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The Subject of the Estonian *des*-converb¹

Abstract

The Estonian *des*-construction is used as both an implicit-subject and an explicit-subject converb. This article concentrates on the subjects of both and also compares them. In the case of implicit-subject converbs, it is argued that not only the (semantic) subject of the superordinate clause can control the implicit subject of the *des*-converb, but also the most salient participant (which can sometimes even be the undergoer) of the superordinate clause. The article also discusses under which conditions the undergoer of the superordinate clause can control the implicit subject of the converb. In the case of explicit-subject converbs it is demonstrated which subjects tend to be explicitly present in the *des*-converb and which are the main properties of the structure and usage of explicit-subject *des*-converbs.

1. Background

A converb is described as a “verb form which depends syntactically on another verb form, but is not its syntactic actant” (Nedjalkov 1995: 97) and as “a nonfinite verb form whose main function is to mark adverbial subordination” (Haspelmath 1995: 3). The Estonian *des*-form is a nonfinite verb form that cannot be the main verb of a sentence. It acts as an adjunct and delivers some adverbial meaning. Hence, the Estonian *des*-form is a typical converb.

One of the main questions in the discussion about converbs is the subject of the converb, consisting of two issues: whether the subject is explicitly present in the converb and if not, then what controls the (implicit)

¹ I thank Marja-Liisa Helasvuo, Liina Lindström, and two anonymous reviewers for their highly valuable comments and suggestions. The study was supported by the project “Subject expression in the Finnic languages: Interactional and cognitive perspectives” (funded by the Academy of Finland) and by the grant PUT90 (funded by the Estonian Research Council).

subject. Based on these issues, there are two major distinctions for converbs. On the one hand, Nedjalkov (1995) and Itkonen (2001) divide converbs into groups based on the co-referentiality of the subject of the converb and the subject of the superordinate clause. While Itkonen (2001: 345) distinguishes same-subject and different-subject converbs, Nedjalkov (1995: 110–111) divides converbs into three groups: same-subject, different-subject and varying-subject converbs. On the other hand, König and van der Auwera (1990) and Haspelmath (1995: 9–11) divide converbs according to the presence or absence of an overt subject in the converb construction. König and van der Auwera distinguish between two types of converbs (the reduced clause has or does not have a subject of its own), but Haspelmath (1995) distinguishes three types: implicit-subject, explicit-subject and free-subject converbs. Kortmann (1991) also takes the presence or absence of the explicit subject as a starting point and distinguishes two non-finite constructions that convey adverbial meaning in English: free adjuncts, which do not have an overt subject NP, and absolutes, which have an overt subject NP.

Of course, the two aforementioned divisions are not independent of each other. Růžicka (1978: 229) and König and van der Auwera (1990: 338) claim that if there is no overt subject in the non-finite subordinate clause, the subject is (most often) the same as the subject of the superordinate clause. Haspelmath (1995: 10–11) argues that there is a direct and functionally motivated connection between the two divisions: typically an implicit-subject converb is also a same-subject converb, an explicit-subject converb has a different subject than the superordinate clause, and a free-subject converb is a varying-subject converb. The Estonian examples (1a–b) illustrate the typical cases of implicit-subject/same-subject converbs and explicit-subject/different-subject converbs², respectively. In sentence (1a), the subject of the superordinate clause (Donald) is also the implicit subject of the converb, he is the one who came back from the lunch break, but in sentence (1b), both clauses have their own explicit subject that are not the same: *ema* ‘mother’ in the

² Subject is used here and hereafter as a semantic notion; the term “grammatical subject” refers to syntactic notion of a subject. Furthermore, an explicit subject of a converb is in the genitive case in Estonian. As the genitive is not used to encode grammatical subjects in Estonian (nominative and partitive are, cf. for example Erelt, Kasik, Metslang, Rajandi, Ross, Saari, Tael & Vare 1993; Metslang 2013), an explicit subject of a converb is, according to Estonian grammar (Erelt et al. 1993: 65–66), analyzed as an adjunct (an agent adverbial).

superordinate clause and *laul* ‘song’ in the converb. Haspelmath (1993: 30) indicates that prescriptive grammarians have also based the rules about converbs on the connection previously described: they have declared non-subject-controlled converbal constructions non-normative. This approach was also seen in Estonian grammar books in the first half of the 20th century (see 1.2).

- (1) a. *Lõunalt tagasi tulles avastas Donald uue faksi.*
 lunch.ABL back come.CONV discover.PST.3SG Donald new.GEN fax.GEN
 ‘Coming back from lunch, Donald discovered a new fax.’
- b. *Laulu lõppedes tõstis ema silmad.*
 song.GEN end.CONV raise.PST.3SG mother eye.PL
 ‘When the song ended, mother raised her eyes.’

As examples (1a–b) demonstrate, both implicit-subject and explicit-subject *des*-converbs can be used in Estonian. What are the main differences between these two types? Are there any constraints in their usage and are there differences between the entities that tend to appear as subjects either in implicit or in explicit subject converbs? To answer these questions, I will follow König and van der Auwera’s (1990) and Haspelmath’s (1995) division and divide all the *des*-constructions based on the presence or absence of the subject of the converb construction.

In the case of implicit-subject *des*-converb constructions, I am interested in which participant can control the implicit subject of the converb construction. Does it have to be the actor³ of the main clause, as the academic grammar of Estonian (Erelt et al. 1993: 261) claims, or is the ability of control limited more on pragmatic terms, as Haspelmath’s (1995) hypothesis claims? Haspelmath (1995: 32–37) poses the hypothesis (see section 3) that the controller of the converb is often a “pragmatically highly salient participant [...], it is often the participant whose mental perspective is taken in the sentence”.⁴ It has been shown earlier (Uuspõld 1972; Erelt et al. 1993) that in Estonian one cannot connect the ability to control the implicit subject of the *des*-converb only to the grammatical subject of the superordinate clause, i.e. to purely syntactic grounds. In this article, I raise

³ I use the terms *actor*, which corresponds to semantic subject, and *undergoer*, which corresponds to semantic object (see Van Valin 2005).

⁴ Haspelmath (1995: 36) argues that most often, the grammatical subject is the most salient participant of a clause.

the question of whether the control of the implicit subject of the *des*-converb is limited to the actor of the superordinate clause or not.

In the case of explicit-subject *des*-converb constructions, I am interested in determining which entities tend to occur as a subject in this construction. As neither the academic grammar of Estonian (Erelt et al. 1993) nor the new overview of Estonian complex sentences (Erelt 2014) address the comparison between implicitly and explicitly expressed subjects of *des*-converb constructions, one aim of this article is to find out whether there are any differences between these. Mainly, do these types tend to perform different adverbial functions in the sentence, and do the entities of the subjects of these two types differ? To answer the latter question I mark in my data all the subject entities either as animate or inanimate. The group of animate entities contains humans (either author/speaker, interlocutor, neutral person, generic person, or impersonal entity) and animals, whereas inanimate entities include objects, organizations, substances, abstract entities, and also computers and diseases, which often act in the sentence similarly to humans.

In the next sub-sections I will make some notes about the morphology and functions of the Estonian *des*-form and give an overview of the earlier discussion of the subject of the *des*-form. Section 2 introduces the data. Section 3 deals with the implicit subject of the *des*-converb and demonstrates which participant controls the subject of the *des*-converb. It also answers in which conditions the controller of the *des*-converb can be other than the actor of the superordinate clause. Section 4 concentrates on the explicit-subject *des*-converbs and shows which are the main differences between explicit- and implicit-subject *des*-converbs and what kind of subjects tend to be explicitly expressed in the construction.

1.1 The Estonian *des*-form

The Estonian *des*-form has two tenses: present (2a) and past (2b). The past tense of the *des*-form also has two voices: personal (2b) and impersonal (2c) (Erelt et al. 1993: 260). The past tense form (2b–c) is an analytical form that consists of the *des*-form of *BE* (*olles*) and participial form of the main verb. Using the *des*-form of *BE* in the past tense is optional and it is mostly left out and only the participial form acts as a converb.⁵ Valijärvi

⁵ Oskar Loorits (1923: 149–150) suggested the use of participial forms as past converbs at the beginning of the 20th century (see also Erelt 2014).

(2004) has considered the past participial forms *-nud* and *-tud* as independent converbs.

