate since, in Kiparsky's words, "expressions denoting bounded nonpunctual events ... have unbounded counterparts that denote processes constituting such events" (Kiparsky 1998:289). Verkuyl's analysis has the possibility of accounting for imperfectivity not only at the level of VP aspect but also at the level of sentential aspect. Then, imperfectivity emerges as a result of an operator, the beauty spot being that there is no grammatical morpheme, other than partitive, that would stand for the operator. Alternatively, the imperfective operator might restrict its input to [-T], atelic events, coerced or not; in this case, the partitive can still be conceived of as VP-aspectual marking.

Plural and mass object NPs are typically case marked with partitive. In accordance with Kiparsky (1998:285), the VP-predicate containing a mass or

plural noun in the sentences (4) and (5) below is unbounded and the case marking is partitive since the complement NP's referent is unbounded.

- (4) Mari ostis raamatuid.

 M.nom buy.3sgpast book.partpl

 'It was books that Mari bought. Mari was buying (the) books.'
- (5) Mari ostis vett.

 M.nom buy.3sgpast water.part

 'It was water that Mari bought. Mari was buying water.'

Estonian earlier sources discuss partitive that marks both singular (3), (5) and plural (4) object NPs in sentences that are referred to as imperfective, irresultative, or nonbounded. In this instance, Verkuyl's sentential terminativity composition would correctly yield a [-T]. In Kiparsky, the partitive can be related to the two options discussed above: coercion or an unbounded "duplicate" predicate. However, differently from singular count noun partitive objects, if the object is plural (4) or mass (5), the sentence containing certain [+B] verbs can have two aspectually opposite interpretations. Several earlier sources mention at least two readings for sentences such as (4) and (5). A VP containing a [-SQA] argument cannot yield a [+T] VP, but problematically for Verkuyl's analysis, [+T] is exactly the result in (4) and (5). In Kiparsky's analysis, next to the coercing partitive that yields [-B] VP-s, the partitive of plural and mass nouns can, alternatively, fail to cause any coercion and occur also in [+B] VPs. According to Kiparsky, the VP predicate in the sentences (4) and (5) can be bounded due to a special NP-related function of the partitive. As Kiparsky explains, "[h]ere the partitive in effect marks the indefiniteness of bare plural or mass noun objects" (Kiparsky 1998:268). Thus, mass and plural objects fall "out of" the generally holding correlation between VP-unboundedness and the partitive morphological case. Henceforth, however, the paper confines itself to examples from sentences with singular count noun phrases as objects.

Finally we discuss the instances of [-B] and [-ADDTO] verbs. Like in Finnish, nominative and genitive object case marking does not occur with all verb classes in Estonian. For instance, only the partitive object is possible with atelic, stative verbs, such as *alahindama* 'underestimate' in (6). As follows from the table of Kiparsky (1998:285), the object case is partitive and the VP-predicate in the sentence (6) is unbounded since it has a lexically unbounded predicate. For Verkuyl, the VP is atelic, [-T], because the VP contains a [-ADDTO] verb.

(6) Mari alahindas Toomast.

M.nom underestimate.past3sg T.part

'Mari (has) underestimated Thomas.'

In sum, object case alternation cannot be regarded as being dependent on verb classification only. The lexical properties of Estonian verbs seem to differ slightly from those of Finnish verbs. The following subsection introduces aspectual verb classifications that make reference to object case.

3.2. Object case alternation is partly dependent on verb classification.

Object case alternation is partly dependent on verb classification: this is the view held by several works on Estonian syntax and lexical semantics. Estonian verb classifications are typically based on the verbs' ability to occur in sentences with the morphological genitive and nominative case marking as opposed to the partitive case marking of objects. There are two classifications: a two-way, "boundability" based classification and a three-way, "resultativity" based classification. The Grammar of Estonian Standard Language (Erelt et al 1993, henceforth EKG II) proposes a two-way classification into "partitive" and "aspect" verbs (EKG II 1993:49). The basis for the classification is the (non-)boundability of verbs (Est. piiritle(ma)tus (EKG II 1993:49)). In the formulation of EKG II, "verbs that express non-boundable activity and require only the partial object [i.e., the object that is case-marked with the morphological partitive case] are called PARTITIVE VERBS" (EKG II 1993:49). The EKG II defines "aspect" verbs as follows: "Verbs that can express boundable action and allow the partial as well as total object [i.e., the object that is case-marked with the morphological genitive/nominative] are ASPECT VERBS" (EKG II 1993:50). In earlier works, Tauli (1968) and Rätsep (1978) propose a three-way verb classification on the basis of "(ir)resultativity". In what follows, the description of the pattern of lexical aspectual verb classes is provided.

