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Differential Object Marking in Estonian: Prototypes, Variation, and Construction-specificity¹

Abstract

This paper provides a comprehensive account of differential object marking in Estonian, with an emphasis on da-infinitive constructions, which exhibit greater variation in object case. I show that there are a number of construction-specific factors influencing the total vs. partial object opposition in Estonian, as well as factors (such as word order) which are relevant in a number of da-infinitive constructions but not in finite clauses. Moreover, even non-finite clauses which do not support an imperfective aspectual interpretation may feature partial objects, because they fall into a gray area between the prototypical total object construction and the prototypical partial object construction. The distribution of nominative and genitive total objects is also discussed: while total object case can typically be explained by the need (or lack thereof) to morphologically distinguish the object from the subject and is therefore a construction-specific feature, there are two constructions in which both nominative and genitive total objects appear. These constructions illustrate that the case of the total object depends heavily on the extent to which the construction resembles the prototypical +overt subject or -overt subject constructions. Examples such as these suggest that some types of object case variation in Estonian lack a functional explanation and are better understood by appealing to cognitive processes such as analogy.

1. Introduction

Studies of alternations in direct object marking in various languages have focused primarily on alternations wherein some objects receive overt

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coding and others do not. Such asymmetric alternations are commonly referred to under the umbrella of Differential Object Marking, abbreviated as DOM (see e.g. Aissen 2002; Iemmolo 2013). Some languages exhibit alternations between two or more forms of overt coding, known as symmetric alternations. Finally, there are languages that feature both symmetric and asymmetric alternations. One such language is Estonian.²

The aim of this article is to provide a comprehensive account of the parameters governing direct object encoding alternations in Estonian, both symmetric and asymmetric, as well as the factors determining whether the alternation is symmetric or asymmetric in a given construction. Special attention will be given to non-finite constructions, as these exhibit greater variation in DO encoding patterns. The results will then be compared to the claims of de Hoop and Malchukov (2008) and Iemmolo (2013) regarding the meaning differences typically expressed by symmetric and asymmetric alternations. The analysis employs material from various Estonian text corpora as well as simple example sentences.

The article consists of eight sections. In section 2, I provide a brief overview of DOM phenomena in the world's languages. Section 3 discusses the total vs. partial object distinction in Estonian, while section 4 explores the factors determining the (a)symmetricality of the DOM opposition in a given construction. Section 5 examines a pair of exceptional constructions exhibiting not only the standard total vs. partial object opposition, but also variation in total object case. Section 6 focuses on construction-specific features of DO encoding alternations in Estonian, and section 7 presents a brief comparison of object marking patterns in Estonian and Finnish. In section 8, I summarize the findings presented in the article and offer some concluding thoughts regarding the cognitive underpinnings of the Estonian object case alternations.

The notion of "object" itself is problematic, as it is difficult to give it a satisfactory all-encompassing and cross-linguistically valid formal definition. For the purposes of this paper, however, the definition provided in the academic grammar of Estonian *Eesti keele grammatika* (1993) will suffice: an object is a NP in the nominative, genitive, or partitive case (or another constituent which may be replaced by a pronominal NP in the nominative, genitive, or partitive), which is dependent on the verb and the referent of which is the entity toward which the action expressed by the verb is directed (EKG II: 10).

2. DOM in the world's languages

A typical asymmetric DO encoding alternation is found in Spanish, where the preposition *a* is used before specific and animate direct objects, while other direct objects are uncoded (Rodríguez-Mondoñedo 2007: 91):

- (1) Veo un árbol. see:PRS;1SG a tree:SG 'I see a tree.'
- (2) Veo a Juan. see:PRS;1SG to Juan 'I see Juan.'

By contrast, symmetric DO encoding alternations are a well-known feature of Finnic languages, as shown in the Finnish examples below illustrating the total vs. partial object opposition, where the object in the partitive (3) indicates imperfectivity/irresultativity, while the object in the genitive (4) indicates the opposite:

- (3) Syön omenaa. eat:PRS;1SG apple:PART;SG 'I am eating a/the apple.'
- (4) Syön omenan. eat:PRS;1SG apple:GEN;SG 'I will eat a/the apple.'

Iemmolo (2013: 380), drawing on a sample of 159 languages featuring alternations in DO encoding, argues that symmetric and asymmetric alternations tend to be governed by different parameters: symmetric alternations express differences in aspect, polarity or quantification, while asymmetric alternations are driven by differences in the referential properties of the DO, such as animacy, topicality, and definiteness. He also points out that asymmetric alternations are cross-linguistically far more common than symmetric ones; of Iemmolo's sample of 159 languages, only 26 (16%) show symmetric alternations.

While the characteristics of symmetric and asymmetric alternations have thus been sketched out in some detail, far less attention has been devoted to the relationships between symmetric and asymmetric DO

encoding alternations within individual languages. In fact, however, the Finnic languages, while frequently cited as examples of languages with symmetric DO encoding, also feature asymmetric alternations, as in the following examples from Estonian:

- (5) Palun tooge mulle piima.
 please bring:IMP;2PL 1SG:ALL milk:PART;SG
 'Please bring me (some) milk.'
- (6) Palun tooge mulle piim.
 please bring:IMP;2PL 1SG:ALL milk:NOM;SG
 'Please bring me the milk.'

The different syntactic environments in which symmetric and asymmetric DO encoding alternations are found in Estonian, as well the exceptional constructions in which both symmetric and asymmetric oppositions appear, will be discussed in section 4.

3. Object case alternation in Estonian: total vs. partial object

The fundamental object marking opposition in Estonian, as in Finnish (see examples (3) and (4) above), is the distinction between the total and partial object. The prototypical total object construction in Estonian features the following:

- A) an affirmative verb form
- B) a quantitatively bounded object
- C) a semantically perfective, resultative, temporally bounded verb form (EKG II: 51–52).

The prototypical partial object construction features the opposite:

- D) a negative verb form
- E) a quantitatively unbounded object
- F) a semantically imperfective, irresultative, temporally unbounded verb form (ibid.)

However, while the total object appears only when criteria A, B and C are all met, the partial object appears when *at least one* of criteria D, E and F is met (or, equivalently, when at least one of criteria A, B and C is *not* met). As an alternative, more general formulation of these criteria, we can state

that the partial object expresses vagueness or imprecision with regard to the duration, volume, and/or result of an action.

The precise nature of the boundedness distinction, for both objects and actions, has long been a popular object of study (see Kont 1963; Pihlak 1985 and Tamm 2004, among others). However, these studies have focused overwhelmingly on finite clauses. Non-finites, especially infinitives, present additional complications for analysis; the crucial parameter of temporal boundedness, which is relatively straightforward to assess in the case of finite verb forms, is less clear when the verb form in question is an infinitive. This means that infinitive phrases do not clearly correspond to either of the prototypical object constructions outlined above (alternatively, one could simply state that the prototypical object constructions feature finite verb forms). The peripheral, non-prototypical nature of non-finite constructions makes them less stable than the prototypical object constructions are: "Category margins are vulnerable to linguistic change because they can have a double, and many times doubtful, categorical interpretation, a fact which creates permanent potential structural ambiguity" (Company 2002: 203).

Consequently, there is far more variation in object case in non-finite constructions than in finite clauses. For example, such variation is quite common in what Penjam (2008: 57) calls the assessment construction (hinnangukonstruktsioon), consisting of a da-infinitive phrase in subject position and an adjectival predicate expressing the speaker's assessment of the activity described by the infinitive phrase (Ogren 2014: 172–173). This construction is illustrated in examples 8–9 below. In these examples, as in all other examples in this paper, the object nominal and the infinitive it modifies are shown in bold.

- (7) On võimalik, et ta leiab be:PRS;3SG possible:NOM;SG that 3SG:NOM find:PRS;3SG sobiva töökoha.

 appropriate:GEN;SG workplace:GEN;SG 'It is possible that he will find an appropriate job.'
- (8) *On võimalik leida sobiv*be:PRS;3SG possible:NOM;SG find:INF appropriate:NOM;SG *töökoht*.
 workplace:NOM;SG

(9) *On võimalik leida sobivat*be:PRS;3SG possible:NOM;SG find:INF appropriate:PART;SG *töökohta*.
workplace:PART;SG
'It is possible to find an appropriate job.'