- (2) a. *Fotograaf kavatseb Eestis olles töötada.*
 photographer plan.3SG Estonia.INE be.CONV work.INF
 ‘The photographer is planning to work during his/her stay in Estonia.’
- b. (*Olles*) *varemgi siin töötanud, tunneb ta hästi*
 be.CONV earlier here work.PST.PTCP know.3SG s/he well
meie inimesi.
 our.GEN people.PL.PRT
 ‘Having worked here before, s/he knows our people well.’
- c. (*Olles*) *üksi koju jäetud,*
 be.CONV alone home.ILL leave.PST.IMPRS.PTCP
oli ta algul nukker.
 be.PST.3SG s/he at.first sad
 ‘Having been left home alone, s/he was sad at first.’

The negation of the *des*-construction mainly uses another non-finite construction: the abessive case of the *ma*-infinitive (3a). It is also possible to mark negation by the negation particle *mitte* (3b). This kind of negation is rather rare.

- (3) a. *Perele mõtlemata ta nõustus.*
 family.ALL think.INF.ABE s/he agree.PST.3SG
- b. *Perele mitte mõeldes ta nõustus.*
 family.ALL NEG think.CONV s/he agree.PST.3SG
 ‘S/He agreed without thinking of his/her family.’

According to Nedjalkov’s (1995: 106–110) semantic division of converbs, the *des*-construction belongs to the group of contextual converbs, as this construction can deliver several different adverbial meanings that are specified in the context. It can be used in a temporal (4a), causal (4b), modal⁶ (4c), conditional (4d), concessive (4e), or purposive (4f) adverbial meaning. (Cf. Uuspõld 1966: 96–117; Erelt et al. 1993: 264; Valijärvi 2004: 26–27.)

⁶ Following Kortmann’s (1998) and Valijärvi’s (2004) approach, modal converbs comprise all the converbs about which it is possible to ask the question *how?* (e.g. the converbs with the meaning of manner and instrument).

- (4) a. *Etenduse lõppedes püsis saalis vaikus.*
 play.GEN end.CONV stay.PST.3SG hall.INE silence
 ‘When the play ended, there was silence in the hall.’
- b. *Madson oli tema vana armastus, kes lõpetas temaga suhted, mõistes hukka noormehe narkoafääri.*
 Madson be.PST.3SG s/he.GEN old love who end.PST.3SG s/he.COM
 relationship.PL disapprove.CONV young.man.GEN drug.affair.GEN
 ‘Madson was his old lover, who ended the relationship, disapproving of the young man’s drug problem.’
- c. *Paur on teeninud oma autoriteedi lakkamatult seletades.*
 Paur be.3SG earn.PST.PTCP own.GEN authority.GEN endlessly
 explain.CONV
 ‘Paur has earned his authority by talking endlessly.’
- d. [*Ma ei raatsi talle haiget teha ja jalga lasta,*
aga paigale jäädes suren vist ära.
 but place.ALL stay.CONV die.1SG probably PTC
 ‘[I can’t bear to hurt him/her and go away,] but if I stay, I will probably die.’
- e. *Kasutades mineviku vormi ei pea ma silmas seda,*
 use.CONV past.GEN form.PRT NEG keep I eye.INE this.PRT
 [*et Liz Franzi pole enam elavate kirjas (en vie)*].
 ‘By using the past tense form, I don’t mean [that Liz Franz isn’t among the living anymore].’
- f. *Emase meelitamiseks ja oma territooriumist teatades teeb elukas konna krooksumise ja kääkkumise vahepealset häält.*
 female.GEN attracting.TRSL and own.GEN territory.ELA notify.CONV
 make.3SG animal frog.GEN croak.GEN and cuckoo.GEN
 cuckooing.GEN between.PRT noise.PRT
 ‘In order to attract a female and to mark its territory, the animal makes a noise that is something between a frog’s croaking and cuckoo’s cuckooing.’

In addition to the aforementioned, my data also demonstrated that the *des-*converb sometimes conveys a consecutive (5a) or explanatory/specifying meaning (5b).

- (5) a. [*Leda oli talust juba lahkunud, kuid*
Siniaas redutas veel seal, seades ohtu ka Luige,
 Siniaas linger.PST.3SG still there endanger.CONV also Luik.GEN
 [*kes truu sõbrana ei võinud teda ära ajada*]
 ‘[Leda had already left the farm, but] Siniaas was still lingering there, thus also
 endangering Luik, [who, being a good friend, couldn’t drive him away].’
- b. *Internetipanga klientide arv kasvas 361 000-ni*
 internet.banking.GEN client.PL.GEN number rise.PST.3SG 361,000-TRM
 (290 000), *moodustades 56% SEB klientide koguarvust.*
 290,000 make.up.CONV 56% SEB.GEN client.PL.GEN total.number.ELA
 ‘The number of internet banking clients increased to 361,000 (290,000),
 comprising 56% of SEB Estonia Bank’s clients.’

However, a converb construction can also express concomitance. It can connect two events that simply take place at the same time, without any additional semantic meaning (6). In these sentences, the subordination of one clause to another is only formal and these sentences can be paraphrased with coordinate sentences (Erelt 2014).

- (6) “*Olukord on sürraalne,*” *saatis Fordi julgeolekunõunik*
 situation be.3SG surreal send.PST.3SG Ford.GEN security.adviser
Brent Scowcroft Kissingerile telegrammi, lisades: [...].
 Brent Scowcroft Kissinger.ALL telegram.GEN add.CONV
 ‘‘The situation is surreal,’’ sent Brent Scowcroft, Ford’s security advisor, in the
 telegram to Kissinger, adding: [...].’

Although both explicit- and implicit-subject converbs can be used in Estonian, one cannot talk about a regular free-subject converb in Estonian, as it is not “free”, whether the subject is explicitly used or not. For example the use of the explicit subject in sentence (1a) would lead to the interpretation that Donald came back and someone else discovered the fax (7).

- (7) *Donaldi lõunalt tagasi tulles avastas ta*
 Donald.GEN lunch.ABL back come.CONV discover.PST.3SG s/he
uue faksi.
 new.GEN fax.GEN
 ‘When Donald came back from lunch, s/he discovered a new fax.’

Sahkai (2011: 96) even claims that implicit- and explicit-subject converbs are two separate constructions in the sense of construction grammar.

- (8) a. *Inimese* *vananedes* *muutub* *kusepõie* *talitlus*
 human.GEN get.older.CONV change.3SG urinary.bladder.GEN functioning
mitmel *viisil*.
 several.ADE way.ADE
 ‘As a person gets older, the functioning of his/her urinary bladder changes in several ways.’
- b. *Vananedes* *muutub* *kusepõie* *talitlus*
 get.older.CONV change.3SG urinary.bladder.GEN functioning
mitmel *viisil*.
 several.ADE way.ADE
 ‘As one gets older, the functioning of his/her urinary bladder changes in several ways.’

However, in rare cases the implicit- and explicit-subject converbs are interchangeable. For example, instead of the explicit-subject converb in sentence (8a), an implicit-subject converb could be used, as in (8b).

1.2 Earlier discussion about the subject of the *des*-converb

Up to the 1960s, the *des*-construction was mostly described from the prescriptive point of view; after that, a descriptive approach became more prominent.

In the **prescriptive approach**, there were discussions about the subject of the converb. Using Finnish as a model, Aavik (1915) suggested broadening the usage of the *des*-construction. He proposed to use the *des*-construction productively in the case of different subjects as well, as it had been used in Estonian earlier (as seen in old Estonian folk songs and in some more or less lexicalized forms like X_{GEN} *nähes* ‘in X’s presence; when X sees’, X_{GEN} *teades* ‘as far as X knows’, etc.) and as it was used in Finnish.

The subject reference of the implicit-subject converb has also been a matter of interest. In the grammar books of the first half of the 20th century (e.g. Põld 1922: 50; Loorits 1923: 149–150; Muuk & Tedre 1930: 124; Aavik 1936: 151), it was postulated that only the grammatical subject of the superordinate clause can be the implicit subject of the converb. Loorits (1923: 149) called the use of sentences like example (9a) a clear logical mistake and, according to him, example (9a) can only mean that the message was in the war. If the subject of the converb is not the same as the grammatical subject of the superordinate clause, the explicit subject in the genitive case has to be used, as in (9b).

- (9) a. *Sõjas olles tuli sõnum.*
 war.INE be.CONV come.PST.3SG message
 ‘While (being) in the war, the message arrived.’
- b. *Minu / mehe sõjas olles tuli sõnum.*
 I.GEN / man.GEN war.INE be.CONV come.PST.3SG message
 ‘While I/the man was in the war, the message arrived.’