1. Telic verbs (+ ADDTO, and +B verbs). These are the verbs that belong to EKG II's aspect verbs, Rätsep's class 1, and Tauli's class A. These are telic, accomplishment and achievement verbs. These verbs occur predominantly with genitive/nominative objects without any other indication of VP- or sentential aspectual classification that would contribute to telicity or perfectivity. Examples of the EKG II aspect verbs are avastama 'discover', jätma 'leave', looma 'create', parandama 'repair', saavutama 'achieve, attain', sooritama 'accomplish, make (exam, etc)', tooma 'bring here, fetch'.

Tauli's A verbs include *tegema* 'make', *viima* 'bring', *rikkuma* 'ruin, spoil' etc. Some examples from Rätsep's class 1 verbs: *alistama* 'subjugate', *ehitama* 'build', *istutama* 'plant', *kirjutama* 'write' etc.

2. Atelic verbs: stative and activity verbs. (a.) Stative verbs, occasional activity verbs (mostly [-ADDTO], [-B] verbs). A subset of EKG II's partitive verbs, Rätsep's class 2, and Tauli's class B verbs denote atelic events. These verbs are atelic by the verbs' lexical aspect without any other indication of VP-aspectual classification that contributes to atelicity. The stative verbs listed under partitive verbs in EKG II include alahindama 'underestimate' (see example (6)), armastama 'love', austama 'honor', eeldama 'presuppose', ette heitma 'reproach'. Class B in Tauli contains võrdlema 'compare', abistama 'help' etc. Rätsep calls his class 2 'partitive object verbs', his examples include nautima 'enjoy', pooldama 'be on the side of, support', sallima 'tolerate, stand' etc. Klaas (1999) calls these only partitive assigning verbs "hard" partitive verbs. (b.) Atelic, activity verbs [+ADDTO, -B]. This is a complementary subset of the previous group of partitive verbs; these are Rätsep's class 3 verbs and Tauli's class C verbs. These verbs can – but need not – form telic VPs with evident VP-aspectual indication of telicity in the form of the verbal particles (such as the so-called "perfectivity adverb" or particle ära) or a resultative complement. Without particles and resultative complements, these verbs have typically partitive objects. Genitive and nominative objects occur in the presence of particles or resultative complements. The activity verbs listed under partitive verbs in EKG II include embama 'hug', hammustama 'bite', asustama 'inhabit', uurima 'study, watch' etc. Class C of Tauli includes lugema 'read', lööma 'hit, strike', lükkama 'push', meelitama 'entice, lure' etc. Class 3 of Rätsep contains ahvatlema 'entice', arstima 'cure', hõõruma 'rub' etc. Klaas (1999) calls these occasionally partitive assigning verbs of the class "soft" partitive verbs. Rätsep provides the "soft partitive" verb class with two parallel lexical representations: a) one with a "three case object" (i.e., an object type that can be in partitive, genitive and nominative) and a resultative complement and b) another representation with a partitive object. An example of Rätsep's dual pattern can be found in the treatment of the verb veeretama 'roll'. The first item of the pattern corresponds typically to sentences such as (7); the second item corresponds to sentences such as (8) (Rätsep 1978:221):

- (7) Mehed veeretasid vaadi õue.

 man.nompl roll.past.3pl barrel.gen yard.illat

 'The men rolled a/the barrel into the yard.'
- (8) Mehed veeretasid vaati.

 man.nompl roll.past.3pl barrel.part

 'The men rolled/were rolling a/the barrel.'

In sum, both earlier approaches to lexical classifications are aspectual in nature and are based on the verbs' objects' case-marking behavior. VP aspect and the object case marking can be seen to correlate significantly on the basis of the data discussed in earlier Estonian sources.

- 3.3. Problems with establishing verb classes on the basis of object case. Despite the significant correlation between the VP aspect and object case, it is not only the VP aspect that determines the object case marking (see (3)). For instance, telic VPs can occur in imperfective sentences. Consider the imperfective sentence (9), with a partitive object and a telic VP:
- (9) Ta sõi kuklit (ära). S/he.nom eat.3sgpas roll.part up.ptcl 'S/he was eating a roll (up). S/he was engaged in the eating up of a roll.'