Example 7 illustrates a finite clause in which only the total object is possible; the momentary, perfective meaning present in the verb form *leiab* 'he/she finds/will find' forces a temporally bounded interpretation, rendering the partial object (*sobivat töökohta*) incoherent. In examples 8 and 9, however, the form *leiab* is replaced by the infinitive *leida* 'to find', which lacks the temporal content of the finite verb form; as such, both total and partial objects are possible, with little or no difference in meaning. In such constructions, object case is determined by a variety of factors, including word order and the polarity of the adjective – factors which, crucially, play no role in the choice of object case in finite clauses. These factors all work to make the partial object possible in verb-object combinations which, in finite clauses, would require the use of the total object.

The observation that non-finite clauses in some languages may behave differently from finite clauses with respect to DO encoding is not a new one. Peter Arkadiev (2013) has examined direct object case in non-finite clauses in Lithuanian. According to Arkadiev, while the prototypical direct object case in Lithuanian is the accusative, various non-finite constructions feature direct objects in the nominative, genitive, or dative. The nominative direct object appears when the non-finite clause is itself the subject of the sentence:

(10) *Jam nepatiko laukelis arti*.

3SG:DAT like:PST;3SG;NEG field:NOM;SG plough:INF

'He did not like to plough the field.' (Arkadiev 2013: 421)

Dative and genitive direct objects in Lithuanian appear in conjunction with purposive infinitives. The genitive object is used when the main verb is a verb of motion (11), while the dative object appears with non-motion verbs (12) (Arkadiev 2013: 421):

(11) *Išvažiavo* **kelio taisyti**.
drive.out:PST;3PL road:GEN;SG repair:INF
'(They) went to repair the road.' (Arkadiev 2013: 421)

(12) *Iššovė žmonėms pagąsdinti*. shoot:PST;3SG person:DAT;PL frighten:INF '(He) fired to scare the people.' (Arkadiev 2013: 422)

All three of these Lithuanian constructions thus represent examples in which objects of non-finite verb forms are marked in a way that is not possible for objects of finite verb forms.

There are two primary infinitives in Estonian, the *da*-infinitive and the *ma*-infinitive or supine³. While the *ma*-infinitive is the standard dictionary form, it has a much narrower scope of usage. Unlike the *da*-infinitive, a "neutral" form that merely expresses an action without conveying any clear temporal meaning, the *ma*-infinitive in its basic form expresses relative future, i.e. that one action follows another (EKK: 263–265). The bare *ma*-infinitive appears only in the following constructions:

- 1. Verb chains featuring the following finite verb classes:
 - a. Verbs expressing the beginning of an action, e.g. *hakkab sööma* 'starts to eat', *kukub karjuma* 'starts shouting', *jääb magama* 'falls asleep'
 - b. Motion verbs, e.g. tuleb sööma 'comes to eat', läheb jooma 'goes to drink'
 - c. Verbs expressing causation, e.g. *paneb* (*raadio*) *mängima* 'turns the radio on' (lit. 'makes the radio play')
 - d. The modal verb pidama 'must, have to'
 - e. The future auxiliary verb saama
- 2. Adjective + complement with certain adjectives, e.g. *valmis* 'ready', *võimeline* 'able'
- 3. As an independent predicate, e.g. kähku magama 'quickly to sleep' (EKK: 265)

Similarly to the Lithuanian example in (11), some Estonian ma-infinitive constructions follow a distinct pattern with respect to DO encoding. In motion verb + ma-infinitive constructions, the object appears in the partitive, even when the boundedness criteria would predict that the total object should be used:

(13) Mõned aastad tagasi läks sõber koos few:NOM;PL year:NOM;PL back go:PST;3SG friend:NOM;SG together naisega autot ostma. (ETT) wife:COM;SG car:PART;SG buy:SUP 'A few years ago, a friend went with his wife to buy a car.'

³ There is also a third infinitive form, the *vat*-infinitive, which is far less common and will not be discussed here.

(14) Täna läks kärbes kärt kokaraamatut
today go:PST:3SG fly:NOM;SG Kärt:NOM;SG cookbook:PART;SG
ostma, et ämblik tiinale sünnipäevaks
buy:SUP to spider:NOM;SG Tiina:ALL;SG birthday:TRANS;SG
maasikatorti küpsetada. (ETT)
strawberry.cake:PART;SG bake:INF
'Kärt the fly went to buy a cookbook today in order to bake a strawberry cake for
Tiina the spider's birthday.'

Both (13) and (14) feature clearly bounded objects. The boundedness of the action expressed by the *ma*-infinitive is perhaps less clear, as it is possible that the sentence could be construed as referring to the process of buying rather than the result; however, this is a somewhat unnatural interpretation, as *ma*-infinitive constructions with destination adverbials typically carry a meaning of purposiveness (EKG II: 253). Moreover, even if we replace the verb *ostma* 'to buy' in (13) and (14) with a momentary action verb that does not reasonably allow an imperfective reading, such as *leidma* 'to find'), the object would still appear in the partitive:

(15) Täna läksin raamatukokku kokaraamatut leidma. today go:PST;1SG library:ILL;SG cookbook:PART;SG find:SUP 'Today I went to the library to find a cookbook.'

It should be noted, however, that other *ma*-infinitive constructions allow both total and partial objects, as in the following example:

(16) Ma olen valmis ostma uue kokaraamatu /
1SG:NOM be:PRS;1SG ready buy:SUP new:GEN;SG cookbook:GEN;SG
uut kokaraamatut.
new:PART;SG cookbook:PART;SG
'I am ready to buy a new cookbook.'

Thus the obligatory use of the partitive in (13-15) is a feature of the motion verb + ma-infinitive construction, not of the ma-infinitive in general.

Another example of a non-finite construction with distinct case-marking patterns is the da-infinitive assessment construction, illustrated in (8) and (9) and repeated here as (17):

(17) On võimalik leida sobiv töökoht / sobivat töökohta. 'It is possible to find an appropriate job.'

As this example indicates, both the total and partial object are entirely possible here (with no real difference in meaning), despite the fact that a standard interpretation of the boundedness criteria would predict only the total object to appear. However, this variation is not a general feature of the assessment construction, but rather a consequence of the semantic properties of the particular assessment adjective used. Ogren (2014: 176) classifies adjectives appearing in the assessment construction according to three parameters: type of assessment (value judgments vs. assessments of possibility, i.e. "good" vs. "possible"), polarity (positive or negative assessment of possibility, i.e. "possible" vs. "impossible") and orientation (result-oriented vs. process-oriented, i.e. "useful" vs. "easy"). While these three parameters differ in importance, all three have a clear statistical effect on object case: adjectives expressing value judgments, positive assessments of possibility, and result-orientation favor the use of the total object, while the opposite characteristics (assessments of possibility, especially negative assessments, as well as process-orientation) favor the use of the partial object. The adjective *võimalik* 'possible' allows both total and partial objects because, while it expresses an assessment of possibility (favoring the use of the partial object), that assessment is positive, and the focus is on the outcome rather than the process. By contrast, the adjective *võimatu* 'impossible' appears almost exclusively with partial objects, as it gives a negative assessment of possibility; the adjective *tähtis* 'important' appears almost exclusively with total objects, as it expresses a value judgment; and the adjective lihtne 'easy, simple', while it allows both partial and total objects, favors the partial object more strongly than does võimalik, due to the fact that *lihtne* is process-oriented, focusing on the characteristics of the action itself, while *võimalik* is result-oriented, focusing on the end state rather than on intermediate stages. As such, if the adjective *võimalik* in (17) were replaced by võimatu, only the partial object would be felicitous; if it were replaced by tähtis, only the total object would be felicitous; and if it were replaced by *lihtne*, the frequency of the partial object would increase, but the total object would remain possible. However, in the assessment construction with finite verb forms (illustrated in (7) above), such variation does not appear; if the boundedness criteria outlined at the beginning of this section are met, only the total object is possible, regardless of the semantic properties of the adjective in the main clause:

(18) On võimalik/võimatu/tähtis, et ta leiab sobiva töökoha / *sobivat töökohta. 'It is possible/impossible/important that s/he will find an appropriate job.' Thus the variation shown in (17) is a distinguishing feature of specifically the da-infinitive assessment construction, not of assessment constructions in general.