The strict requirement of having the same subject was abandoned by the 1960s.

The descriptive approach. In the 1960s, the *des*-construction among other constructions with a non-finite verb form became the focus of the research of Uuspõld (1966, 1972, 1982). Uuspõld (1966) firstly divided *des*-constructions into two groups: the independent and the dependent construction. The independent construction is more loosely connected to the superordinate clause than the dependent as the subject of the independent construction is included in the construction, whereas in the dependent construction, the subject is implicit in the construction and it is located in the superordinate clause.

According to Uuspõld (1966), only intransitive verbs can be used in independent converbs, except the verbs *nägema* ‘see’ and *kuulma* ‘hear’, but even in these cases there cannot be an overt object in the construction (10).

- (10) a. **minu nähes filmi*
 I.GEN see.CONV movie.PRT
- b. **lapse kuulates laulu*
 child.GEN hear.CONV song.PRT

Uuspõld (1982: 41) also points out that in non-temporal *des*-constructions, an explicit genitive subject can be present only if there is a part-whole relationship between the subject of the converb and the subject of the superordinate clause (11).

- (11) *Laiade seelikute lehvides mööduvad rahvatantsijad.*
 wide.PL.GEN skirt.PL.GEN flow.CONV pass.3PL folk.dancer.PL
 ‘With their wide skirts flowing, the folk dancers pass by.’

It is also important to note that although the non-finite *des*-converb inflects for tense (see examples 2a–b in 1.1), a converb can have an explicit subject only in the present tense (Arkadiev 2013: 408). If one puts the past tense of the *des*-converb in example (11), the example becomes ungrammatical (12).

- (12) **Laiade seelikute lehvinud olles, möödusid*
 wide.PL.GEN skirt.PL.GEN flow.PTCP be.CONV pass.PST.3PL
rahvatantsijad.
 folk.dancer.PL

Sahkai (2011: 16–17) has argued that an explicit-subject converb is more restricted than an implicit-subject converb also on a functional basis: it cannot be used as a causal, purpose, conditional, or concessive adverbial, nor in the concomitative function. Unlike implicit subjects of converbs, the genitive subject refers most often to an inanimate entity.

In the case of dependent *des*-constructions, Uuspõld (1966, 1972) demonstrated that the semantic subject⁷ (not the grammatical subject) controls the implicit subject of the *des*-construction. Uuspõld (1966: 73–74) showed that a participant marked as either an adverbial or a grammatical object and also a possessor which is a genitive attribute in the superordinate clause can control the implicit subject of the *des*-converb (13a–c).

- (13) a. *Astudes Tartu Õpetajate Seminari polnud*
 step.CONV Tartu.GEN teacher.PL.GEN seminar.ILL be.NEG.PST.PTCP
J. Tammel näilisi kalduvusi kirjandusele.
 J.Tamm.ADE putative.PL.PRT propensity.PL.PRT literature.ALL
 ‘When joining the Tartu Teachers’ Seminar, J. Tamm didn’t seem to have any propensity for literature.’
- b. *Seda kuuldes valdas eidekest meeleliigutus.*
 this.PRT hear.CONV pervade.PST.3SG old.lady.PRT emotion
 ‘When hearing it, the old lady was overcome with emotion.’
- c. *Raamatut lugedes oli ta nägu mõtlik.*
 book.PRT read.CONV be.PST.3SG s/he.GEN face thoughtful
 ‘When reading the book, his/her face was thoughtful.’

Uuspõld (1972) also connects the implicit subject of the converb to the animate participant of the main clause. If there is an inanimate grammatical subject in the main clause, then the converb is controlled by another participant that is animate (14, also 13).

- (14) *Keskoolis õppides oli Peetrit huvitanud ajalugu.*
 high.school.INE study.CONV be.PST.3SG Peeter.PRT interest.PST.PTCP history
 ‘When studying in high school, Peeter was interested in history.’

⁷ Uuspõld (1966, 1972) did not use this term in her studies.

If there are more than two animate participants in a sentence, then the converb is controlled by the argument that would be the topic of the clause given neutral word order (15). In Estonian, in the allative experiencer construction, the neutral word order would have the adverbial experiencer in the first position, followed by the verb and the stimulus in the nominative case (see e.g. Erelt & Metslang 2006: 255; example 15b), hence *Peeter*, the adverbial in the main clause, controls the implicit subject of the converb, not *grandmother*, which is the grammatical subject of the sentence.

- (15) a. *Lapsepõlvele mõeldes meenus Peetrile vanaema.*
 childhood.ALL think.CONV come.to.mind.PST.3SG Peeter.ALL grandmother
 ‘When thinking of his childhood, his grandmother came to Peeter’s mind.’
- b. *Peetrile meenus vanaema.*
 Peeter.ALL come.to.mind.PST.3SG grandmother
 ‘Grandmother came to Peeter’s mind.’

The academic grammar of Estonian (Erelt et al. 1993: 261–263) also describes converb constructions mostly based on Uuspõld’s (1966, 1972) studies. In Erelt et al. (1993) converbs are also divided into two groups: converbs can be either referentially dependent on or independent of the superordinate clause. In the case of referentially dependent clauses the subject of the converb is mostly co-referential with the actor of the superordinate clause (13, 14, 15a). In rare cases, if the sentential counterpart of the converb is an impersonal sentence, the object (not the subject) of the converb is co-referential with the actor of the main clause. In example (16), *kartulid* ‘potatoes’, the actor of the superordinate clause, is the undergoer of the converb (the actor of the converb is not specified).

- (16) *Kartulid lähevad keetes pehmeks.*
 potato.PL go.3PL boil.CONV tender.TRSL
 ‘Potatoes become tender when boiled.’

As the last detailed studies date back to a time when it was not possible to use language corpora, the present study delivers a corpus-based overview of the subject of the *des*-converb and the comparison of implicit- and explicit-subject converbs.

2. Data

The data were obtained from the Balanced Corpus of Written Estonian at the University of Tartu.⁸ The corpus comprises fiction, newspapers and scientific texts (5 million text words of each kind). Thus, the study is based on written and mostly language-edited texts. However, among the scientific texts, there are also dissertations, which are usually not edited.

The search of the corpus was done based on morphology (I searched for all *des*-forms). The total number of sentences that contained at least one *des*-form was 49,300. Firstly, I excluded all the cases of highly grammaticalized or lexicalized *des*-forms that are still analyzed as *des*-forms in the corpus (adpositions *alates* + N_{ELA} ‘since’, N_{ELA} + *arvates* ‘since’, N_{GEN} + *kestes* ‘during the N’; N_{GEN} + *arvates* ‘in N’s opinion’; *elades* ‘never’), but that cannot be paraphrased with a simple sentence.

As converbs with an explicit subject are rarer than implicit-subject converbs, I included all cases of explicit-subject converbs and after that I randomly took the same amount of implicit-subject converbs. At the same time, I did not take more than six occurrences of the implicit-subject *des*-converb written by the same author. Altogether, I have analyzed 3,426 sentences with a *des*-converb clause: 1,713 implicit-subject converb clauses and the same number of explicit-subject converb clauses.

The search was morphology-based and because of the reasons described in sub-section 1.1, the data consist mostly of affirmative sentences with the present tense *des*-form (only 3 sentences with the negation word *mitte* and 9 sentences with the analytical past tense of the *des*-form).

3. Implicit-subject *des*-converbs

Although the implicit subject of a converbial construction is often referentially controlled by the subject of the superordinate clause, it has also been shown that the ability to control the implicit subject of a converb is not restricted to the subject of the superordinate clause. Kortmann (1991: 47–53) demonstrates that in some cases the controller of the implicit subject of a free adjunct is either the speaker or generic subject that is explicitly present neither in the superordinate clause nor in the (nearby) context. Haspelmath (1995: 32–36) also shows that the implicit subject of the converb can be controlled by both an implicit generic agent and a speaker as well as a non-

⁸ <<http://www.cl.ut.ee/korpused/grammatikakorpus/>>

nominative experiencer and a possessor of the participant. Haspelmath (1995: 36) even poses the hypothesis that it is a pragmatically salient participant (not the subject) that controls the implicit subject of the converb construction. In this section I will show, based on the corpus data, which participant of the sentence or the situation can control the implicit subject of the Estonian *des*-converb and whether the Estonian implicit-subject *des*-converb supports Haspelmath's hypothesis. Following the approach of Kortmann (1991), I do not constrain the ability to control (or be a controller) to intrasentential phenomena. In this article, the term 'controller' comprises the participant which the subject of the converb is co-referential with; it can be the participant of the superordinate clause, previous context as well as a participant in the situation who is not mentioned explicitly at all.

