Pivot constructions in spoken Estonian

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Abstract

This article examines pivot constructions (PCs) in Estonian interaction. The data (146 examples from 135 randomly selected conversations) come from Corpus of spoken Estonian. The first section presents the main structural types of Estonian PCs. In addition to single-pivot PCs, the Estonian data revealed PCs with two pivots (and as a consequence: three pre-/post-pivots segments), which have not been mentioned in the literature before. The next section presents an analysis of (word-)searches made by PCs in Estonian. Four different variants of searches are presented according to the location of the initiation and outcome of the search with regard to the pivot. The last section analyses post-positioned self-repairs made by PCs. They are used almost always to offer an alternative verb. All post-positioned self-repairs are associated with the purpose of making information more accurate, precise, or specific. The analysis also showed that there is a division of labor between verb replacements made with or without PC.

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1. Introduction

The purpose of the present article is to describe the structural types of Estonian pivot constructions (PCs) and analyze their use as self-initiated self-repair (SISR) practices. In order to provide a background for these analyses, I will first review some definitions of PCs and of SISR, and also give some basic facts about Estonian syntax. I will then describe the structural types of Estonian PCs and introduce a new variant – a PC with two pivots. The next sections will describe and analyze PCs with and without SISR. There are two types of SISR: (word-)searching and post-positioned self-repair made by a PC.

1.1. Pivot construction: definition and typology

There is no generally accepted definition and typology of PC (Franck, 1985; Hakulinen, 1987; Hennoste, 2001:195–197; Scheutz, 2005:107–112; Norén, 2007:106–140; Betz, 2008:27–35; Norén and Linell, 2013). If one scans the literature, however, a prototypical PC would be defined on the basis of the following seven features (Scheutz, 2005:107–112; see also Norén, 2007; Norén and Linell, 2013): (a) it consists of three adjacent parts: pre-pivot, pivot, and post-pivot; (b) the pre-pivot + pivot and the pivot + post-pivot segments construct clausal units, but the first and the last parts are incoherent from a normative grammatical perspective; (c) the turn could be brought to a possible syntactic completion at the end of the pivot segment; (d) it includes two finite verbs (main predicate verbs or finite parts of composite verb forms) appearing in the pre-pivot and post-pivot; (e) the pivot between the verbs fulfills the same syntactic function in the pre-pivot

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and the post-pivot; (f) it is constructed as a prosodically coherent unit (without restarts) but there could be self-repairs and pauses in the PC; and (g) there is semantic coherence between the pre-pivot and the post-pivot.1

In example (1) below, P is talking about computer problems with his brother. In this example the pre-pivot is ta ei võta ‘it does not get’, the post-pivot is ei võta ühendust ‘does not get in touch’, and the pivot is noh nende klientidega ‘with these customers’, which is an NP in the comitative case and an adverbial with regard to both verbs.2

(1)

1. P: vaata kas ’proksi on: õigesti ’konfitud, sebäраст
check-IMP whether proxy be-PRES-SG3 properly configure-PTCL because
check whether the proxy is properly configured because

2. 

minu=arust ta ei võta: noh nende
in my opinion it NEG get-NEG PRT these-GEN-PL
in my opinion it does not get in with these

3. 

kli‘entidega ei võta ‘ühendust.
customer-CMT-PL NEG get-NEG connection-NFV.
customers does not get in touch

There are different lexi-grammatical types of PCs and different researchers have used different typologies. In the present study I will adopt a typology of the PCs based on three structural features: (1) an utterance could be brought to a possible syntactic completion at the end of the pivot or not; (2) PCs could be extended by adding new elements in the post-pivot or not; and (3) elements in the pre-pivot could be recycled fully or partially in the post-pivot.

In the PC in example (1) elements in the pre-pivot are partially recycled in the post-pivot (only the verb ei võta without the subject pronoun ta ‘it’). The turn is not brought to a possible syntactic completion at the end of the pivot, because the obligatory non-finite part ühendust of the complex verb võtma ühendust is still missing at that point. The turn is brought to completion at the end of the post-pivot after introducing ühendust.

1.2. Self-initiated self-repair

Repair is “an organized set of practices” addressing and resolving problems in speaking, hearing, or understanding in interaction. In SISR the repair is initiated by the speaker of the problem source (repairable) and the completion of the repair is done by the same speaker (Sidnell, 2010:110). For the purposes of the present study SISR operations could be divided into two groups: (word-)searching and post-positioned self-repair.