4. Cross-constructional variation in total object case: symmetric vs. asymmetric case alternations in Estonian

The notion of prototype, i.e. the principle that members of a given category may differ in the degree to which they represent that category and the prototype is the most representative member of the category (Aarts 2006; Taylor 2008), can be applied not only to the primary object marking opposition in Estonian, that between partial and total objects, but also to the distribution of the two total object cases. Total objects in Estonian may appear in either the genitive or the nominative (Estonian has no equivalent of the Finnish -t accusative).

Unlike the total vs. partial object opposition, which is driven by semantics (boundedness), the nominative vs. genitive total object opposition is based on syntactic criteria. The nominative total object appears without exception in the imperative and jussive moods and in the impersonal voice (as well as in the plural in all moods/voices; the nominative plural object will be discussed in section 6). It also appears in numerous da-infinitive constructions, including:

- the purpose construction (*otstarbe- ja põhjuslausekonstruktsioon*), in which a non-finite subordinate clause expresses the purpose or reason for doing something (Penjam 2008: 117):
- (19) Jaan läheb metsa, et tappa põder.

 Jaan:NOM go:PRS;3SG forest:ILL;SG to kill:INF moose:NOM;SG

 'Jaan is going into the forest to kill a moose.'
- the assessment construction, described earlier:
- (20) On parem osta odavam arvuti.
 be:PRS;3SG better:NOM;SG buy:INF cheaper:NOM;SG computer:NOM;SG 'It is better to buy a cheaper computer.'
- the postposed attribute construction (*järeltäiendikonstruktsioon*), in which the non-finite clause modifies a noun (Penjam 2008: 102):

- (21) Ta tegi ettepaneku uus
 3SG:NOM do:PST;3SG proposal:GEN;SG new:NOM;SG
 parkla ehitada.
 parking.lot:NOM;SG build:INF
 'S/he made a proposal to build a new parking lot.'
- the translative adverbial construction (*translatiivadverbiaaliga kavatsuskonstruktsioon*), in which a nominal in the translative case serves as the predicative and the *da*-infinitive phrase is the subject (Penjam 2008: 65):
- (22) Tema eesmärgiks on **leida** viirusele **ravim**.

 3SG:GEN goal:TRANS;SG be:PRS;3SG find:INF virus:ALL;SG cure:NOM;SG 'His/her goal is to find a cure for the virus.'
- the necessive construction (*netsessiivkonstruktsioon*), in which the predicate expresses the necessity, obligatoriness or possibility of the action described in the *da*-infinitive phrase, which appears in subject position (Penjam 2008: 48):
- (23) Mul tuleb **oma pesumasin**1SG:ADE come:PRS;3SG own:NOM;SG washing.machine;NOM;SG töökotta viia.
 workshop:ILL;SG take:INF
 'I have to take my washing machine to the repair shop.'
- In (20), (22), and (23), the infinitive phrase is the subject of the sentence and the direct object in the infinitive phrase appears in the nominative, similarly to the Lithuanian construction shown in (10). Also significant is the fact that the nominative total object does *not* appear in the *da*-infinitive object construction (*objektikonstruktsioon*), where the *da*-infinitive phrase serves as the direct object (Penjam 2008: 74–75):
- (24) Tahame leida probleemile lihtsa lahenduse. want:PRS;1PL find:INF problem:ALL;SG simple:GEN;SG solution:GEN;SG 'We want to find a simple solution to the problem.'

Clearly, the distribution of the nominative and genitive object does not simply correspond to the distinction between finite (tensed) and non-finite verb forms. What the syntactic environments featuring the nominative total object have in common, however, is that they do not feature overt grammatical subjects, while the genitive total object appears in

environments where overt grammatical subjects occur⁴. This is not a new observation; it is essentially a re-statement of the so-called Jahnsson's Rule, posited for Finnish, which states that verbs with overt subjects govern the -n accusative (equivalent to the genitive in our terms), while verbs without overt subjects govern the endingless accusative (i.e. the nominative) (Kiparsky 2001: 317, from Jahnsson 1871). However, Jahnsson's Rule is not absolute, as subject pronouns may be omitted (with no effect on object case) and overt subjects may appear with imperatives; therefore, a weaker formulation of the rule is necessary. In recognition of this, Kiparsky (2001: 336) offers the following amendment:

The object is case-marked even when there is no overt preverbal subject as long as there is subject-verb agreement and there *could* be a lexical subject in Spec-IP position (without other changes in the sentence).

He clarifies that second-person imperatives with overt subjects do not violate this rule because they do not show subject-verb agreement, a position taken earlier by Hakulinen and Karlsson (1975: 342), who go further by stating that the apparent "subject" is not really a subject at all, but rather an appositive. However, even Kiparsky's formulation of Jahnsson's Rule, again postulated for Finnish, is too categorical to fit the situation observed in Estonian. The Estonian constructions that violate Jahnsson's Rule in one way or another will be discussed in sections 5 and 6 of this article.

Given that a) subjects of transitive clauses appear almost exclusively in the nominative case and b) nominative objects appear only in environments typically characterized by the absence of an overt grammatical subject, it is clear that the nominative total object is made possible by the absence of the need to disambiguate between object and subject (see Comrie 1975; Hakulinen & Karlsson 1975). In this regard, Estonian (along with Finnish) thus serves to illustrate the general rule put

⁴ Among the *da*-infinitive constructions listed above, there are two apparent exceptions to this. The first is the postposed attribute construction (example 21). Hakulinen and Karlsson (1975: 343–344), discussing the same construction in Finnish, argue that the nominative total object can be explained as an island effect; while the main clause of the sentence has a grammatical subject, the attribute construction does not inherit that subject. The object of the non-finite verb cannot be fronted, as in **Uus parkla tegi ta ettepaneku ehitada*. The same logic applies to the purpose construction (example 19), where no part of the non-finite clause can be fronted, i.e. removed from the subordinate clause in which it appears.

forth by de Hoop and Malchukov (2008), who posit two different encoding. motivations behind systems of DO DISTINGUISHABILITY, requires that subjects and objects of transitive clauses be morphologically distinct from one another (typically accomplished by case marking), while the second, IDENTIFY, "makes use of case morphology to encode specific semantic/pragmatic information about the nominal in question", including, for instance, thematic roles such as agent, goal, and experiencer (de Hoop & Malchukov 2008: 567-568). De Hoop and Malchukov claim that asymmetric alternations may be related to either DISTINGUISHABILITY or IDENTIFY, while symmetric alternations, since all possible forms within a symmetric alternation are morphologically distinct from the subject, are necessarily driven by IDENTIFY. (In practice, this is equivalent to stating simply that all DO encoding alternations are motivated by DISTINGUISHABILITY and/or IDENTIFY.) The meaning differences typically expressed by the total vs. partial object opposition in Finnic languages – aspect, polarity and quantification – clearly fall into the category of IDENTIFY, while the use of the two total object cases can largely be explained by appealing to DISTINGUISHABILITY.

The preceding discussion has focused on the factors determining whether a given construction exhibits a symmetrical (= genitive total object) or asymmetrical (= nominative total object) DOM alternation, with the resulting implication that the (a)symmetricality of the DOM alternation is a construction-specific feature. In other words, while there are two possible cases for the total object, within any one construction there is only one possibility: either the nominative (= asymmetric DOM) or the genitive (= symmetric DOM), but not both. However, in Estonian, this is not an absolute rule. The following section examines the exceptional constructions in which both nominative and genitive total objects occur.

5. Construction-internal variation in total object case in Estonian

There are two related constructions in Estonian which exhibit inconsistent total object case usage. Both of these constructions show semantic similarities to the imperative, suggesting that the property of **imperativity** could be a factor influencing the choice of total object case.