Although I did not take highly grammaticalized and lexicalized *des*-forms into account when I gathered my data (see section 2), I included *võrreldes* 'comparing'. As it has been shown (see e.g. Uuspõld 2001) that this form is undergoing the grammaticalization path to adposition, I additionally eliminated the more grammaticalized cases of *võrreldes*. I decided on the degree of grammaticalization based on the simple sentence paraphrase: if the *des*-construction of *võrreldes* could not be paraphrased with a simple sentence, I did not take it into account. Altogether, I eliminated 62 implicit-subject sentences; hence, I have 1651 implicit-subject *des*-constructions in my data.

I firstly divided the data into three groups, based on whether the implicit subject of the converb is co-referential with the actor of the superordinate clause or not (see table 1). The biggest group (82.2% of all sentences with the implicit-subject *des*-converb) consists of sentences where the implicit subject is co-referential with the actor of the superordinate clause. The other two groups are far smaller, but still not marginal: the implicit subject of the *des*-construction is not co-referential with the actor of the superordinate clause in 14.5% of the sentences, and partly the same as the actor of the superordinate clause in 3.3% of the sentences. In the following sub-section all three groups will be described in detail.

Table 1. The controller of the implicit subject of the *des*-converb

The implicit subject of the *des*-converb is ...

... co-referential with the actor of the superordinate clause	1357	82.2%
... partly co-referential with the actor of the superordinate clause	54	3.3%
... not co-referential with the actor of the superordinate clause	240	14.5%
	1651	100%

It is important to note that in the vast majority of cases (88.8%), the reference of the implicit subject of the *des*-construction is animate.

- (17) *Arvuti teisendab teksti osalauseste kaupa,*
 computer translate.3SG text.PRT/GEN clause.PL.GEN by
grammatikat ja kakskeelset sõnastikku kasutades.
 grammar.PRT and bilingual.PRT dictionary.PRT use.CONV
 ‘The computer translates the text by clauses, using grammar and bilingual dictionaries.’

Even among the sentences with an inanimate implicit subject, especially computers, programs and everything else connected to technology (17), the subjects can be described as if they were acting like animate entities.

3.1 The implicit subject of the converb is co-referential with the actor of the superordinate clause

Cases where the grammatical subject of the superordinate clause controls the implicit subject of the converb are regarded as the typical ones. In the corpus data, the grammatical subject controls the implicit subject of the converb in 1,023 sentences (example 18). This forms 75.4% of all same-actor converbs and 62% of all implicit-subject converbs.

- (18) *Kanada koondis sai kolmanda võidu,*
 Canada.GEN team get.PST.3SG third.GEN victory.GEN
alistades Šveitsi 6:2.
 beat.CONV Switzerland.GEN 6:2
 ‘The Canadian team got its third victory, beating Switzerland 6:2.’

There are two groups of sentences where the controller of the same-actor converb is not the grammatical subject of the superordinate clause (altogether 335 sentences): 1) the controller is marked as either an adverbial or grammatical object (37 sentences), or 2) the controller is not explicitly present in the superordinate clause (298 sentences). Additionally, in one sentence, it is ambiguous whether the controller is marked as an adverbial or if it is not in the superordinate clause at all.

3.1.1 The controller is an adverbial or the grammatical object of the superordinate clause

If the controller is not marked as the grammatical subject, but is still present in the superordinate clause, it can be either an adverbial (in 31 sentences) or the grammatical object (in 6 sentences). In majority of these sentences (in 36 sentences out of 37) the controller is either the possessor (19a) or the experiencer (19b). It has been shown that these kinds of adverbials and objects have some subject properties (see e.g. Lindström 2012, 2013; Metslang 2013).

- (19) a. *Võidab see, kel on surres rohkem asju.*
 win.3SG this who.ADE be.3SG die.CONV more thing.PL.PRT
 ‘The winner is the person who has the most things when s/he dies.’
- b. *Kristjanil on mõnda asja näidates väheke ebamugav.*
 Kristjan.ADE be.3SG some.PRT thing.PRT show.CONV little uncomfortable
 ‘Kristjan feels a little uncomfortable (when) showing some things.’

These are the cases that Haspelmath (1995) has brought out as the possible non-subject-controlled implicit subjects of the converbs. These cases also correspond to Uuspõld’s (1972) claim that the adverbial/object placed in the topical position controls the implicit subject in *des*-constructions.

The idea that the implicit subject of the *des*-converb is controlled by the actor rather than the grammatical subject of the superordinate clause is also supported by the only passive sentence in this group. In example (20a) the handymen who used the nut-based varnish are marked as an adverbial (by the *poolt* ‘by’ construction). In this example there is only one animate argument (*parimad meistrimehed* ‘best craftsmen’), and as Uuspõld (1972) connects the implicit subject of the converb to the animate participant of the main clause, one can say, that the animacy of the adverbial participant elicits the control. However, in the made-up sentence (20b) the grammatical subject is also animate (*modellid* ‘models’), and hence, animacy can not be the factor that determines the controller. However, the implicit subject of the *des*-form is still controlled by an actor that is marked as an adverbial, not by the grammatical subject.

- (20) a. *Kõik need esemed on käsitsi lakitud*
 all these thing.PL be.3SG by.hand varnish.PST.IMPRS.PTCP
Vietnamis parimate meistrimeeste poolt, kasutades ajaloolise
 Vietnam.INE best.PL.GEN handyman.PL.GEN by, use.CONV historical.GEN
retsepti järgi pähklitest valmistatud lakki.
 recipe.GEN based.on nut.PL.ELA make.PST.IMPRS.PTCP varnish.PRT
 ‘All these products are hand-varnished in Vietnam by the best craftsmen, using
 a nut-based varnish that has been made using a historical recipe.’
- b. *Modellid on meigitud parimate*
 model.PL be.3SG make.up.PST.IMPRS.PTCP best.PL.GEN
kosmeetikute poolt, kasutades vaid käsitsi tehtud kosmeetikat.
 make-up.artist.PL.GEN by use.CONV only handmade cosmetics.PRT
 ‘The models were made up by the best make-up artists, using only handmade
 cosmetics.’

Thus, Estonian offers a counterexample to the Haspelmath’s (1995: 36) claim that he has made according to Mohanan (1983). Haspelmath (1995: 36) shows based on Mohanan (1983) that in passive sentences, syntax clearly plays a role.

- (21) a. *Lying idly in the sun, John watched Mary.* (John is lying in the sun)
 b. *Lying idly in the sun, Mary was watched by John.* (Mary is lying in the sun)

In (21b), the grammatical subject rather than the agent controls the implicit subject of the converb. However, as (20b) demonstrates, this is not the case in Estonian; the agent marked as adverbial controls the implicit subject⁹ in the passive sentence as well.

3.1.2 The controller is not present in the superordinate clause

In the data, there are 298 sentences in which the implicit subject is controlled by the actor of the superordinate clause, but the actor is not explicitly present in the sentence. In 91 sentences the impersonal voice is used in the main clause. In these sentences the actor of the superordinate clause is hidden and/or it is not important who the actor is, but it is

⁹ It should be noted that the fundamental voice opposition in Estonian is between personal and impersonal voice, passive is used in addition to impersonal voice (Torn-Leesik 2009).

unambiguously understandable that the actor of the *des*-converb and the actor of the superordinate clause are co-referential (22).

- (22) *Õpiti* *kõige enam just* *tavatutes* *olukordades*
 study.PST.IMPRS most much.COMP unusual.PL.INE situation.PL.INE
ja tavatuid *meetodeid* *kasutades*.
 and unusual.PL.PRT method.PL.PRT use.CONV
 ‘Studying was mostly done in unusual circumstances and using unusual methods.’

In 114 sentences, the reference of the implicit subject of the *des*-converb is generic (23), i.e. it applies to anyone (in a group). In the superordinate clause, the actor is left open¹⁰ and as the *des*-converb is not marked for subject, it seems to be appropriate to confirm the generic reference. However, in these 114 sentences it is clear that the subject of the *des*-converb is co-referential with the actor of the superordinate clause. In example (23), anyone who uses a low-cost airline has to take into consideration landing at an airport that is located farther from the city center.