The initiation of a (word-)searching is typically marked by special search markers: pauses, word prolongations (sina: ’you:’), fillers and particles (ee, noh) (for Estonian see Hennoste, 2000b:2694–2697). Another possibility is to use syntactic constituents as means for searching. The first option is to recycle the words or phrases with or without a cut-off (ta tu- tuli ‘she ca- came’; ta tuli tuli ‘she came came’). The second option is to use a placeholder (Hayashi and Yoon, 2006:489–490; Hennoste, 2001:192–193; also Keevallik, 2010). A placeholder is a pronoun or a pro-adverb (e.g. see, seal ‘this, there’), which has two roles in self-repairs. It shows the speaker’s preliminary solution by indicating which syntactic constituent and in which form it was projected. At the same time it indicates that the speaker knows a solution, but she is unable to recall it immediately. The third option is to use another syntactic constituent instead of the projected constituent.

The operations of the post-posed self-repair could be divided into two groups for the present study. One group is restarts (abortions). A restart is an operation by which the speaker abandons an utterance-in-progress and begins a new one (Goodwin, 1980:274). The first construction is left uncompleted and the result has the format [fragment] + [coherent sentence]. Typically, the new construction is marked prosodically as a new unit.

In another group of post-posed self-repair the speaker interrupts an ongoing utterance, makes a repair, and then completes the utterance. Four repair operations are used in this group: replacement of one item by another, insertion of a new item afterwards, deletion of some item, and reordering of words or phrases in the prior talk (Sidnell, 2010:115–116).

1 There could be exceptions from prototypical cases, e.g. an NP in the pivot could be a subject with regard to the pre-pivot verb, but an object with regard to the post-pivot verb. See Lindström (2013) and Norén and Linell (2013).

2 For transcription and glossing symbols see Appendices A and B.
The same-utterance repair could be initiated immediately after a problem source, or with some delay (e.g. after two words). Typically, special repair initiators are used (cut-off, particle või ‘or’, etc.), but one might begin smoothly or use search markers. These self-repairs can be divided into two types on the basis of the problems solved – error correction and modification (i.e. offering a more appropriate alternative).

The following examples contain SISR without PC. The example (2) below is drawn from a telephone conversation between two friends. Here a pause (.) and a word prolongation (täistun:d) are used for searching (line 1). The first post-positioned self-repair (line 2) is initiated by cutting off the problem source (võta- ‘pick’), i.e. the form võtab is not brought to completion; the meaning is literally ‘take’, but here ‘pick’). Then the error is corrected by replacing the verb (võta- > on ‘pic- > is’), as the verb võtma ‘here: to pick’ is grammatically unacceptable in this construction in Estonian (Hennoste, 2008:35–36). Then the second replacement follows (on > tuleb ‘is > comes’), which is initiated smoothly and is used to suggest a more appropriate alternative.

(2)
1. H: =jah ja see on (.). ’täistun:d läbi kümme ’minutit yes and this be-PRES-SG3 the hour after ten minute-PAR yes and it’s ten past the hour
2. võta- on ’tuleb. pick-PRES-SG3 be-PRES-SG3 come-PRES-SG3 pic- is comes.

Example (3) is drawn from a conversation between two female students. Here the particle noh is used for searching and after the cut-off of the word ra- ‘library’ the speaker uses the restart and initiates the new utterance.

(3)
1. H: aga mai noh=ei= old ra- ma ei saand ’minna= but I not PRT NEG be-PTCL library I NEG can-PTCL go-INF but I wasn’t was not in lib- I couldn’t go
2. (−)= ’raamatukokku library-ILL to the library

In example (4) a daughter and her father (F) are talking about their friends. Here F is searching for a continuation after the verb ostis ‘bought’ (line 1). He uses at first the placeholder selle (this + GEN), which projects some noun in the genitive (e.g. grammatical object). But he follows up by the word Kiisale (Kiisa + ALL) instead, which is a place name functioning as a place adverbial and serves as a search marker at the same time here. He then repeats the placeholder selle, and only after a pause the object suvila (summer house + GEN) follows which completes the clause.

(4)
1. F: ja ’Andrus nüüd=kuskil ’eelmine aasta sis ostis and Andrus now about last year then buy-PST-SG3 and Andrus now about last year then bought
2. selle ’Kiisale selle, (.). ’suvila this-GEN Kiisa-ALL this-GEN summer house-GEN this to Kiisa this summer house
3. ( ja tegi selle nüüd) ’majaks endale ’ringi. and make-PST-SG3 this-GEN now house-TRA self-ALL round and remade it into a house for himself.

Below, we shall see how these self-repair devices are deployed in PCs. First, however, we need to introduce a few basics of Estonian grammar.
1.3. The syntax of Estonian

In order to carry out PC analysis, some knowledge of Estonian syntax is necessary (see Erelt, 2003; Erelt et al., 2007). Estonian is a close relative to Finnish and has been under the influence of German for centuries. During the 13th–19th centuries Estonians were basically peasants and the nobility was German.