First, both nominative and genitive total objects are possible in **reported commands** using the command verbs *paluma* 'to ask, request' or *käskima* 'to command, order' (EKK: 408):

- (25) *Palusin* **näidata** talle **istekoha** kätte. ask:PST;1SG show:INF 3SG:ALL seat:GEN;SG hand:ILL;SG
- (26) Palusin näidata talle istekoht kätte.
 ask:PST;1SG show:INF 3SG:ALL seat:NOM;SG hand:ILL;SG
 'I asked (someone) to show him/her to his/her seat.'

This contrasts with direct commands, where the total object can appear only in the nominative, regardless of whether the imperative is expressed by a morphologically imperative form or by the infinitive:

- (27) *Palun* **näidata** talle **istekoht** kätte. ask:PRS;1SG show:INF 3SG:ALL seat:NOM;SG hand:ILL;SG
- (28) Palun näidake talle **istekoht/*istekoha** kätte.⁵ please show:IMP;2PL 3SG:ALL seat:NOM;SG/seat:GEN;SG hand:ILL;SG 'Please show him/her to his/her seat.'

The second exception is the so-called **enabling-obligating construction** (name translated from Penjam 2008: 82, Estonian *võimaldamis-kohustamiskonstruktsioon*). In this construction, the subject of the sentence enables or obligates the logical subject of the *da*-infinitive phrase to do something. The second participant, if mentioned explicitly, appears in the adessive. Common verbs in this construction include *võimaldama* 'to enable, make possible', *soovitama* 'to recommend', *kohustama* 'to obligate', *laskma* 'to let/have (someone do something)' and *aitama* 'to help'. Again, both nominative and genitive total objects are possible:

- (29) Soovitan sul osta uue mantli. recommend:PRS;1SG 2SG:ADE buy:INF new:GEN;SG coat:GEN;SG
- (30) Soovitan sul osta uus mantel. recommend:PRS;1SG 2SG:ADE buy:INF new:NOM;SG coat:NOM;SG 'I recommend that you buy a new coat.'

Structurally, the reported command construction and the enablingobligating construction are nearly identical, the only difference between them being that in the latter construction, both nominative and genitive objects are possible in direct speech as well as in reported speech (whereas

The word *palun* here is a not a true verb, but rather a lexicalized form, a particle meaning 'please'; however, the origin of the particle *palun* is the finite verb form *palun* 'I ask', and in any case, the progression shown in (31–37) is based on similarity of form, not necessarily of grammatical structure.

the reported command construction, by definition, expresses only reported speech). The use of genitive total objects in these constructions is motivated by Jahnsson's Rule, i.e. by the presence of a grammatical subject in the sentence; however, unlike in the other non-finite constructions taking genitive total objects, the grammatical subject of the sentence is not coreferential with the logical subject of the non-finite clause. Meanwhile, the nominative total object is motivated by the semantic and structural parallels between these constructions and imperatives (as imperatives are the core environment of nominative objects in the Balto-Finnic languages, per Grünthal (1941) as summarized in Kiparsky (2001: 338). In addition to the imperative-like semantic content of the verb, these constructions resemble imperatives in their participant structure (both feature an addressee who is requested and/or given the opportunity to perform the action expressed by the verb phrase). The competing structural parallels leading to variation in total object case in these constructions are illustrated in the following set of sentences, which show a progression from the simple imperative, i.e. the prototypical nominative object construction, to the simple indicative, i.e. the prototypical genitive object construction:

- (31) Näidake talle **istekoht** kätte. show:IMP;2PL 3SG:ALL seat:NOM;SG hand:ILL;SG 'Show him/her to his/her seat.' (imperative, no other verb form present, object in nominative)
- (32) Palun näidake talle **istekoht** kätte.
 please show:IMP;2PL 3SG:ALL seat:NOM;SG hand:ILL;SG
 'Please show him/her to his/her seat.' (imperative + palun 'please', lit. 'I request', object in nominative)
- (33) Palun (teil) näidata talle istekoht kätte.

 ask:PRS;1SG 2PL:ADE show:INF 3SG:ALL seat:NOM;SG hand:ILL;SG

 'Please show him/her to his/her seat.' (imperative verb form replaced by infinitive, optional adessive argument indicating the logical subject of the non-finite clause, object in nominative)
- (34) Palusin (teil) näidata talle istekoht/istekoha
 ask:PST;1SG 2PL:ADE show:INF 3SG:ALL seat:NOM;SG/seat:GEN;SG
 kätte.
 hand:ILL;SG
 'I asked you to show him/her to his/her seat.' (reported command, object in nominative or genitive)

(35) Soovitan (teil) **näidata** talle **istekoht/istekoha** recommend:PRS;1SG 2PL:ADE show:INF 3SG:ALL seat:NOM;SG/seat:GEN;SG kätte.

hand:ILL:SG

- 'I recommend that you show him/her to his/her seat.' (enabling-obligating construction, object in nominative or genitive)
- (36) Kavatsen näidata talle istekoha kätte.
 plan:PRS;1SG show:INF 3SG:ALL seat:GEN;SG hand:ILL;SG
 'I plan to show him/her to his/her seat.' (standard da-infinitive object construction, no adessive argument possible, object in genitive)
- (37) *Näitan* talle **istekoha** kätte. show:PRS;1SG 3SG:ALL seat:GEN;SG hand:ILL;SG 'I will show him/her to his/her seat.' (finite verb form, object in genitive)

This sequence suggests that from a semantic viewpoint, imperativity ought to be viewed not as a binary feature, but as a continuum with fully imperative sentences at one end and sentences with no imperative meaning at the other end. At either end of the continuum, there is no variation in the case of the total object, while in the middle (examples 34 and 35, i.e. the reported command and enabling-obligating constructions) both nominative and genitive objects are possible. There is a slight difference in meaning between the nominative and genitive object in (34) and (35) in that the former carries more imperative force, presumably due to its structural similarity to the imperative.

Furthermore, this view of imperativity as a scalar feature suggests that even within the same construction, different degrees of imperativity should be accompanied by differences in the case of the total object. And indeed, there is evidence that this is the case. Varying degrees of imperativity can be found within the enabling-obligating construction, depending on the semantics of the finite verb; for instance, the verb *soovitama* 'to recommend' intuitively carries a stronger connotation of imperative than does the verb *võimaldama* 'to enable, make possible'. And as we would expect, the nominative total object, associated with imperatives, is considerably more common in conjunction with *soovitama* than with *võimaldama*. A pair of examples:

- (38) Seega soovitame Sul reisima minnes alati therefore recommend:PRS;1PL 2SG:ADE travel:SUP go:CON always endale reisikindlustus soetada. (ETT) self:ALL;SG travel.insurance:NOM;SG obtain:INF 'Therefore, we recommend that you always buy travel insurance for yourself when traveling.'
- (39) Muretsemiseks pole põhjust, tänapäevased worrying:TRANS;SG be:PRS;3SG:NEG reason:PART;SG modern:NOM;PL tuimestusvahendid võimaldavad selle hamba eemaldada anesthetics:NOM;PL enable:PRS;3PL that:GEN;SG tooth:GEN;SG remove:INF valutult. (ETT) painlessly 'There's no reason to worry, today's anesthetics allow (one) to remove that tooth

However, this pattern (greater imperative force = higher incidence of nominative total object) does not hold for all verbs in the construction. Table 1 presents data on total object usage with four different verbs in the enabling-obligating construction based on sentences from the Estonian web language corpus EtTenTen⁶ (the first 100 relevant matches for each verb were used, excluding duplicates):

Table 1. Total object case variation in the enabling-obligating construction with the verbs *soovitama*, *käskima*, *võimaldama*, and *lubama*

Verb	Nominative	Genitive	Total
soovitama 'to recommend'	63	37	100
käskima 'to command'	41	59	100
võimaldama 'to enable'	23	77	100
<i>lubama</i> 'to allow' ⁷	15	85	100

painlessly.'