- (23) *Odavlennufirmaga* *sõites* *tuleb* *aga*
 low.cost.airline.COM drive.CONV must.3SG but
arvestada, *et päriselt Londonisse* *ei saa*.
 take.into.consideration.INF that really London.ILL NEG get
 ‘When using a low-cost airline, one has to take into consideration that s/he won’t really get into London.’

Using the *des*-converb without the explicit co-referential actor also seems to be a convenient means of generalizing the situation or somebody’s experience (24) or hiding the specific actor if it is not important who the actual actor is or when concealing the actor follows from the (older) tradition of Estonian science texts where first person singular forms were not used. There were 51 of these kinds of sentences in the data. In example (24) a specific past situation is described, but the claim in the sentence with the *des*-form that delivers the thoughts of Varblane applies to Varblane and, at the same time, also generically to everybody. The generic interpretation is formed by turning from past to present tense, using the generic 3SG form of the modal verb and by using the generic second person pronoun in the coordinated clause.

¹⁰ Regarding open reference in Estonian (and Finnish) see e.g. Jokela and Plado (2015).

- (24) [*Hakkas pimedaks minema. Varblane võdistas õlgu, kuid tuppa veel ei läinud.*]
Õues olles saab vähemasti põgeneda,
 outside be.CONV can.3SG at.least escape.INF
toas oled sa raudselt lõksus.
 inside be.2SG you surely trap.INE
 ‘[It started to get dark. Varblane shook his shoulders, but he didn’t go inside yet.]
 When staying outside, escape is at least possible, in the room you are trapped for sure.’

In 40 sentences, the subject of the *des*-converb is controlled by the implicit participant who refers to some specific person(s). However, although the actor is not explicitly present in the superordinate clause, it is mentioned in the near context, or if the controller is the author/speaker, it can also be inferred from the situation. The vast majority of implicit controllers in this group are the experiencer by their semantic role. In both examples in (25) the controller is the implicit author/speaker. In (25a) the reference to the implicit controller is in the previous sentence (*saan* ‘get.1SG’, *võtsin* ‘take.PST.1SG’). Uuspõld (1966) refers to controllers of this kind as the dominant subject; this is the subject that is present outside the sentence with the *des*-converb, but to whom some word in the superordinate clause refers (*tunne* ‘feeling’ in (25a)). But this is not the case in sentence (25b), in that the subject is not given explicitly either in the previous or following sentences.

- (25) a. [*Õnnelikuna, et lõpuks valust lahti saan, võtsin kaks tabletti Tramadoli korraga.*]
Mõnekiümne minuti pärast autosse istudes oli
 couple.dozen.GEN minute.GEN after car.ILL sit.CONV be.PST.3SG
tunne juba parem.
 feeling already better
 ‘[Glad that I could finally get rid of the pain, I took two pills of Tramadol at once.] Sitting in the car after a couple of dozen minutes, I felt better already.’
- b. *Esiti teeb lugu nalja, edasi mõeldes kurbust.*
 at.first make.3SG story joke.PRT forth think.CONV sadness.PRT
 ‘At first, it seems funny, but when thinking more about it, it makes one sad.’

Hence, the data demonstrate that the actor of the superordinate clause can control the implicit subject of the converb, even if it is not explicitly present in the superordinate clause or even in the text.

3.2 The implicit subject of the converb is partly co-referential with the actor of the superordinate clause

In the data, there are 54 sentences where the implicit subject of the *des*-converb is partly the same as the actor of the superordinate clause. Two kinds of sentences belong to this category: 1) sentences where the *des*-converb is controlled by the genitive attribute of the subject of the superordinate clause (35 sentences), and 2) sentences where the subject of the *des*-converb is the same as the actor of the other infinitival construction of the superordinate clause (19 sentences).

The former, i.e. the genitive attribute, corresponds to Haspelmath's (1995) possessor of the participant. The subject of the superordinate clause is an NP, but the controller of the implicit subject of the converb is not the main noun, but an attribute of the NP. The possessor can be either an animate (26a) or an inanimate (26b) entity. The possessor that controls the implicit subject of the *des*-converb can also be implicit, as in (26c), where the person who came from outside is the same whose hair is frizzy, but his/her identity is not specified.

- (26) a. *Lahkudes on aga Rehe väärtus väga kõrge,*
 leave.CONV be.3SG but Rehe.GEN value very high
 [*sest maksuameti juht teab tõesti väga palju.*]
 'At the moment of leaving, Rehe's value was really high, [because the chief of the Tax Board really knows a lot].'
- b. *Olles surma põhjustavate haiguste nimistus 4.*
 be.CONV death.PRT cause.PTCP.PL.GEN disease.PL.GEN list.INE 4th
kohal, ulatub Alzheimeri tõve esinemissagedus
 place.ADE reach.3SG Alzheimer.GEN disease.GEN frequency.of.occurrence
maailmas 20 miljonini.
 world.INE 20 million.TRM
 'Occupying 4th place on the list of terminal illnesses, the frequency of occurrence for Alzheimer's disease reaches 20 million worldwide.'
- c. *Juuksed olid õuest niiske õhu käest*
 hair.PL be.PST.3PL outside.ELA humid.GEN air.GEN from
tulles krussis.
 come.CONV frizzy
 'The hair was frizzy coming in from the humid air outside.'

If the *des*-converb is subordinated to another infinitival construction, then the actor of the infinitival construction controls the *des*-converb, even if the actor of the superordinate infinitival construction is the undergoer of the main clause as in example (27a). In the example, the audience is the undergoer of the main clause (the organizer cannot forbid the audience); yet, the audience is also the actor of dancing and enjoying the concert (in the sentence marked by infinitive forms). Example (27b) demonstrates that here also the controller of the implicit subject of the *des*-converb can be implicit in the superordinate clause. It is not stated in the sentence to whom the industrialists' demand of finding and opening new markets was addressed.

- (27) a. *Korraldaja ei tohi keelata publikul püsti seistes*
 organizer NEG may forbid.INF audience.ADE stand.CONV
kaasa elada ja tantsida.
 with live.INF and dance.INF
 'The organizer must not forbid the audience from standing up and dancing to enjoy the concert.'
- b. [*Hiljem käitasid sõjamasinat suurtöösturid,*]
kes nõudsid uute turgude leidmist ja
 who demand.PST.3PL new.PL.GEN market.PL.GEN finding.PRT and
avamist kas või jõuga ähvardades.
 opening.PRT Q or power.COM threaten.CONV
 '[Later the war-machine was exploited by the big industrialists;] they demanded that new markets be found and opened, even by threat of force if necessary.'

The ability to control the *des*-converb is not strictly limited to the actor of infinitival forms; it is also possible in the case of deverbal nouns, as in example (27b).

3.3 The implicit subject of the converb is not co-referential with the actor of the superordinate clause

In the data, there are 240 sentences where the subject of the *des*-converb is not the same as the actor of the superordinate clause. In the majority of the sentences (227), the subject of the *des*-form is not present in the superordinate clause, and only in 13 sentences the implicit subject of the *des*-converb is coreferential with the undergoer of the superordinate clause.

3.3.1 The subject of the *des*-converb is not a participant in the superordinate clause

The biggest sub-group of sentences where the controller of the *des*-converb is not the same as the actor of the superordinate clause and is not present in the superordinate clause (166 sentences) consists of converb-clauses that comment on what is said in the superordinate clause and/or the converbs that make either the speech act or the content of the superordinate clause active/relevant in the situation. According to Dancygier (1990) and Plado (2008, 2014) I name these type of clauses conversational clauses. Also, Haspelmath (1995: 36) claims that this is a group of sentences in which the control by the speaker is commonly found. In example (28a) the *des*-converb activates the subject of earlier discussion again (the properties and behavior of humans) and suggests that the following speech act belongs to that.

- (28) a. *Tulles tagasi inimese juurde – kas me oleme=gi nii ettearvamatud?*
 come.CONV back human.GEN to Q we be.1PL=PTC so
 unpredictable.PL
 ‘Coming back to the human – are we really so unpredictable?’
- b. *Kalurite pikaajalisele praktikale toetudes*
 fisherman.PL.GEN long-time.ALL practice.ALL rely.CONV
lestavarusid ei esine.
 reserve.of.flounders.PL.PRT NEG be
 ‘Relying on the fishermen’s long-time practice, there is no reserve of flounders.’