Estonian has a complicated case system. There are 14 cases which can be divided into two groups. The first three cases (nominative, genitive, and partitive) are used for the functions of grammatical subject, object and predicative in utterances. The other cases are formed by adding endings to the genitive form and are used as adverbials (e.g. nominative laud ‘table’, genitive laua, and adessive laua + l ‘on the table’).

Word order in Estonian is regarded as grammatically free. The strongest factor of word order is the theme–rhem structure of the sentence. Usually the theme is placed at the beginning of the sentence and is unstressed while the most important new information of the rhem (focus) is at the end of the sentence and is stressed.

Estonian reveals verb-second (V2) ordering in independent affirmative declarative clauses. The verb occupies the second position even if an adverbial or object is placed at the beginning of the sentence (cf. German: Betz, 2008:16 and Swedish: Norén and Linell, 2013). This requirement is less strict in spoken Estonian (Lindström, 2005:173–174). The subject is not an obligatory clause constituent and in clauses without subjects the verb could be at the beginning of the clause and the person is indicated by the verb form (Ma lähen koju/Lähem koju ‘I am going home/[I am] going home’). There is no rule in Estonian that the subject and the finite verb must be side by side; however, it is the strongest statistical word-order constant in spoken Estonian (Hennoste, 2001:201–202).

Estonian has many compound verb forms as complex predicates. They include compound verb forms (on näinud ‘has seen’), periphrastic verb forms (olema ‘be’, saama ‘become’, etc. + a non-finite verb form, on lahkumas ‘is about to leave’, etc.), catenative verbs (hakkab sõõma ‘begins to eat’, etc.), expression verbs (verb + a declarative word, e.g. aru saama ‘understand’), and phrasal verbs (verb + adverb, e.g. alla jääma ‘be run over’). It is common that the non-finite member of the complex predicate is separated from the finite verb and moves to the end of the clause (e.g. Ta ei ole mind tänna näinud ‘He hasn’t seen me today’; see also German Satzklammer: Betz, 2008:18–19).

The neutral word order of the syntactic constituents after the finite verb in the declarative clause is as follows: adverbial of possessor (=indirect object in English grammar) – optional adverbial – (direct) object/predicative – adverbial complement – non-finite parts of the verb (Sahkai, 1999:29). This basic word order is similar to German.

Negation is expressed by means of the negative particle ei ‘no, not’ which almost always immediately precedes the verb (ma ei tule ‘I will not come’). In the imperative, the particle ära (ärge, ärgem, ärgu in different persons) is used (ära tule ‘don’t come’).

The verb olem ‘to be’ has two syntactic functions in Estonian: the copula (ma olen ‘I am’) and the predicate of the possessive/experienter construction (mul on ‘I have’). The latter clauses open with a noun in the adessive and have a structure N + ADE + olem + N + NOM (e.g. tal on raamat/külm ‘he has a book’/‘he is cold’). The noun in the adessive is an adverbial and the last constituent in the nominative (or in the partitive) is the grammatical subject (a book) or the predicative (cold).

1.4. Material and overview

The data are drawn from the Tartu University Corpus of spoken Estonian (Hennoste et al., 2008). 146 pivot constructions from 135 randomly selected telephone and face-to-face, everyday, and institutional conversations were used.

In the first section of the results chapter I will analyze the quantitative data of typical PC structural types and then (the less typical) PCs with two pivots. In the immediately following sections I will analyze PCs as searching and post-positioned self-repair practices.

2. The structural types of PCs in Estonian talk

In this section I will present an overview of the structural types of Estonian PC. The structural types of PC found in the data can be divided into two groups: PCs with one pivot (Table 1) and with two pivots (Table 2).

2.1. Pivot construction with one pivot

There were 138 PCs with one pivot in the data (see extract (1) for an example). The majority of these PCs (113) were not brought to a possible completion at the end of the pivot, and of these, 108 were extended beyond the pivot by way of partial recycling of the pre-pivot.
Table 1
Types of Estonian PCs with one pivot.

<table>
<thead>
<tr>
<th></th>
<th>Completed in pivot</th>
<th>Non-completed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extended</td>
<td></td>
<td>Extended</td>
</tr>
<tr>
<td></td>
<td>Full recycling</td>
<td>Partial recycling</td>
<td>Full recycling</td>
</tr>
<tr>
<td>Without SISR</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Searching</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Post-positioned self-repair</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 2
Types of Estonian PCs with two pivots.