The results for the verbs *lubama* and *võimaldama* are as expected: these two verbs carry little or no imperative force, and accordingly, they show a clear preference for the genitive total object. The verb *käskima*, on the other

^{6 &}lt;a href="https://www.sketchengine.co.uk/documentation/wiki/Corpora/TenTen/etTenTen">https://www.sketchengine.co.uk/documentation/wiki/Corpora/TenTen/etTenTen
The etTenTen corpus covers a variety of domains including government websites, blogs, forums and news sites, as well as religious and informative texts. An overview of the text types represented in the corpus is available at http://www2.keeleveeb.ee/dict/corpus/ettenten/about.html (in Estonian).

⁷ The verb *lubama* also carries the meaning 'to promise'; however, as this meaning belongs to a different construction, only the 'allow, permit' uses of *lubama* have been considered in the analysis presented here.

hand, offers a repudiation of the imperativity-based account of total object case variation; despite the fact that this verb clearly carries the most imperative force of the four verbs analyzed here, it actually shows a slight preference for the genitive total object, and takes nominative total objects less often than does *soovitama*. The general pattern still prevails – of these four verbs, the two carrying the greatest imperative force (*käskima* and *soovitama*) take nominative total objects far more often than do the low imperative force verbs *võimaldama* and *lubama* – however, it must be acknowledged that there is variation on the level of individual verbs that cannot be explained by an appeal to imperativity.

While it is possible to identify significant differences in object case preference between individual main verbs, perhaps more striking is how weak those preferences are; even in the case of $v\tilde{o}imaldama$, the nominative total object appears frequently enough that it can hardly be considered exceptional. One can also find pairs of virtually identical sentences, one of which features the genitive object and the other of which features the nominative, as in (40) and (41):

- (40) Samuti tutvustas OPosariigi edusamme introduce:PST;3PL OP:NOM state:GEN;SG advance:PART;PL also Põhja-Eestis naftatransiidi vööndi loomises, northern. Estonia: INE oil.transit: GEN; SG zone: GEN; SG creation: INE; SG mis võimaldab **Eestil** anda oma what:NOM;SG enable:PRS;3SG Estonia: ADE give: INF own: GEN; SG Euroopa energiaga varustamisse. (ETT) contribution:GEN;SG Europe:GEN energy:COM;SG provision:ILL;SG 'OP also introduced the state's progress in creating an oil transport zone in northern Estonia, which will allow Estonia to make its contribution to providing Europe with energy.'
- (41) *"See* võimaldab **Eestil** anda oma this:NOM;SG enable:PRS;3SG Estonia:ADE give:INF own:NOM;SG demokraatliku ühiskonna kuiunemisse panus contribution:NOM;SG democratic:GEN;SG society:GEN;SG development:ILL;SG Ukrainas," ütles Paet. (ETT) Ukraine: INE say: PST; 3SG Paet: NOM "This allows Estonia to make its contribution to the development of a democratic society in Ukraine," Paet said.'

As the verb *võimaldama* carries little or no imperative meaning (unlike *soovitama*), there is no discernible difference in meaning between the

genitive and nominative object in sentences like (40) and (41), which may help explain why such variation is possible.

One further source of object case variation in the enabling-obligating construction is coordination. In 14 of the 100 sentences with the verb *soovitama*, the object appears in an infinitive phrase constituting the second or later conjunct in a coordinate structure, as in the following example where the infinitive phrases headed by *pöörduda* 'to turn' and *selgitada* 'to clarify' are coordinated:

(42) *Igal juhul soovitaksin pöörduda konsultatsioonile* every:ADE case:ADE;SG recommend:COND;1SG turn:INF consultation:ALL;SG *ning selgitada välja Teile sobiv võimalus*. (ETT) and clarify:INF out 2PL:ALL appropriate:NOM;SG possibility:NOM;SG 'In any case, I'd recommend that you go in for a consultation and find out which option suits you.'

Out of these 14, the object appears in the nominative 12 times (86%); in the other 86 sentences, the nominative appears 51 times (59%). The difference is far more striking with the verb *võimaldama*: when the infinitive phrase containing the object appears as the second or later conjunct in a coordinate structure, the nominative object appears 60% of the time (9/15), compared to only 16% (14/85) for all other sentences. The same pattern holds for the verbs *lubama* and *käskima* as well, although the sample contains relatively few sentences in which these verbs are modified by coordinate structures. For *lubama*, all four such sentences feature nominative objects, compared to only 11 of the remaining 96 sentences (11%); for *käskima*, nominative objects appear in seven of the eight sentences featuring coordination (88%) and in 34 of the 92 remaining sentences (37%).

It is thus clear that there is a very strong relationship in the enablingobligating construction between coordination and total object case; objects in the second or later element of a coordinate structure are far more likely to appear in the nominative than are objects which do not meet that description. Perhaps the most vivid illustrations of this relationship are the following examples, in which both nominative and genitive total objects appear in the same sentence:

- (43) Seetõttu soovitasin Musta mere ma thus recommend:PST;1SG 1SG:NOM black:GEN;SG sea:GEN;SG afääri omaks tunnistada, anda sellele nii affair:GEN;SG own:TRANS;SG recognize:INF give:INF that:ALL;SG as hea näo kui võimalik, ning kuulutada as possible:NOM;SG and declare:INF good:GEN;SG face:GEN;SG vastu.⁸ (ETT) sõda Entente war:NOM;SG Entente:GEN against 'Thus I recommended to acknowledge the Black Sea affair, put as good a face on it as possible, and declare war on Entente.'
- (44) Näiteks arutame läbi ja soovitame example:TRANS;SG discuss:PRS;1PL through and recommend:PRS:1PL teistele=gi taasavada igas Eestimaa vallas other:ALL;PL=too reopen:INF every:INE Estonia:GEN municipality:INE;SG vähemasti **ühe** avaliku külasauna ning sinna at.least one:GEN;SG public:GEN;SG village.sauna:GEN;SG and there mittetulundusühinguna kohalik asutada saunaklubi. (ETT) establish:INF nonprofit.association:ESS;SG local:NOM;SG sauna.club:NOM;SG 'For example, we are discussing and we recommend to others as well to re-open at least one public sauna in each Estonian municipality and establish a non-profit local sauna club there.'

These examples defy conventional explanation. There is no semantic or pragmatic difference between the final conjuncts (with nominative objects) and the preceding conjuncts (with genitive objects); it cannot reasonably be claimed that the final conjuncts are more imperative-like. Nor can the answer be found in information structure, as all of the conjuncts in (43) and (44) appear in the role of focus. The only plausible explanation is that the final conjuncts, due to their location in the sentence, are thus (in the mind of the language user) significantly less closely connected to the finite verb than are the initial conjuncts. Presumably, this means that these final conjuncts are more closely connected to the infinitive that they modify than to the finite verb, which would indeed result in a decreased preference for

The forms *afääri* and *sõda* here both coincide with the partitive forms of the respective nouns; however, as the verbs they modify here require total objects, it can be safely assumed that in this sentence, they are not partitive forms. (While the verb *kuulutama* does take a partial object in the meaning of "to announce, preach, propagate", this is not so for the performative meaning of "to declare"; in fact, the first example given under *kuulutama* in the most recent edition of the normative dictionary Eesti Õigekeelsussõnaraamat (ÕS 2013: 414) is *Kuulutas naaberriigile sõja* 'Declared war on the neighboring country', using the total object form *sõja* 'war:GEN'.

the genitive, since non-finite clauses do not govern genitive total objects with the same regularity that finite clauses do.

This variation in total object case also serves as a challenge to de Hoop and Malchukov's account of DOM as a vehicle for the functions of DISTINGUISHABILITY and IDENTIFY. There is clearly no basis for suggesting that DISTINGUISHABILITY is the motivating factor behind this variation; the need to distinguish subject from object is no greater in the reported command or enabling-obligating constructions than it is in other non-finite constructions discussed in this article. IDENTIFY, meanwhile, is a problematic explanation in that while some of the variation in total object case in these constructions can be explained with reference to imperativity, not all (or even most) of it can. The relationship between imperativity and total object case is tenuous to begin with, as evidenced by e.g. the contradictory results shown above for the verbs käskima and soovitama, and the prevalence of the nominative total object in phrases appearing as non-initial conjuncts in a coordinate structure cannot be ascribed to any semantic or pragmatic features of the object nominal, but rather has to do with the way in which the language user processes the sentence he/she is producing. Thus the opposition between genitive and nominative total objects in these constructions does not appear to perform either of the functions described by de Hoop and Malchukov; in fact, it does not appear to have any functional explanation at all.