Kortmann (1991: 50–53) claims, based on English data, that all *-ing* forms of the corresponding group have undergone a shift from open-class to closed-class items, and some of them are now analyzed as conjunctions or prepositions. Of course, not all items have completed the shift, but have undergone it to varying degrees. My data also shows the same tendency. There are only 22 different verbs used in *des*-forms in conversational clauses (~7.5 clauses per every verb), compared to 480 verbs used for all implicit-subject *des*-converbs (~3.4 clauses per every verb). Also the majority of the *des*-constructions with *võrdlema* ‘compare’ that can still be paraphrased with a simple clause and that I included in the research belong to that group (29a). Although most of the verbs are used in more or less set phrases (see 29a–b), one can also form conversational constructions regularly from other verbs, as in (28b).

- (29) a. *Saksamaa ja Roomaga võrreldes*
 Germany.GEN and Rome.COM compare.CONV
paikneb Rootsi Euroopa ääremaal.
 locate.3SG Sweden Europe.GEN periphery.ADE
 ‘Compared to Germany and Rome, Sweden is located in the periphery of Europe.’
- b. *Viimane kontsert oli ausalt öeldes üpris igav.*
 last concert be.PST.3SG honest say.CONV pretty boring
 ‘To be honest, the last concert was rather boring.’

In conversational clauses, the subject of the *des*-converb is mostly either the author of the text or the speaker (see e.g. 28 and 29b). In the sentence (28a), the implicit subject of the converb is not co-referential with the subject of the main clause; *me* ‘we’ refers generically to all humans, whereas the actor of the converb is the author (and possibly also the reader). However, in conversational clauses, the implicit subject of the *des*-converb can also be a generic person (or ambiguous between a generic person and the author/speaker), as in example (30), where anyone who watches fashion television shows or reads magazines notices that there is a strong trend towards skinniness.

- (30) [*Lauljanna Karen Carpenter surigi lahtistite üleannustamise tagajärjel – kinnisideest säilitada saledust. Kui palju naisi on tegelikult nii hukka saanud.*]
Aga moesaateid või ajakirju vaadates,
 but fashion.show.PL.PRT or magazine.PL.PRT watch.CONV
see trend võtab aina dragoonilisemaid vorme.
 this trend take.3SG increasingly draconian.COMP.PL.PRT form.PL.PRT
 ‘[Singer Karen Carpenter actually did die because of taking too many laxatives – because of the obsession with staying slim. How many women have actually died that way?] But watching fashion-shows or magazines, this trend is taking more and more draconian forms.’

The reference to a generic person (and also the ambiguity between the author/speaker and a generic person) is common with more grammaticalized *des*-constructions, especially with *võrreldes* ‘compare. CONV’. In sentence (29a), anyone (not only the author of the text) who compares the location of Sweden to the location of Rome or Germany understands that Sweden is located in the periphery of Europe.

A generic person can be the implicit subject of the *des*-converb also in non-conversational clauses (32 sentences in the data). In those cases the whole sentence conveys a generic state of affairs. In (31) there is no clue as

to the subject-reference of the *des*-converb in the superordinate clause or in the close context, but the subject is a generic person: anyone who speeds up brings about the growling of the engine.

- (31) *Põhjagaasiga kiirendades uriseb V6-mootor*
 down.gas.COM speed.up.CONV growl.3SG V6-engine
paljutõotava sportlikkusega.
 promising.GEN sportiness.COM
 ‘Speeding up, the V6-engine growls with promising sportiness.’

In this group, there is a small sub-group of sentences where the subject of the superordinate clause is the same as the undergoer of the *des*-converb (not the actor of the *des*-converb). Based on the limited number of examples in my data, the converb bears a conditional function and conveys the situation under which the state of affairs of the superordinate clause holds. These are generic sentences, in that the actor of the converb is a non-specified generic person without a controller. These converbs are close to impersonal clauses; Erelt et al. (1993) and Erelt (2014) have connected these converbs to impersonal sentences and have claimed that the sentential counterpart of the converb is an impersonal sentence. The situation described in sentence (32) is generic: it applies to anyone who blows onto the soup.

- (32) *Supp=ki jahtub puhudes ritem.*
 soup=PTC cool.3SG blow.CONV quick.COMP
 ‘Even soup cools down quicker if you blow on it.’

Hence, there exists co-referentiality between the implicit element of the converb and the actor of the superordinate clause, but exceptionally, the actor of the superordinate clause is co-referential with the undergoer of the converb. At the same time, the actor of the converb is left unspecified.

In 28 sentences, the implicit actor of the *des*-converb that is not present in the superordinate clause is, in a given situation, the most important person that can be mentioned before in the earlier context; or, if the controller of the implicit-subject *des*-converb is the author/speaker, it does not have to be mentioned before, it can be inferred only from the situation. The controllers of this group coincide partly with the dominant subject highlighted by Uuspõld (1966). Based on the data, the author/speaker is left out of the superordinate clause (and even from the context) more often than other participants: 26 (example 33a–b) and 2 (example 33c) sentences, respectively.

- (33) a. [*Ma mäletan, kui ma olin veel väike ja jooksin lehmadega heinamaal võidu.*]
Koju tultes oli laual värsk piim,
 home.ILL come.CONV be.PST.3SG table.ADE fresh milk
pehme sai ja arvuti.
 soft bread and computer
 ‘[I remember when I was little and used to run around with the cows in the pasture.] Coming home, there was fresh milk, soft bread, and the computer on the table.’
- b. *See erinevus ei kadunud ka mitmesuguseid*
 this difference NEG disappear.PTCP also various.PL.PRT
standardimismeetodeid kasutades.
 method.of.standardization.PL.PRT use.CONV
 ‘This difference did not disappear even when using various methods of standardization.’
- c. [*Anne Adams väidab, et kaubakeskuses oleks ta peaaegu arreteeritud, sest*]
kaardiga makstes oli arvutiekraanile löönud kiri:
 card.COM pay.CONV be.PST.3SG screen.ALL hit.PTCP text
 ‘[Anne Adams claims that she was nearly arrested in the supermarket, because] when paying by bank card, this text appeared on the screen.’

In addition to the previous groups, there are 2 sentences in the data where the implicit subject of the *des*-converb is not a generic person, but a non-specified group.

- (34) *Rakendades vähem hõivatud ajal kaks korda väiksemat*
 employ.CONV few.COMP busy time.ADE double small.COMP.PRT
arvu kiirabibrigaade, jääks töökoormus
 number.PRT ambulance.crew.PL.PRT stay.COND work.load
keskmiselt samaks.
 average same.TRSL
 ‘By employing half the number of ambulance crews during less busy times, the work load would stay the same on average.’

For example, in (34), it is not specified who should make the decision to use fewer ambulance crews during less busy times. Similarly to examples (31–32) the actor of the converb is left open and uncontrolled, but unlike (31–32), the actor is not a generic person.

3.3.2 The subject of the *des*-converb is same as the undergoer of the superordinate clause

Sentences where the undergoer of the superordinate clause controls the implicit subject of the *des*-converb are very rare: there are only 13 such sentences in my data. Although the data is extremely limited, I will next describe in which conditions (based on the data) the undergoer of the superordinate clause can control the implicit subject of the *des*-converb.

The undergoer of the superordinate clause as the controller of the implicit subject of the *des*-converb is allowed in the case of manner converbs that typically deliver the sound that the undergoer makes in a given situation (35a). Erelt et al. (1993: 261) call this type of converbs half-adverbized.

(35) a. *Adjutant lōi kannused kilksatades kokku.*
 adjutant hit.PST.3SG spur.PL clink.CONV together
 ‘The adjutant clicked his spurs with a clink.’

b. *Adjutant lōi kannused kukkudes kokku.*
 adjutant hit.PST.3SG spur.PL fall.CONV together
 ‘The adjutant clicked his spurs when he fell.’