<table>
<thead>
<tr>
<th></th>
<th>Completed after first post-pivot</th>
<th>Non-completed after first post-pivot</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-extended in the second post-pivot</td>
<td>Extended in the second post-pivot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Full recycling</td>
<td>Partial recycling</td>
<td>Full recycling</td>
</tr>
<tr>
<td>Without SISR</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Searching in the second part</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Post-positioned self-repair in the second part</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Post-positioned self-repair in the first part</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

2.2. Pivot construction with two pivots

In addition to the PCs with one pivot there are also constructions with two pivots in Estonian. In those constructions during the process of utterance production the first post-pivot is retroactively made into the second pre-pivot, and it has a double role in the whole construction (post-pivot/pre-pivot) (example 5).

Extract (5) below is an example of this construction type.

(5)

1. H: ma ei ole ‘üldse peagu ‘vaandand,
   I NEG be-NEG nothing almost look-PTCL
   I have almost nothing looked

2. mul olid ‘eile olid ‘külalised käsid= ja.
   I-ADE be-PST-3PL yesterday be-PST-3PL guest-PL-NOM visit-PST-3PL and
   I had yesterday had some guests visited us and

Here H discusses preparations for an exam with her friend over the phone. She begins the PC with the possessive construction *mul olid* ‘I had’, which is followed by the first pivot (time adverbial *eile* ‘yesterday’). She then recycles the verb and continues with a second pivot (subject *külalised* ‘guests’). After that she continues with a third finite verb *käsid=ja* ‘visited’, this time not a recycling but a replacement (*olid > käsid* ‘had > visited’), on which the turn is brought to completion with a falling final intonation. The construction is shown in Fig. 1. One might suggest that such a construction (example 5; Fig. 1) could be alternatively analyzed, namely, as involving self-repair with an initial construction that gets abandoned after the adverbial, and then followed by a restart. However, all examples of this kind are semantically coherent constructions without a break in the intonation contour (cf. restart in example 3). The pivots fulfill different syntactic functions (time adverbial and subject in example 5), but they have the same function with regard to their ‘own’ pre-pivot and post-pivot. The syntactic and prosodic continuity thus speaks for the two-pivot analysis.

These constructions have two structural variants. One variant is brought to a possible syntactic completion at the end of the first post-pivot (example 5: *mul olid* ‘eile olid *külalised* ‘I had yesterday had guests’). Another group comprises PCs that are non-completed after the first post-pivot. In example (6), two children M and A, and their mother E are talking. A is leaving after a weekend at home.
(6)

   at what time Ann your bus will leave

2. (0.7)

   at half past nine

4. E: ma=pean 'laos olema ennen=jä
   I must-PRES-1SG warehouse-INE be-INF at first and
   I must be in the warehouse at first and

5. *sis mul on* pool kümnest on= mul
   then I-ADE be-PRES-3SG half ten-ELA be-PRES-3SG I-ADE
   then I have at half past nine have I

6. 'see (0.8) Jämejala mul= on: 'ravi.
   this-NOM Jämejala-ADE I-ADE be-PRES-3SG treatment.
   this at Jämejala I have treatment.

M asks when A's bus is leaving and she answers “at half past nine”. Then mother E takes her turn and begins with the information that she must be in the warehouse (at her workplace) at first (line 4). Her next utterance is a PC which begins by the conjunction sis ‘then’ and continues with the possessive construction mul on ‘I have’ followed by the time adverbial pool kümnest ‘at half past nine’. She then recycles the pre-pivot by using reversed word order on mul ‘have I’, which now constitutes a post-pivot (line 5). At this point the sentence is grammatically incomplete. E continues with the word see (this + NOM), which is followed by the adverbial Jämejala (Jämejala + ADE). The utterance is still not grammatically complete as I have requires a grammatical subject or a predicative. She searches for a completion by prolongation of the verb (on:), and only then E completes the utterance grammatically and intonationally with the subject ravi (treatment + NOM) in line 6.

The syntactic constituents in the first pre-pivot could be recycled fully (example 6) or partially in the pre-/post-pivot and in the last post-pivot (example 5).

2.3. Concluding remarks on PC structure types in Estonian talk

Different structural variants of the PCs are used in Estonian talk (see Tables 1 and 2). The analysis of the data shows however that most of Estonian PCs are characterized by four features (see example 1).

(1) 81% of PCs are syntactically non-completed at the end of the pivot. The obligatory syntactic constituents still missing are typically grammatical objects or/and the non-finite parts of complex predicates which typically occur at the end of an utterance.
(2) In 87% of cases, the only part that is recycled of in the post-pivot(s), is the verb, whereas adverbials and subjects are typically omitted.
(3) 81% of Estonian PCs contain 'light weight' elements in the (first) pre-pivot (cf. Scheutz, 2005:113). They include the verb olema 'be/ have', a pronoun subject or an adverbial (e.g. mina 'I', mul '1 + ADE'), or some pronominal adverbials (e.g. sini 'here', sis 'then').
(4) 69% of PCs contain searching or post-positioned self-repair.