Another factor influencing total object case in the enabling-obligating construction is the presence or absence of a logical subject (in the adessive) of the non-finite clause. This variation can be seen in the example sentences provided earlier: adessive arguments are present in (38), (40), and (41), absent in (39), (42), and (43). Table 2 shows total object case in the enabling-obligating construction for the four verbs previously examined, broken down by whether or not the sentence contains an adessive logical subject argument:

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Table 2. Total object case variation in the enabling-obligating construction, by presence/absence of adessive subject argument

Verb	OvertSubj	Nominative	Genitive	Nominative %
soovitama	+	25	6	81%
soovitama	-	40	29	58%
võimaldama	+	10	20	33%
võimaldama	-	13	57	19%
lubama	+	12	32	27%
lubama	-	3	53	5%
käskima	+	27	18	60%
käskima	-	14	41	25%
Total	+	74	76	49%
Total	-	70	180	28%

The above data show that for all four verbs, the nominative object is more common when there is an overt adessive subject argument than when there is not. One explanation for this may be that the presence of the overt adessive argument actually facilitates the analogy with the imperative. The adessive argument in the enabling-obligating construction represents the addressee of the command/recommendation/etc.; in the imperative, the addressee is always explicitly mentioned via the verb form. Thus making the addressee explicit increases the similarity between the enabling-obligating construction and the imperative. It is difficult to prove that this is in fact the reason for the results observed here; in any case, however, the persistence of the pattern across all four verbs examined strongly suggests that there is a real effect. These data indicate that, in the enabling-obligating construction, logical (non-grammatical) subjects have an effect on object case that grammatical subjects do not; while the actual presence or absence of a grammatical subject in a given sentence is irrelevant to object case (as per Kiparsky's amended version of Jahnsson's Rule), this is not true for the logical subject of the non-finite clause in the enabling-obligating construction.

6. Construction-specificity in DO encoding patterns

The evidence presented in sections 3 and 4 demonstrates that the (a)symmetricality of the DO encoding alternation in a given infinitival construction depends heavily on the extent to which the construction resembles the prototypical +overt subject or -overt subject constructions.

However, with very few exceptions, symmetric and asymmetric alternations in Estonian express precisely the same differences in meaning (contrary to Iemmolo's generalization introduced in section 2 above), i.e. differences in aspect, polarity, and quantification. Variation in object case driven by the referential properties of the object is quite rare.

In finite clauses, word order (or information structure in general) does not affect object case; the choice between total and partial object is driven entirely by the criterion of boundedness. Thus, in the following sentences, only the total object is possible, despite the fact that the object is in sentence-final position in (45) and in sentence-initial position in (46).

- (45) *Mari* ostis eile **huvitava raamatu**.

 Mari:NOM buy:PST;3SG yesterday interesting:GEN;SG book:GEN;SG
- (46) *Huvitava raamatu ostis Mari eile.* 'Mari bought an interesting book yesterday.'

However, in some non-finite constructions, there is a strong relationship between object case and word order. One such construction is the dainfinitive assessment construction, exemplified earlier in (17). While some adjectives in this construction favor either the total or partial object so strongly that there is virtually no variation to study, the adjectives that do allow for the use of either object case show a very clear pattern: objects at or near the beginning of the sentence appear far more often in the partitive, while objects at or near the end of the sentence favor the nominative. While it is difficult to determine the information-structural properties of objects in isolated sentences stripped of their larger context (as the data is presented in the corpus), it suffices here to assume that sentence-initial position correlates strongly with topicality, while sentence-final position correlates with focus (according to Lindström (2006: 879), sentence-final position is the unmarked position for non-contrastive focus in Estonian). Hence topicalized objects (47) appear in the partitive more often than do focused objects (50)9. This is true for both symmetric and asymmetric object case

The statistical tendency for topicalized objects to appear in the partitive more often than focused objects holds for both finite and non-finite clauses; however, this merely demonstrates the existence of a correlation between topicalization and object case, and does not indicate a causal relationship (in either direction). The absence of a causal relationship between topicalization (or word order more generally) and object case in finite clauses can easily be demonstrated via examples such as (45) and (46) above; the same argument cannot be made for non-finite constructions.

alternations. Ogren (2014: 178) provides the following data, based on newspaper text corpora from the years 1995–2007 (material from the newspapers Postimees, Eesti Päevaleht and Õhtuleht), for assessment construction sentences featuring the adjective *lihtne* 'easy', in which both the total object (in the nominative) and the partial object appear quite productively:

Table 3. Asymmetric object case variation (partitive-nominative) in the *da*-infinitive assessment construction featuring the adjective *lihtne* 'easy', by word order (O = object, V = non-finite verb, A = adjective)¹⁰

Word order	Partial object	Total object	Total	Partial object %
Object-initial (OVA, OAV)	190	7	197	96%
Object-central (AOV, VOA)	69	50	119	58%
Object-final (AVO, VAO)	34	99	133	26%
Total	293	156	449	65%

Some examples of object-initial (47), object-central (48), (49) and object-final (50) word order (note that in this context the words "initial", "central" and "final" refer only to the position of the object relative to the adjective *lihtne* and the *da*-infinitive verb form, not to the position of the object in the sentence as a whole):

- (47) **Piraattarkvara lõpptarbijat** on lihtne üles pirate.software:GEN;SG end.user:PART;SG be:PRS;3SG easy:NOM;SG up **leida** ja sellega saaks politsei hakkama. (EPL) find:INF and that:COM;SG get:COND;3SG police:NOM;SG begin:SUP 'The end user of pirated software is easy to find and the police could manage it.'
- (48) *Meil* aga müügivõrk olemas, meil on 1PL:ADE be:PRS:3SG but sales.network:NOM:SG be:SUP:INE 1PL:ADE lihtne üks toode juurde easy:NOM;SG one:NOM;SG product:NOM;SG additionally be:PRS;3SG lisada. (EPL) add:INF 'But we have a sales network in place, it's easy for us to add one more product.'

The data presented in this table (and in all other tables throughout the article) are based only on infinitival clauses which, if they were re-phrased as finite clauses, would necessarily feature total objects. In other words, features that cause the use of the partial object in any construction – negation, unbounded action, unbounded object nominal – are not under consideration and do not affect the quantitative data presented here.

- (49) Tegelikult on selle peo jaoks väga actually be:PRS;3SG this:GEN;SG party:GEN;SG for very lihtne endale kostüümi¹¹ muretseda. (ÕL) easy:NOM;SG self:ALL;SG costume:PART;SG procure:INF 'It's actually very easy to find oneself a costume for this party.'
- (50) Paralleelselt sellega on tema arvates
 in.parallel that:COM;SG be:PRS;3SG 3SG:GEN think:CON
 lihtne rajada ka jalakäijate tunnel. (EPL)
 easy:NOM;SG build:INF also pedestrian:GEN;PL tunnel:NOM;SG
 'In parallel to that, he also believes it is easy to build a pedestrian tunnel.'

The same relationship between word order and object case can also be observed in the *da*-infinitive object construction, featuring symmetric object case alternation (data from Ogren 2013: 57).

Table 4. Symmetric case variation (partitive-genitive) in the *da*-infinitive object construction with various verb chains, by word order

Verb chain	Partial object	Total object	Total	Partial object %
OV_{da} word order				
leida tahtma 'to want to find'	4	5	9	44%
leida püüdma 'to try to find'	12	4	16	75%
leida soovima 'to wish to find'	7	3	10	70%
korraldada tahtma 'to want to organize'	9	15	24	38%
korraldada soovima 'to wish to organize'	8	4	12	67%
Total	40	31	71	56%

¹¹ The partitive form *kostüümi* is identical to that of the genitive; however, as this construction takes nominative total objects rather than genitive, it is clear that the form used in (49) is the partitive.