As a human being typically cannot clink, then the undergoer that can clink is the controller. If the sentence had a verb that was not so clearly connected to the undergoer, then the actor of the superordinate clause would control the *des*-converb, as in example (35b), where both the actor (*adjutant*) and the undergoer (*spurs*) can fall.¹¹

The undergoer of the superordinate clause can also control the implicit subject in cases where the undergoer is the participant who has been foregrounded in the earlier context (36a) or who is foregrounded in the sentence as more important than the actor. In the latter, the impersonal voice can be used to background the actor (36b). In example (36a) the controller of the converb is the undergoer of the superordinate clause (*teda* ‘s/he.PRT’). However, as the same participant is strongly foregrounded in the previous text, it can be the controller of the implicit subject of the

¹¹ However, it seems that the word order where the *des*-form follows the object of the superordinate clause also makes possible the interpretation that spurs fell. If the adjutant fell, then in the neutral word order the *des*-form would precede the object of the superordinate clause.

converb. Also the semantics supports the interpretation that the undergoer controls the converb, as a father typically does not grow up.

(36) a. [*Jacques Brel sündis 1929. aastal Brüsselis pakenditehase direktori perekonnas. Jacques sai karmi kasvatuse, õppides katoliiklikus kolledžis.*]

Suureks saades sundis isa teda oma
big.TRSL become.CONV force.PST.3SG father s/he.PRT own.GEN

firmas tööle.
company.INE work.ALL

‘[Jacques Brel was born in 1929 in Brussels in the family of a packing factory director. Studying in a catholic college, Jacques had a strict upbringing.] When he grew up, his father forced him to work in his company.’

b. *Haiglast lahkudes teostati audiomeetriline*

hospital.ELA leave.CONV carry.out.PST.IMPRS audiometric

uuring vaid 5%-l lastest.

test only 5%.ADE child.PL.ELA

‘When leaving the hospital, the audiometric test was carried out only on 5% of children.’

The converbs analyzed and described in sub-section 3.3 demonstrate clearly that the control of the subject of the Estonian *des*-converb should not be restricted to the actor of the superordinate clause, but rather the most salient participant of the superordinate clause, context or even speech situation. However, in some cases the subject-reference is left open and non-specified.

4. The explicit subject of the *des*-converb

Explicit-subject *des*-converbs are patently less frequent than implicit-subject *des*-converbs. They are also more restricted in their use, as they cannot be used in the past tense. As described in sub-section 1.2, in the 1920s this construction was recommended to be used productively, both with intransitive and transitive verbs. However, according to Erelt et al. (1993: 262), nowadays, this construction can regularly be formed only with intransitive verbs. Additionally, there are some lexicalized converbs with some transitive verbs. Next I will briefly describe, based on the data, the structure of the construction and then the explicit actor of the converb.

4.1 The structure and usage of the explicit-subject *des*-converb

My data confirms that explicit-subject *des*-converbs are more restricted in their use than implicit-subject *des*-converbs. They also seem to be used often in fixed expressions: in the data there are only 218 different verbs in the explicit-subject *des*-construction (~7.9 clauses per verb, compared to ~3.4 clauses per verb in the case of the implicit-subject *des*-construction). The most frequently used explicit-subject converbs are *möödudes* (used in 249 instances; example 37a) and *lõppedes* (208 instances; 37b), followed by *saabudes* ‘arriving, coming’, *suurenedes* ‘enlarging, increasing’, and *kasvades* ‘growing’.

(37) a. *Ta lahkus juba mõne kuu möödudes.*
 s/he leave.PST.3SG already some.GEN month.GEN pass.CONV
 ‘S/he left after a few months.’

b. *Päeva lõppedes otsustas Toivo koju minna.*
 day.GEN end.CONV decide.PST.3SG Toivo home.ILL go.INF
 ‘When the day ended, Toivo decided to go home.’

In addition to the number of different verbs, the explicit-subject *des*-converb also conveys fewer (adverbial) meanings than the implicit-subject *des*-converb. However, based on my data, their use is not as restricted as claimed by Sahkai (2011: 17; see sub-section 1.2): in addition to a temporal and modal meaning, an explicit-subject converb can also convey causal (38a), conditional (38b), or concessive adverbial meaning, and it can be used in the concomitative function. In addition to these, it is also used in a specific way, ambiguously expressing time and quantity (38c).

(38) a. *Vaba ajakirjanduse puududes tõusis tähelepanu fookusse pool- või veerandvaba teater.*
 free press.GEN miss.CONV rise.PST.3SG attention.GEN
 focus.ILL half or quarter.free theater
 ‘As free press was missing, the half- or quarter-free theater rose into focus.’

- b. *Praeguse tempo jätkudes peaks vanade*
 present.GEN tempo.GEN continue.CONV should.COND old.PL.GEN
trahvinõuete probleem olema lahendatud
 penalty.demand.PL.GEN problem be.INF solve.PST.IMPRS.PTCP
südasuveks.
 midsummer.TRSL
 ‘If the present tempo continues, the problem of the old demands of penalties
 should be solved by midsummer.’
- c. *Haigestumine sagedane vanuse suurenedes.*
 getting.sick become.frequent.3SG age.GEN increase.CONV
 ‘Getting sick becomes more frequent as age increases.’ / ‘The older a person is,
 the more often s/he gets sick.’

Although explicit-subject converbs with transitive verbs that also include the object in the construction are extremely rare, they are not impossible. Among the 1713 explicit-subject converbs examined, there are two sentences with an explicit object: one from fiction (39) and one from an academic text.

- (39) *Kapelli mängides Valgre kaheksa aasta eest*
 orchestra.GEN play.CONV Valgre.GEN eight.GEN years.GEN ago
komponeeritud valssi, küsisin [...].
 compose.PTCP waltz.PRT ask.PST.1SG
 ‘While the orchestra was playing the waltz that Valgre had composed eight years ago, I asked [...].’

It is claimed (see e.g. Uuspõld 1966: 60; Erelt et al. 1993: 263) that the explicit-subject *des*-converb construction can be formed with the transitive verbs *kuulma* ‘hear’, *nägema* ‘see’, *teadma* ‘know’, but there cannot be an overt object in the construction. Erelt et al. (1993: 263) call these constructions lexicalized. In my data, there are altogether 99 converb constructions of this type. There are examples with all of the named verbs (40a–c), and with the verb *teadma* there is also one example that is not as strongly lexicalized as the other examples: in example 40d, the *des*-construction *meie teades* does not carry the lexicalized meaning ‘as far as we know’.

- (40) a. *Aga kunagi ei laulnud ta ema või vanaema*
 but ever NEG sing.PTCP s/he mother.GEN or grandmother.GEN
kuuldes.
 hear.CONV
 ‘But never did s/he sing so that mother or grandmother would hear.’ / ‘But s/he never sang within earshot of mother or grandmother.’
- b. *Mõnikord ta isegi nuttis omaette, aga mitte kunagi*
 sometimes s/he even cry.PST.3SG in.privacy but NEG ever
teiste nähes.
 other.PL.GEN see.CONV
 ‘Sometimes s/he cried alone, but never so that other people could see / in the presence of other people.’
- c. *Minu teades saadeti nad ju tagasi.*
 I.GEN know.CONV send.PST.IMPRS they PTC back
 ‘As far as I know, they were sent back.’
- d. *Surnud on aga teinud seda meie teades.*
 dead.PL be.3SG but do.PST.PTCP this.PRT we.GEN know.CONV
 ‘But the dead have done it with us knowing about it.’

In addition to these verbs, in the data there is one corresponding sentence with the verb *aimama* ‘intuit, sense’ (41), but the usage of the explicit-subject converb with this verb makes the sentence stylistically non-neutral. Also, in this example, there is no overt object in the sentence.

- (41) *Beriti silmades oli uudishimu ja*
 Berit.GEN eye.PL.INE be.PST.3SG curiosity.PRT and
Andraase aimates ka kutset.
 Andreas.GEN sense.CONV also invitation.PRT
 ‘In Berit’s eyes there was curiosity, and Andreas also sensed an invitation.’

However, although these constructions do not contain an overt grammatical object, they still contain a semantic object that is present in the superordinate clause. In example (40a) the semantic object of the *des*-form is his/her singing, similarly, in (40b) it is his/her crying. In addition to lacking an overt object, in these lexicalized constructions, there cannot be modifiers other than objects either. For example, one cannot insert an adverbial of time, place or manner even into the less lexicalized sentence (40d) without the sentence becoming ungrammatical (42).

- (42) **Surnud on aga teinud seda meie*
 dead.PL be.3SG but do.PTCP this.PRT we.GEN
eile / kindlalt teades.
 yesterday / for.sure know.CONV

Erelt (2014) also claims that although there can be other modifiers of the verb in the construction, the construction mostly consists of two parts: the actor in the genitive case and the verb. This claim is supported by my data.