In conclusion, we can divide Estonian PCs roughly into three groups. The first group consists of non-completed, partially recycled PCs with SISR (53% of all cases). The second group is non-completed and partially recycled PCs without SISR (23%). All other variants together account for 24% of the data.

3. Analysis of PC as a searching practice

This section will analyze PCs that are used for searching. There are four search possibilities which differ by the place of search initiation and outcome with regard to the pivot.

32 single-pivot PCs contain word search in the pivot (plus one PC with two pivots where the searching takes place in the second pivot). This type could be illustrated by example (1) where P explains to his companion a computer problem, which he asks him to check. The search is initiated on the boundary of the pre-pivot and the pivot by prolongation of the verb võta: 'get'. Then the search particle noh follows (Hennoste, 2001:185–191), followed by the solution nende klientidega 'with those clients', which terminates the pivot. Then the utterance is extended with a verb recycling and the missing part of the complex verb (ühendust), which completes the PC. At the same time the pivot is used for portioning of the information here as it involves separating two foci (klientidega and ühendust) from each other (Scheutz, 2005:120).

In seven examples of PCs all the search phases are in the post-pivot (plus one PC with two pivots where the searching takes place in the last post-pivot). In example (7) two schoolgirls are discussing their teachers’ favorite words.

(7)
1. K: põhisõna on tal <‘vapustav.’>
   her main word is terrific
2. B: @ jah. (0.5) see näidend see oli nii <‘vapustav,’>
   yes this play this be-PST-SG3 so terrific
   yes this play this was so terrific
3. no <‘vapustavalt’> mängisid @ onju, jumala vapustav. (.)
   PRT terrifically play-PST-PL3 PRT god-GEN terrific.
4. nagu ‘Roosvaldil on siukseks sõnaks on
   as Roosvald-ADE be-PRES-SG3 such word-TRA be-PRES-SG3
   as Roosvald has such a word has/is
5. see (1.0) okei.
   this okei.
   this okay
6. täts okei. ool rait. jes. okei onju. ok- okei,
   täts ((smile)) t(h)äts ok(h)ei.
   That’s okay all right. yes okay PRT. ok- okay that’s ((smile)) that’s okay.

B begins her turn in line 2 by confirming K’s information about the favorite word of one teacher and adds some more examples. When she continues with the favorite word of another teacher (Roosvald), she ends up using a PC. B begins the PC with the possessive construction Roosvaldil on ‘Roosvald has’. Then the pivot siukseks sõnaks ‘such a word’ follows. After that the verb recycling takes place. Instead of providing the ‘favorite word’ of teacher Roosvald, B initiates word search by using see ‘this’ and a pause and only then the search outcome okei follows, which completes the
utterance. As Roosvald’s favorite word is new information here, the word see cannot refer backwards or be a marker of definiteness. It could be analyzed as a placeholder for the grammatical subject in the nominative.

Five examples contain separate word searches in the pivot and the post-pivot. In example (8) a customer C and a shop assistant SA are talking about the color of the wallpaper that the customer prefers for her room.

(8)
1. SA: no=sin (. ) ‘stendide peal ned=on=ned (0.8) PRT here on the stands those are those
2. > ned=’paber=ja=’vinüül’tapeedid ‘segamini=aga: < (.) those paper and vinyl wallpapers disorderly but
3. phhh ‘millist ‘tooni teil ‘vaja oleks=et (0.4) what tone would you need that
4. äkki ma (.) saan teid (.) ‘aidata sobiva ‘valikul. may be I can help you in finding the suitable one.
5. (0.4)
6. C: no: aa (.) no=ma=sooviaks=midagi (0.4) sellist (.) ‘eledat (.) PRT PRT PRT I wish-CON something-PAR such-PAR bright-PAR I would like something bright
7. ‘eledat ‘tooni> selist= nändeks ‘kollakat=või< (.) noh bright-PAR tone-PAR such-PAR for example yellow-PAR or PRT tone such a yellow one for example or
8. sest= mul endal= on (.) ‘mööbel=on because I-ADE myself-ADE be-PRES-SG3 furniture be-PRES-SG3 because I myself have the furniture I have/is
9. ‘ka: (.) selline ‘eledam. also such bright-COM.
also such brighter.
10. (0.4)
11. SA: * mhmh * (.) (ja)=kas te soovite: (0.4) ‘portega=või PRT and would you like with border or
12. (.) või=ilma ‘porteta panna. or without border to put.