Verb chain	Partial object	Total object	Total	Partial object %
$V_{da}O$ word order				
leida tahtma	15	40	55	27%
leida püüdma	24	19	43	56%
leida soovima	29	30	59	49%
korraldada tahtma	2	51	53	4%
korraldada soovima	4	21	25	16%
Total	74	161	235	31%

Examples (51–55) illustrate various verb chains in the object construction. In (51–54), the expected relationship between word order and object case is observed (total object with VO, partial object with OV), while in (55), the opposite is found (total object with OV).

- (51) Vald tahab Gotmansi sõnul torni municipality:NOM;SG want:PRS;3SG Gotmans:GEN according.to tower:GEN;SG omanik edasi olla ja torni investeerijat leida. (PM) owner:NOM;SG ahead be:INF and tower:GEN;SG investor:PART;SG find:INF 'According to Gotmans, the municipality wants to retain ownership of the tower and find an investor for it.' (OV_{da}, partitive)
- (52) Vedomosti teatel tahab valitsus

 Vedomosti:GEN announcement:ADE;SG want:PRS;3SG government:NOM;SG

 leida juuni jooksul Vjahhirevile mantlipärija. (EPL)

 find:INF june:GEN during Vjahhirev:ALL heir:GEN;SG

 'According to Vedomosti, the government wants to find an heir to Vjahhirev by the end of June.' (V_{da}O, genitive)
- (53) Isamaaliit soovib rahvahääletust korraldada Pro.Patria.Union:NOM wish:PRS;3SG referendum:PART;SG organize:INF juba järgmise aasta suvel. (EPL) already following:GEN;SG year:GEN;SG summer:ADE;SG 'The Pro Patria Union wishes to organize a referendum as early as next summer.' $(OV_{da}, partitive)$

- (54) Tegemist onpoliitiliselt tundliku teemaga, doing:PART;SG be:PRS;3SG politically sensitive:GEN;SG topic:COM;SG seetõttu soovivad EL-iiuhid Euroopa therefore wish:PRS;3PL EU:GEN leader:NOM;PL Europe:GEN juhtimisel Valuutainstituudi korraldada Monetary.Institute:GEN leading:ADE;SG organize:INF põhjaliku uurimuse. (EPL) thorough:GEN;SG study:GEN;SG 'It is a politically sensitive topic, therefore EU leaders wish to organize a thorough study led by the European Monetary Institute.' ($V_{da}O$, genitive)
- (55) *Ta* avaldas lootust, et ka Eesti 3SG:NOM express:PST;3SG hope:PART;SG that also Estonia:GEN soovib ESCO Holdinguga mõistliku riik state:NOM;SG wish:PRS;3SG ESCO Holding:COM reasonable:GEN;SG lahenduse leida. (EPL) solution:GEN:SG find:INF 'He expressed hope that the Estonian government also wishes to find a reasonable solution with ESCO Holding.' (OV_{da} , genitive)

The data in Table 4 demonstrate that the relationship between object case and word order is not specific to either symmetric or asymmetric DO encoding, but rather to a particular type of construction, namely *da*-infinitive constructions. While the strength of the relationship may differ among *da*-infinitive constructions (as Tables 4 and 5 indicate, it is considerably stronger in the assessment construction than in the object construction), the fact that the relationship exists at all serves to distinguish these constructions from finite clauses (where altering the word order in a sentence does not affect the choice of object case, see examples 45–46) with respect to DO encoding.

One further example of construction-specificity in Estonian DO encoding patterns is that of the plural total object. Whereas in the singular, the total object may appear in either nominative or genitive, in the plural, only the nominative is possible. This difference cannot be explained by any semantic or referential properties, as the meaning differences expressed by the partial vs. total object distinction are the same in the plural as in the singular. Furthermore, while the nominative total object in the singular is tied to the absence of an overt grammatical subject, thus avoiding a situation where subject and object receive the same case marking, such situations do arise when a plural subject meets a plural total object:

(56) *Poisid kutsusid tüdrukud teatrisse*. boy:NOM;PL invite:PST;3PL girl:NOM;PL theater:ILL;SG 'The boys invited the girls to the theater.'

In such situations, the morphological ambiguity is resolved by an appeal to context, encyclopedic knowledge, the animacy hierarchy (assuming that the higher-animacy argument is the subject) or, if all else fails, word order; as SO word order is far more common in Estonian than OS word order, it can generally be assumed (with the exception of sentences featuring contrastive stress) that in sentences such as (56) the first argument is the subject and the second is the object (Lindström 2004: 47). One possible motivation for the exclusively asymmetric nature of the DO encoding alternation in the plural (in other words, the absence of an available total object case form other than the nominative) lies in frequency: as sentences like (56) are relatively uncommon (far less common than analogous examples in the singular), the need to morphologically disambiguate between plural subject and plural total object is fairly minimal. Hakulinen and Karlsson (1975: 356), discussing the same phenomenon in Finnish, make a similar argument: they point to the use of the partitive plural to mark indefinite quantities of count nouns as a reason why accusative (i.e. non-partitive) objects are less common in the plural than in the singular). In any case, though, this difference between singular and plural object marking cannot be explained by any difference between the semantic or referential properties of plural objects as compared to singular objects; rather, it should be seen as a quirk of the plural total object construction that only one total object case is available (see Künnap 2008 for a discussion of the historical development of accusative plural marking in the Finnic languages).

Finally, total object marking in the Estonian jussive does not follow the cross-constructional rules outlined in this article. The jussive is used to express wishes, concession, or evidentiality in the form of commands referred from sources not present in the given speech situation (Erelt 2012: 30-31). Its present-tense forms are identical to that of the third-person singular form of the imperative (ending in -gu/-ku). Like the imperative, the jussive features exclusively nominative total objects; unlike the imperative, however, jussive sentences contain grammatical subjects, as in (57) below:

(57) *Ütles*, võtku apteeki etkaasa ma say:PST;3SG that take:JUSS 1SG:NOM pharmacy:ILL;SG with ja proovigu, isikuttõendav dokument identifying:NOM;SG document:NOM;SG and try:JUSS äkki õnnestub. (ETT) maybe succeed:PRS;3SG 'He told me to take an identification document with me to the pharmacy and try, maybe it will work.'

The jussive thus represents a syntactic environment in which DISTINGUISHABILITY could be expected to influence object case marking (given the presence of a grammatical subject), but does not. The result is structural ambiguity similar to that observed in conjunction with the plural total object in (56), but here possible in the singular as well:

(58) *Poiss* kutsugu **tüdruk** teatrisse. boy:NOM;SG invite:JUSS girl:NOM;SG theater:ILL;SG 'May the boy invite the girl to the theater.'

As in the similar example of (56), such ambiguities are resolved by context, the animacy hierarchy, and/or word order.

7. A brief comparison with Finnish

While this article has focused on Estonian, it should be noted that the great majority of the patterns discussed here can be observed in Finnish as well. The primary meaning differences expressed by the distinction between total and partial object in Estonian (see section 3) are expressed by the very same distinction in Finnish. There are some differences in the object marking of personal pronouns, for which Finnish has distinct accusative forms, but the total object case assignment rules in the two languages are nearly identical. As in Estonian, the plural total object in Finnish appears exclusively in the nominative, while in the singular, the genitive total object appears in finite clauses in the indicative and conditional, and the nominative total object appears in the impersonal and the first- and secondperson imperative. The similarities between Estonian and Finnish extend to non-finite constructions as well, as the nominative total object appears in Finnish A-infinitive (generally corresponding in both form and function to the Estonian da-infinitive) constructions typically lacking an overt grammatical subject, while constructions typically featuring an overt grammatical subject take genitive total objects. Accordingly, the closest Finnish equivalents of all but one of the Estonian *da*-infinitive constructions listed in section 4 all feature the same total object case as found in Estonian:

- The assessment construction:
- (59) On helppoa **löytää uusi työpaikka**.
 be:PRS;3SG easy:PART;SG find:INF new:NOM;SG workplace:NOM;SG 'It's easy to find a new job.'
- The postposed attribute construction:
- (60) Päätös ostaa asunto on tärkeä.

 decision:NOM;SG buy:INF apartment:NOM;SG be:PRS;3SG important:NOM;SG

 'The decision to buy an apartment is important.'
- The essive adverbial construction, corresponding to the Estonian translative adverbial construction:
- (61) Tavoitteena on **löytää** ongelmaan **ratkaisu**. goal:ESS;SG be:PRS;3SG find:INF problem:ILL;SG solution:NOM;SG 'The goal is to find a solution to the problem.'
- The necessive construction with the verb *täytyä* 'must, have to' + logical subject in genitive, corresponding to the Estonian construction with *tulema* + logical subject in adessive:
- (62) Minun täytyy **ostaa uusi jääkaappi**.