- (43) a. *Meremehed kulutavad laeva sadamas seistes*
 sailor.PL spend.3PL ship.GEN harbor.INE stand.CONV
üsna palju raha iseenda vajadusteks.
 quite much money.PRT own.GEN need.PL.TRSL
 ‘When the ship stays in the harbour, sailors spend quite a lot of money on their own needs.’
- b. *Aga ei tõestanud, ütlesin hääle kergelt tõustes.*
 but NEG prove.PST.PTCP say.PST.1SG voice.GEN little rise.CONV
 ‘But you didn’t prove it, I said with my voice rising a little bit.’

In the construction, modifiers with intransitive verbs are rather rare: in the data, there are only 95 *des*-clauses with modifiers (out of 1,612 *des*-clauses with an intransitive verb). The most common modifier is the adverbial of place (43a), but there are also other adverbials (43b).

4.2 The subject of the explicit-subject *des*-converb

The explicit subjects of the *des*-converb differ from the implicit subjects of the *des*-converb in animacy: the majority of explicit subjects are inanimate, whereas the majority of implicit subjects are animate (16.6% and 88.8% animate subjects respectively). Sahkai (2011: 16–17) explains the differences as the result of the different functions of explicit-subject and implicit-subject converbs. According to her, the fact that explicit-subject converbs are mostly time or manner adverbials cause the result that the explicit-subject converb does not express events with an intentional agent. As in my data, 40.4% of all animate-subject converbs are used as time adverbials (compared to 59.9% of inanimate-subject converbs) and since 38.9% of animate subjects are agents (mostly with motion verbs), the function of the converb does not explain the whole difference. I offer the explanation that in addition to function, the extremely restricted use with

transitive verbs¹² and the tendency to appear in more fixed expressions also plays a role.

In 285 explicit-subject *des*-converbs the subject is animate: either a person (or persons) (258 sentences; example 44a), an organization (14; 44b), or an animal (13; 44c).

- (44) a. *Tema tagasi tulles istus Aune ikka oma tugitoolis.*
 s/he.GEN back come.CONV sit.PST.3SG Aune still own.GEN armchair.INE
 ‘When s/he came back, Aune was still sitting in her armchair.’
- b. *Meeskoori püüinele tulles lisandub*
 men’s.choir.GEN stage.ALL come.CONV come.along.3SG
teisi=gi akustilisi pille.
 other.PL.GEN=PTC acoustic.PL.PRT instrument.PL.PRT
 ‘When the men’s choir comes to the stage, other acoustic instruments will follow.’
- c. *Ta säilitab oma asendi ka looma vananedes.*
 s/he keep.3SG own.GEN position.GEN also animal.GEN get.older.CONV
 ‘It keeps its shape even as the animal gets older.’

It is also important to note that all examples with a transitive verb have an animate implicit subject (see examples 39–41).

In my data, there are 1,428 inanimate explicit-subject *des*-converbs. The most frequent subject is some abstract entity (45): in 1,216 (~85.2% of all inanimate explicit subjects) *des*-converbs there is an abstract subject.

- (45) a. *19. sajandi edenedes oli Vene avalikkuses*
 19th century.GEN advance.CONV be.PST.3SG Russian.GEN public.INE
järjest enam vene natsionalismi.
 increasingly more Russian.GEN nationalism.PRT
 ‘As the 19th century advanced, there was more and more Russian nationalism among the Russian public.’

¹² The restricted use of explicit-subject converb possibly derives from its history: it is partly artificially revived (see sub-section 1.2).

- b. *Eluaegne rinnavähirisk väheneb*
 lifetime risk.of.breast.cancer decrease.3SG
sünnituste arvu suurenedes.
 childbirth.PL.GEN number.GEN increase.CONV
 ‘The lifetime risk of breast cancer decreases as the number of childbirths increases.’

In addition to an abstract entity, the explicit subject of the *des*-converb can also be a concrete entity (in 188 sentences; example 46a), in rarer cases a substance (in 19 sentences; 46b) or an organization (5; 46c).

- (46) a. *Ja vahtis meid kollaste hammaste särades.*
 and gaze.PST.3SG we.PRT yellow.PL.GEN tooth.PL.GEN shine.CONV
 ‘And s/he gazed at us with her/his yellow teeth shining.’
- b. *Juhib paadi vee vahutades kivi juurde.*
 drive.3SG boat.GEN water.GEN foam.CONV stone.GEN next
 ‘S/he drives the boat to the stone with the water foaming.’
- c. *Ülikooli laienedes kasvas ka*
 university.GEN expand.CONV grow.PST.3SG also
abitöölise arv.
 help.worker.PL.GEN number
 ‘As the university expanded, the number of non-academic workers also grew.’

The corpus data did not confirm Uuspõld’s (1982: 41) claim that in non-temporal *des*-constructions the explicit genitive subject has to be in a part-whole relationship with the subject of the superordinate clause. Although this is often the case (as in example 46a), there are also counterexamples, like 43b. In this example, the converb expresses a modal meaning (answering the question *how?*), but there is no part-whole relationship between s/he and water.

5. Conclusion

In Estonian, there are both implicit-subject and explicit-subject *des*-converbs. The explicit subject of the converb is marked by the genitive case, which is not a grammatical subject case in Estonian. The explicit-subject converb is more restricted in its use: nowadays, it is formed mostly from intransitive verbs. However, based on the data, explicit-subject *des*-converbs with transitive verbs are not completely impossible. In addition to

lexicalized explicit-subject *des*-converbs with transitive verbs (where there is no overt object in the construction), explicit-subject *des*-converbs with an overt object in the construction are also regularly formed. However, these kinds of sentences are rather rare.

The explicit subject of the *des*-converb is overwhelmingly inanimate and typically some abstract entity, although in the data, there are also explicit subjects that refer to people, animals, or organizations. By contrast, the implicit subject of the *des*-converb is usually animate (most often human).

The implicit subject of the *des*-converb can be 1) the same as the actor of the superordinate clause, 2) partly the same as the actor of the superordinate clause, and 3) not the same as the actor of the superordinate clause. Most often, the implicit subject of the *des*-converb is controlled by the actor of the superordinate clause. The actor that controls the implicit subject does not have to be the grammatical subject of the superordinate clause, but can alternatively be an adverbial or a grammatical object. Additionally, the actor does not have to be explicitly present in the superordinate clause (especially in impersonal sentences and if the subject is generic, but also if the subject is the author/speaker, or if the subject is present in the nearby context).

The controller of the implicit subject is partly the same as the actor of the superordinate clause in sentences where the controller is the possessor of the participant and in sentences where the subject of the *des*-converb is the same as the actor of the other infinitival construction of the superordinate clause.

In most of the sentences where the controller of the implicit subject of the *des*-converb is not the same as the actor of the superordinate clause, the controller is not present in the superordinate clause at all. Mostly, the controller is left out in the case of converb clauses that comment on what is said in the superordinate clause and/or the converbs that make either the speech act or the content of the superordinate clause active/relevant in the situation. In these cases the controller is present in the speech situation; it is typically the speaker/author. However, in rather rare cases, the controller of the implicit subject is the undergoer of the superordinate clause. It is allowed in the case of manner converbs that typically express the sound that the undergoer makes in the given situation, and also if the undergoer is a strongly foregrounded participant in the text or the most salient participant of the speech situation. Furthermore, the controller is not present at all if the implicit subject of the converb is a generic person or a

non-specified person or group. Hence one should not restrict the implicit subject of the Estonian *des*-converb to the actor of the superordinate clause. In the case of foregrounded participants, generic persons, conversational clauses and some manner adverbials, the implicit subject of the *des*-converb need not be co-referential with the actors of the superordinate clause. Thus, the Estonian data support Haspelmath's (1995) hypothesis and demonstrate that the implicit subject is controlled by the most pragmatically salient participant, not only by the actor of the superordinate clause, as the academic grammar of Estonian (Erelt et al. 1993) claims.

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Abbreviations

1–3	person	IMPRS	impersonal
ABE	abessive	INE	inessive
ABL	ablative	INF	infinitive
ADE	adessive	NEG	negation
ALL	allative	PL	plural
COM	comitative	PRT	partitive
COMP	comparative	PST	past
COND	conditional	PTC	particle
CONV	converb	PTCP	participle
ELA	elative	SG	singular
GEN	genitive	TRM	terminative
ILL	illative	TRSL	translative

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