C begins her turn with her wish to buy yellow wallpaper and then initiates an account for this, which involves a PC. She begins with the possessive construction (mul endal on ‘I myself have’), and initiates the first search in the pivot by using a pause (.) mööbel ‘furniture’. After a recycling of the verb on ‘have/is’, the second search is initiated in the post-pivot (a prolongation of the adverbial ka; a pause, and the placeholder selline), which is brought to a solution using the word heledam ‘brighter’, which completes the turn.

In three examples (plus one example with two pivots) the word search begins in the pivot and the solution comes only in the post-pivot. This type could be illustrated by the last part of the PC in example (6). The search process is initiated by the placeholder see (this + NOM) in the second pivot and followed by a pause (line 6). Then the speaker continues with the place adverbial Jämejala (Jämejala + ADE), which is followed by recycling of the pre-pivot mul on ‘I have’. The search is completed in the post-pivot after prolongation of the verb (pool kümnest on=mul ‘see (0.8) Jämejala mul=on: ‘ravi, ‘at half past nine have I this at Jämejala I have treatment’).
See could be a placeholder which projects the noun in the nominative. However, see in the nominative could be used also as a search marker, which could be followed by nouns in different cases (Hennoste, 2001:192–193; Keevallik, 2010). If see is a search marker, there are two separate word searches (see (0.8) Jämejalal and on: ravi). In case see is a placeholder, there is one search process. Here see is a placeholder, which is confirmed by the fact that the speaker returns to the word in the nominative in the last post-pivot, which is preceded by search markers (recycling and prolongation). One can conclude that Jämejalal has a twofold function here. It is a place adverbial and a search marker as in example (4).

4. Analysis of PC as a post-positioned self-repair practice

The second group of PCs has a post-positioned self-repair in the post-pivot. Here I will analyze PCs with one pivot first, and then those with two pivots. There are different kinds of repairs, relating to the syntactic category of the problem source (predicate verb or other constituent), repair operation (replacement or insertion), and type of the problem-solving (modification or error correction). Here I will concentrate on the ways in which the replacement modifies the ongoing talk.

4.1. SISR in PCs with one pivot

All repairs in the PCs with one pivot are modifications that may be divided into two groups: verb replacements and noun replacements.

4.1.1. Predicate verb replacements

42 cases (89%) are verb replacements by an alternative verb. One can find six types of replacements which differ by the semantic, morphological or syntactic relations between the problem source and the outcome verb.

One possibility is the replacement by a morphological form of the same verb (example 9). Two young ladies discuss a ski trip to Slovakia. V is an organizer and authority who has previously visited the area. H has asked a question about ski rental prices. V answers and gives the precise price (line 1).

(9)
1. V: < suusakomplekt 'laenutus sada 'eeki.> üks 'päev.< a set of skis, rental a hundred kroons per day.

2. (0.5)

3. H: kule isegi minu arust=eee 'Otepää on kallim. listen, in my opinion, it’s more expensive even at Otepää.

4. (1.8)

5. V: hehe < Otepää on 'nelisada krooni SMILE Otepää-ADE be-PRES-SG3 four hundred kroon-PAR
SMILE at Otepää it is four hundred kroons

6. oli vist 'laud be-PST-SG3 probably snowboard
was probably a snowboard

7. ja 'kolmsada oli::> õõ 'suusad.
and three hundred be-PST-SG3 skis-PL-NOM.
and three hundred was skis.

H provides her opinion that the price at Otepää (an Estonian ski center) is higher, and adds the phrase minu arust ‘in my opinion’, which indicates uncertainty of her knowledge (line 3). After a long pause and a smile (hehe) V presents more specific information about prices at Otepää (lines 5 and 6). She begins with the adverbial Otepääl (Otepää + ADE), which connects her turn to the partner’s previous turn. Then a verb in the present on ‘is’ and a phrase nelisada krooni ‘four
hundred kroons’ follow which is analyzed as a predicative in Estonian grammar. After that the construction is grammatically potentially completed, but V recycles the verb, changing the present to the past tense (on > oli), and adds the adverbial vist ‘probably’ which shows uncertainty of her information. Then the word laud ‘snowboard’ follows and after that she adds a new clause which presents the price of the skis. The past tense cannot indicate what the price is now. It could refer to an earlier price, but this information is not relevant from the viewpoint of the previous turn of H (line 3). Another variant is that the past tense indicates knowledge that is based on some specific case. This is shown in V’s next turn where she speaks about their trip to Otepää (not shown in the example).

Here V performs two actions by means of verb replacement. She indicates that the degree of accuracy of her information is lower than shown by the first verb form (on > oli vist ‘is > was probably’). At the same time she uses replacement to show more precisely the degree of accuracy of her knowledge. Simultaneously she uses a PC for the fusion of the focus and topic positions here (Scheutz, 2005:118). The pivot element nelisada krooni ‘four hundred kroons’ combines the focus position of the first part and the focused topic position of the final part of the PC. The reason for the shift could be fact that ‘four hundred kroons’ is the price of the snowboard and not the price of the skis which was the topic in the previous turns.