 1SG:GEN must:PRS;3SG buy:INF new:NOM;SG refrigerator:NOM;SG 'I have to buy a new refrigerator.'
- The object construction:
- (63) Haluan ostaa uuden jääkaapin.
 want:PRS;1SG buy:INF new:GEN;SG refrigerator:GEN;SG 'I want to buy a new refrigerator.'

The lone exception is the Finnish first infinitive translative purpose construction, which, unlike the Estonian da-infinitive purpose construction, takes a genitive total object:

(64) Katselen mainoksia **löytääkseni parhaan** look:PRS;1SG advertisement:PART;PL find:INF:TRANS:POSS;1SG best:GEN;SG **hinnan**.

price:GEN;SG

'I'm looking at the advertisements (in order) to find the best price.'

Even here, while they arrive at different outcomes, the two languages follow the same principle in determining total object case. The subordinate clause in (64), while it lacks conventional grammatical subject marking, does mark the subject by way of the possessive suffix attached to the infinitive. As such, we need merely expand the notion of 'grammatical subject' to include all subject-marking morphemes affixed to verbs, and then we can conclude that this Finnish example conforms to the general rule that the genitive total object appears in constructions featuring overt grammatical subject marking. The Estonian purpose construction, lacking any subject-marking morpheme, features the nominative total object as expected (see example 19):

(65) Vaatan reklaame, et leida parim hind.
look:PRS;1SG advertisement:PART;PL to find:INF best:NOM;SG price:NOM;SG
'I'm looking at the advertisements (in order) to find the best price.'

There are, however, some noteworthy differences in object marking between the two languages. One significant difference is that Finnish lacks an equivalent of the Estonian enabling-obligating construction in which both genitive and nominative total objects appear. The Finnish construction structurally closest to the Estonian enabling-obligating construction features a logical subject of the non-finite clause in the genitive (where Estonian uses the adessive), as in (66) below:

(66) *Isä* käski pojan **tuoda kirveen/*kirves**.
father:NOM;SG order:PST;3SG boy:GEN;SG bring:INF axe:GEN;SG/axe:NOM;SG
'The father ordered the boy to bring the axe.'

However, as this example illustrates, Finnish differs from Estonian in that only the genitive total object is possible. What could explain this difference between the two languages? In section 5, it was postulated that the use of the nominative total object in the Estonian enabling-obligating and reported command constructions is motivated by structural parallels between those constructions and the imperative. These structural parallels, however, are not shared with Finnish. The structural progression from imperative to

indicative in Estonian shown in (31–37) depends for its continuity on the particle-ized verb form *palun*, which Finnish lacks a formal and functional equivalent of, as Finnish *pyydän* 'I ask, request' has not been lexicalized in the same way that Estonian *palun* has. As such, there is no clear motivation in Finnish for the use of the nominative, whereas the genitive is clearly motivated by DISTINGUISHABILITY, as the use of a nominative total object would result in there being no morphological distinction between the subject of the sentence and the object of the non-finite clause; as Hakulinen and Karlsson (1975: 343–346) have shown, total object case in Finnish infinitival constructions is almost entirely predictable from the need (or lack thereof) to morphologically distinguish the object from the sentence's nominative subject.

Another example of DISTINGUISHABILITY in Finnish, not found in Estonian, is the use of the genitive total object in third-person imperative sentences, thereby avoiding structural ambiguity akin to that occurring in the Estonian jussive in (58):

(67) Poika kutsukoon **tytön** teatteriin. boy:NOM;SG invite:IMP;3SG girl:GEN;SG theater:ILL;SG 'May the boy invite the girl to the theater.'

There are also a number of differences between Estonian and Finnish in the use of total vs. partial objects in infinitival constructions, a full treatment of which is outside the scope of this article. However, one significant difference lies in the fact that unlike in Estonian, the Finnish motion verb + *mA*-infinitive construction (technically the *mA*-infinitive illative) allows both total and partial objects, meaning that the total object is possible (although not obligatory) when the action and object are bounded:

(68) Menin ostamaan uuden auton / uutta autoa.
go:PST;1SG buy:SUP:ILL new:GEN;SG car:GEN;SG new:PART;SG car:PART;SG 'I went to buy a new car.'

In Estonian, as shown in (13) and (14) earlier, the boundedness criteria do not apply in this construction, and only the partial object is possible:

(69) Läksin ostma uut autot / *uue auto.
go:PST;1SG buy:SUP new:PART;SG car:part;SG new:GEN;SG car:GEN;SG 'I went to buy a new car.'

Object marking in Finnish, at least in the constructions examined above, thus adheres more closely to general rules (boundedness for the total/partial object opposition, and Jahnsson's Rule, i.e. DISTINGUISHABILITY, for the nominative/genitive total object opposition) than it does in Estonian. Finnish not only has less construction-internal object case variation than does Estonian, but also has fewer construction-specific factors influencing object case.

8. Conclusion

In this article, I have illustrated the parameters governing DO encoding alternations in Estonian: the symmetric opposition between genitive and partitive, the asymmetric opposition between nominative and partitive, and the opposition between the nominative and genitive as total object cases. While there are well-established general principles that explain the great majority of variation in DO encoding, object case in Estonian nevertheless shows a significant degree of construction-specificity. Furthermore, there is no relationship between the meaning differences expressed by the DO encoding alternation in a given construction and the (a)symmetricality of that opposition; the exact same differences in meaning are expressed in some constructions by a symmetric DO encoding alternation and in other constructions by an asymmetric alternation. Only in the da-infinitive assessment construction do we find meaning differences expressed by an asymmetric alternation that are not expressed in other constructions by a symmetric alternation; moreover, these meaning differences are related to polarity and other semantic properties of the assessment adjective, not to referential properties of the DO. As such, Estonian represents an exception to Iemmolo's (2013) generalization regarding the different parameters governing symmetric and asymmetric alternations; it falls much more closely in line with the more general claims of de Hoop and Malchukov (2008) concerning the two basic motivations of DO encoding alternation, DISTINGUISHABILITY and IDENTIFY. Even de Hoop and Malchukov's generalization, however, proves inadequate to describe the variation in total object case observed in the Estonian reported command and enablingobligating constructions.

From a typological perspective, the most intriguing aspect of object case variation in Estonian is the presence of numerous factors – word order, coordination, the presence/absence of adessive logical subject arguments, semantic properties of assessment adjectives, imperativity (as a semantic

rather than grammatical feature) — which play a substantial role in object case only in non-finite clauses. In this, as well as in the distribution of nominative and genitive total objects, prototype effects are quite visible, as even sentences which clearly carry a perfective meaning (or rather sentences which do not support an imperfective aspectual interpretation) may feature partial objects, because the construction in question falls into a gray area between the prototypical total object construction and the prototypical partial object construction. From a cognitive perspective, this suggests that the choice of object case is driven more by analogy than by consideration (whether conscious or sub-conscious) of the temporal boundedness of the event being described. This in turn leads to substantial inconsistency in object case usage in these constructions, inconsistency that does not appear in finite clauses.

Corpus abbreviations

EPL – Eesti Päevaleht ETT – etTenTen PM – Postimees ÕL – Õhtuleht

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