Thus, even in combination with the verbal particle *ära* or a resultative phrase, the object of a soft partitive verb or an aspect verb can have the partitive case, and the sentence is aspectually imperfective. As another example, sentence (10) presents the soft partitive verb *veeretama* '(make) roll' with a resultative phrase and a partitive object:

(10) Mehed veeretasid vaati õue.

men.nom roll.past.3pl barrel.part yard.illat

'The men were rolling a/the barrel into the yard.'

Therefore, since the object case is not only dependent on verb class or VP aspect in Estonian, it is problematic to have one's verb classes based on the fact of a verb's occurrence with a certain object case. The partitive case marking of objects cannot be a distinguishing characteristic for verb classes – partitive objects are possible with *all* transitive verbs. In addition, the genitive/nominative case is possible with some atelic verbs if they occur in a telic VP. Moreover, if we wish to establish verb classes that are *predictive* of

syntactic and object case behavior, it would be circular to define the case-assigning capacity of verbs by simply listing them according to their occurrence with these morphological cases. These considerations lead to searching for a case-independent set of linguistic diagnostics. This paper opts for the diagnostics built upon the compatibility with – and the range of interpretations arising from – two grammatical forms related to expressing progressive in Estonian.

4. Two Progressives in Estonian

This section introduces the periphrastic "progressive -mas-construction" and the partitive case, more specifically, the relation of these grammatical forms to the expression of progressive in Estonian. These two forms have distinct interpretations with VPs of different aspectual value. Therefore, different verbs occur with these forms: for instance, transitive verbs do not typically combine with the periphrastic construction, unless their denotation contains a culmination (as in telic verbs). Hereby it is useful to distinguish between the grammatical progressive and the semantic progressive. The grammatical progressive is a cross-linguistically fuzzy aspectual subcategory of imperfective (Comrie 1976). Some languages, such as English, have a progressive grammatical marker. Other languages do not have any separate progressive morpheme; therefore, they lack the progressive grammatical category. However, even if the grammatical category and the morpheme are missing from a language, the language has its ways of giving expression to progression in time - that is, semantic progressive. In what follows, the periphrastic "progressive -mas-construction" is the grammatical construction that can be classified as an evidence of the (development of a) grammatical category of progressive in Estonian (Metslang 1993). The partitive object occurs in sentences that are interpreted as denoting a process or an activity – the semantic progressive.

4.1. The periphrastic progressive <u>-mas</u>-construction.

In transitive sentences, the periphrastic progressive *-mas*-construction has aspect (more specifically, viewpoint aspect) and less clearly (viewpoint) aspect related interpretations.

4.1.1. "Aspectual" <u>-mas</u>-construction.

The periphrastic construction's two possible interpretations of imminence are instances of grammatical, sentential viewpoint aspect. Either the imminence of

starting an activity can be expressed ("inceptive" imminence) or, as a more frequent interpretation, the imminence of a culmination can be referred to. An instance of inceptive imminence is given here (11) with the verb *minema* 'to go':

(11) Ma olin juba minemas.

I be.past.1sg already go.masinf

'I was going already; I was on my way; I was about to go'.

The inceptive imminence interpretation emerges as an interpretation with activity verbs, being a possible but pragmatically infrequent interpretation with accomplishment verbs. The telic VPs' first interpretation with the *-mas*-construction is that of the imminence of a culmination in (12):

(12) Kui sa sisenesid, olin ma (juba) võtit leidmas. When you stepped in, be.past.1sg I already key.part find.masinf 'When you stepped in, I was already finding the key.'

Atelic process and activity verbs do not occur in this construction with an aspectual interpretation in normal discourse settings.

4.1.2. "Agentive" <u>-mas</u>-construction.

Second, there are interpretations of the *-mas*-construction that are restricted exclusively to agentive sentences (Erelt 1985:15-18). The following instance of the *-mas*-construction is described as expressing primarily a purpose or aim (13a, in Estonian sources termed as "finality"), or location (13b, referred to as "absentivity" in typological sources). The sentence (13) has the imperfective viewpoint interpretation:

- (13) Kui sa sisenesid, olin ma (mujal) kuklit (ära) söömas. When you stepped in, be.past.1sg_I_elsewhere roll.part up.ptcleat.masinf a. 'When you stepped in, I was (somewhere else,) eating (up) a roll.'
 - b. 'When you stepped in, I had the task/aim to eat (up) a roll.'