A second type contains replacements of a neutral verb by a narrower or emotionally stronger synonym. The syntactic construction and the morphological form of the verb remain the same. In example (10) below, two girls are discussing a movie. V has earlier become upset about the views of E who had claimed that the main character was “a beautiful and clever prostitute”. The others react by smiles and emotional responses (oh, God). Then E continues with the conjunction/particle ja siis ‘and then’ (line 1 in the example), but V interrupts her turn (line 2).

(10)
1. E: ja siis
   and then
2. V: kule ‘ära räägi= nüüd, palun no ‘jäta noh=s,
   listen NEG speak-IMP now please PRT stop-IMP PRT
   listen don’t say stop it now please
3. jäta ‘järgi, no ‘töesti,
   stop-IPM PRT really
   stop it really
4. no sa räägid tättsa ‘rumalusi
   PRT you talk-PRES-SG2 absolute nonsense-PAR-PL
   you are talking absolute nonsense
5. ajad praegu suust välja.
   ride-PRES-SG2 now mouth-ELA out.
   drive out of your mouth now.

At the beginning of her turn V wishes E to shut up. She then starts an utterance that presents a specifying argument to E’s previous statement (line 4). V begins with the subject sa ‘you’, which is followed by the neutral verb räägid ‘[you] are talking’ and brings the clause to potential grammatical completion with the phrase tättsa rumalusi ‘absolute nonsense’. In the post-pivot she replaces the verb by a strong and emotional metaphor ajad suust välja ‘lit. drive out of your mouth’. The new variant intensifies or strengthens the first formulation and at the same time it probably conveys more accurately V’s assessment.

A third type of replacements includes most self-repair cases in the data. Here the generic verb olem ‘be’ is replaced by a more concrete and active verb. In example (11), the shop assistant (SA) shows wallpapers to the customer (C). In his previous turn SA had discussed the different impact of vinyl and paper wallpapers on human health. C then continues with a question about the price differences between the two types (line 1).

(11)
   oh but but are their prices different too
2. (0.4)
SA: no on ikka 'meie poes' on

PRT be-PRES-SG3 still that we-GEN store-INE be-PRES-SG3
sure at our store are

vinüültapeetide innad algavad (0.4)
vinyl wallpaper-GEN-PL price-NOM-PL start-PRES-SG3
the prices of vinyl wallpapers start

'sajast kroonist=rull=kusagil,
hundred-ELA kroon-ELA roll around
at around a hundred kroons a roll

kuni=seal () 'paarisajaj kroonini, (0.6)
up there couple hundred-GEN kroon-TER
up to a couple hundred kroons

no 'pabertapeetide= innad (0.4) algavad kolmekümne 'üheksast
PRT paper wallpaper-GEN-PL price-NOM-PL start-PRES-PL3 thirty-GEN nine-ELA
the prices of paper wallpapers start at thirty-nine

kroonist (0.4) 'rull kuni=sis () pea 'saja kroonini,
kroon-ELA roll up to PRT almost hundred-GEN kroon-TER.
kroons a roll up to almost a hundred kroons.

SA begins his answer with an affirmative response (no on ikka 'sure') and then continues with a PC that contains more detailed information. He starts the PC with the adverbial meie poes 'at our store', which is followed by a pause and the verb on 'are' and the subject phrase vinüültapeetide innad 'prices of vinyl wallpapers'. This projects the information about prices. Instead, SA replaces on by a more concrete verb algavad '[they] start' and presents the information starting with lower prices. The new verb enables SA to take into account the customer's presumed interest in lower prices as the question about prices indicates typically that the customer is interested in cheaper products. The shop assistant changes the direction of the talk and presents his information in a form that meets more accurately the expectations of the customer.

A fourth type represents replacement of a verb by another verb with a different meaning (see example 12). Here two brothers are talking about the possible meeting in the town tomorrow. V has said that he might perhaps come to town tomorrow. H responds that he will not be at work tomorrow. V asks where H will be. Here the example begins. H responds that he is on vacation and is visiting the sites in order to raise cash. Then a pause follows, and V responds with the information management particle aa (Hennoste, 2000a:1784; K eevalik, 1999:46–47). H interprets the combination of a pause and the particle as a prompt for additional information when he extends his telling in line 5.

(12)

1. H: ma praegust 'puhkan, ja käin ob'jektidel ringi,
at present I'm on vacation and I'm visiting the sites

2. puüian 'raha kokku saada.
[I am] trying to raise cash.