These interpretations are instances of the semantic progressive, since the sentences in those readings can be modified by a durative adverbial:

- (14) Ta oli tundide viisi kuklit (ära) söömas. *s/he be.3sgpast hour.genpl wise roll.part up.ptcl eat.masinf*
 - a. 'S/he was somewhere (for hours), eating (up) a roll.'
 - b. 'For hours, s/he was engaged in the task of eating up a roll.'

In fact, the semantic progressive can be the interpretation of the sentence without any "help" from the *-mas*-construction: the object in the progressive construction is only grammatical with the partitive case. The aspectual effects of the partitive morphological case on the objects are further explicated in the following subsection.

4.2. Partitive progressive.

The partitive object induces the progressive interpretation with telic VP-aspect. Accomplishment (or achievement) VPs obtain an activity (resp. iterative) interpretation. In sentence (15), the counterpart of the sentence (14) with the *mas*-construction, this "activity" interpretation can be translated by means of using the English Progressive, tested by the durative adverbial modification test:

(15) Ta sõi tundide viisi ühte kuklit (?ära). *s/he eat.3sgpast hour.genpl wise one.part roll.part up.ptcl* 'S/he was eating one roll (up) for hours. For hours, s/he was engaged in the activity of eating up a roll.'

In this case, it is difficult to establish whether the partitive case is exactly related to progressive (sentence aspectuality) or activity (VP-aspectuality).

These properties of the progressive-related phenomena in Estonian grammar allow us to construct genitive/nominative free tests that are based on the differences between progressives' sensitivity to certain aspectual properties of the VP. The following list summarizes the facts about the progressives that are relevant for the verb classification tests.

- 1. Partitive case of objects imposes the *progressive/activity/process* reading on telic, accomplishment and achievement VPs. The resulting sentence is compatible with the durative adverbials (e.g., *for an hour*).
- 2. Agentive *mas*-construction imposes the *absentivity and/or finality* interpretations. These interpretations emerge only if the sentence has a volitional agent.

3. Aspectual *mas*-construction imposes the interpretation of the *imminence* of a culmination. Thus, there must be a culmination in the VP.

The following section will present the "genitive-free tests" to check the following hypothesis: there exists an aspectual class of verbs that never occur with genitive/nominative objects (hard partitives). There exists a second lexical class of verbs that occur with genitive objects in combination with particles and resultative phrases (soft partitives). There exists a third aspectual class of verbs that occur with genitive objects without any contribution from particles and resultative phrases (aspect verbs).

4.3. Two progressives as tests.

The aim of the three genitive-free tests is to find principled criteria to single out verbs that can occur in a telic VP, that is, soft partitive and aspect verbs. These verbs must pass at least two of the tests, one of which is based on the partitive progressive. Test 1 finds the telic and atelic nonstative verbs. The test is based on the semantic (partitive) progressive and combinability with a durative adverbial. An example of an English equivalent for this test: For hours, I was eating a roll (cf. (15)). Test 2 finds those atelic verbs that can occur in telic VPs. The test is based on the "agentive" -mas-construction and its absentivity/finality reading with agents. An English example of this test: When you stepped in, I was (somewhere else) eating the roll (cf. (14)). Test 3 finds the verbs that occur in a telic VP with an object that is a singular count noun NP. This test is based on the grammatical "aspectual" mas-construction and its interpretation of the imminence of a culmination. An English example of this test: When you stepped in, I was already finding the key (cf. (12)). The three tests are carried out on the basis of VPs containing verbs and their singular count noun partitive objects.

5. Verbs, VP aspect and object case

The tests yield a Vendlerian patterning of verbs; see Table 3. Singnificantly, this pattern is compatible with the two different classification principles that emerge in earlier Estonian aspect and object case based approaches, with a split into achievements and accomplishments within the resultative/aspect verbs. Verbs are grouped according to the classifications of Rätsep, Tauli and *EKG II* and provided with an example and an approximate indication of Vendler's and Verkuyl's class. Verbs that pass at least two tests – test 1 with partitive progressive and at least one additional test – can occur with the genitive/nominative objects. The positive result of the first test, thus,

distinguishes approximately the [+ADDTO] verbs. Within this group, the additional positive result of the aspectual *-mas*-construction test naturally separates the class of verbs that occur with genitive/nominative objects without an addition of resultative phrases and particles. Only accomplishment verbs have positive results for all tests. The verbs that fail at least two tests are the hard partitive verbs, even if they test occasionally positive in one of the *-mas*-progressive tests. The test pattern also clearly predicts those atelic verbs that occur with genitive/nominative objects with a particle or a resultative phrase. These verbs display a negative result in the 3rd test and but a positive result in the 2nd test, revealing the crucial role of volitionality in verbs with the features [+ADDTO] and [-B].

Rätsep /Tauli / EKG II	example	[+/- ADD- TO]	Vendler class	1.Part. progr.	2.Ag. mas- constr.	3.Asp. mas-constr.
1/A/asp.	tooma 'bring'	+	accomp.	+	+	+
1/A/asp.	leidma 'find'	+	ach.	+	-	+
2/B/hard partitive	eeldama'presuppose' uskuma 'believe'	-	state	-	-	- -/+
3/c/soft p.	lükkama 'push'	+	activity	+	+	-

Table 3. Results of the threefold test.

Thus, the tests work together to make a balanced complex test for object case marking, the conditions of which can be clearly stated. This threefold test with the conditions described in the previous section has an advantage over Kiparsky's test as described in 3.1, for instance, in case of some stative verbs that denote a change of a (mental) state, such as *uskuma* 'believe', *teadma* 'know' or *nägema* 'see'. These verbs would be tested to be [+B] – and, wrongly, genitive/nominative assigners – according to Kiparsky's test applied to Estonian verbs. The test has an additional advantage as it reflects relevant details of verbs in the composition VP aspectuality.

6. Conclusion

The article has shed some light on the relation between VP aspect, sentential aspect and object case in Estonian. A complex test for an event-based Estonian verb classification has been developed; also, the test predicts many details of the composition of VP aspect.

References:

- Comrie, Bernard. 1976. Aspect. Cambridge: Cambridge University Press.
- Depraetere, Ilse. 1995. 'On the necessity of distinguishing between (un)boundedness and (a)telicity', *Linguistics and Philosophy* 18/1. 1—19.
- Dowty, David. 1979. Word Meaning in Montague Grammar. Dordrecht: Reidel.
- Erelt, Mati. 1985. 'MA-, -MAS- ja –MAST-infinitiivist eesti keeles.' [On -MA, -MAS and –MAST infinitive in Estonian] In: *Ars Grammatica*. Academy of Sciences of the Estonian SSR Institute of Language and Literature. Tallinn, Valgus. 4—22.
- EKG II = Erelt, M., R. Kasik, H. Metslang, H. Rajandi, K. Ross, H. Saari, K. Tael and S. Vare. 1993. *Eesti Keele Grammatika II. Süntaks. Lisa: Kiri.* [The Grammar of the Estonian Language II. Syntax]. Tallinn.
- Kiparsky, Paul (1998) 'Partitive Case and Aspect'. In Miriam Butt and Willem Geuder (eds.) *The Projection of Arguments*. Stanford, CSLI Publications: 265–307.
- Klaas, Birute. 1999. 'Dependence of the object case on the semantics of the verb in Estonian, Finnish and Lithuanian.' In: ed. Erelt, Mati Estonian. Typological studies III. Publications of the Department of Estonian of the University of Tartu 11. 47—83.
- Metslang, Helle. 1993. 'Kas eesti keeles on olemas progressiiv?' [Is there progressive in Estonian?] *Keel ja Kirjandus* 1993, 6,7,8. 326—334, 410—417, 470—476.
- Rätsep, Huno. 1978. 'Eesti keele lihtlausete tüübid.' [Types of Estonian simple sentences.] *ENSV TA Emakeele Seltsi toimetised* 12. Valgus, Tallinn.
- Smith, Carlota. 1990. The Parameter of Aspect. Dordrecht: Kluwer.
- Tamm, Anne. 1999. 'Specificity, aspect and the two partitives of Estonian.' In: *DOXIMP 3*. *Graduate Students' Third Linguistics Symposium. June 5th, 1998, Selected Papers. Working Papers in the Theory of Grammar.* Vol 6, Number 3. Research Institute for Linguistics, Budapest. 221—235.
- Tauli, Valter. 1968. "Totaalobjekt eesti kirjakeeles." [Total object in Estonian.] In: Suomalais-ugrilaisen Seuran Toimituksia 145. Helsinki. 216-224.
- Vendler, Zeno. 1957. Verbs and times. *Philosophical Review* 66:143–160.
- Verkuyl, Henk. 1989. 'Aspectual Classes and Aspectual Composition.' *Lingustics and Philosophy*, 12:1.39–94.