3. (0.5)

PRT

5. H: =et noh teen nimodi hal'tuuraotsi otsin praegu.
that PRT do-PRES-SG1 so extra job-PAR-PL search-PRES-SG1 now.
so I'm doing extra jobs looking for now.
H begins the turn in line 5 with the particles et noh ‘that + search particle’. After that he initiates a PC with the verb teen ‘I’m doing’ without a subject and brings the sentence to its potential syntactic completion with the object haltuuraotsi ‘extra jobs’. Then he replaces the verb teen to otsin ‘I’m looking for’ in the post-pivot, which alters the described situation. The verb do implies that the speaker has a job, but look for indicates that actually there is no job. Here the verb replacement could be interpreted as making the information more accurate.

A fifth type of replacements occurs only with the verb olemä ‘be’. This type may be further divided into four subcategories. In most cases olemä functions as the copula both in the pre-pivot and the post-pivot (example 3) – this is the first subcategory. A second subcategory comprises examples where the possessive construction is used both in the pre-pivot and the post-pivot. The preservation of the role of the verb is marked explicitly by recycling the (pro)noun in the adessive in the post-pivot(s) (example 6: mul on > on mul > mul on ‘I have’).

The third subcategory consists of cases where the PC begins as a possessive construction and contains only verb recycling in the post-pivot (example 7: Roosvaldil on siukeseks sönaks on see (1.0) okei ‘Roosvald has such a word has/is this okay’). Here the question arises whether the change of the syntactic role of olemä takes place or not. One possibility is to interpret omission of the adverbial (Roosvaldil) as a move from one construction to another as here is no explicit adverbial recycling which marked the preservation of the verb role. However, this is not valid from the perspective of semantics as the adverbial in the adessive is an essential semantic component of the PC in this case. For this reason, it is preferable to interpret those cases as something between keeping and changing the verb’s function.

The fourth and last subcategory to the fifth replacement type contains three utterances which begin with a time or place adverbial plus the copula olemä and followed by a pronoun in the adessive as a pivot by which the speaker moves to the possessive construction. In example (13) two women are talking to each other. R’s son has problems at school and she has turned to her friend K for help; the latter asks a question about his problems (lines 1 and 2).

(13)
1. K: .hh ee=mm=hh (.) nojah=nüü (1.0) uvitav küll ‘mida ta säl
   .hh PRT PRT PRT PRT PRT now interesting PRT what he there
2. noodiöpetuses:=e ‘öpib ja mida ta peab ‘öskama.
   in the music lessons studies and what he must know
3. R: ‘säääl on  ‘tal  on
   there be-PRES-SG3 he-ADE be-PRES-SG3
   there is he has got it
4. noodi ‘vihikus  ‘olemas,
   music exercise book-INE be-NFV
   in the music exercise book
5. aega noh ega ‘mina pole  ka seda ‘öppind,
   but PRT NEG I be-NEG too this-PAR learn-PC
   but PRT I haven’t studied it either
6. ega ‘mina ka ei  ‘tea.
   nor I too NEG know-NEG
   I don’t know it either

R begins her answer to K’s question with the place adverbial säääl ‘there’ followed by the copula on (line 3). She then introduces tal (he + ADE) and recycles the verb. Then she continues with the place adverbial noodivihikus ‘in the music exercise book’ and completes the PC with the non-predicative part of the verb olemas (line 4). Here one can interpret the verb recycling on > on as a shift from one syntactic role of olemas to another. The speaker moves from the normal copula on ‘is’ to the copula on ‘has’ in the possessive construction by changing the role of the verb using the pivot tal.

The first word in the pre-pivot säääl ‘there’ connects the utterance to the previous segment säääl noodiöpetuses ‘there in the music lessons’, which projects more information about music lessons. The repair changes the construction and the direction of the talk. Now the speaker says that ‘he’ (the son) has got the information that could be found in the music exercise book. The new variant indicates that she does not have information but at the same time it shows more precisely the degree of accuracy of her knowledge.
In the sixth type of replacements the syntactic construction of the PC is changed more radically. Example (14) is from a telephone conversation, a troubles telling between two friends. Speaker V has been telling about her husband, whose leg is seriously ill. Speaker H asked a question about the possible future developments, and V responded that gangrene and amputation of the leg might follow. H then begins a new question, which changes the topic of the conversation (line 1). V interrupts her turn and continues her previous troubles telling with more detailed information (lines 2–4).

(14)
1. H: aga=no ‘präägu sa tilg[u–]
   but now you dri–
2. V:       [t]al on juba: ammu,
   he-ADE is-PR3 already long time ago,
   he has had it for a long time already
3. ő tal oli kolmekümne=aastalt taheti
   PRT he-ADE be-PST-SG3 thirty-GEN year-ELA want-IMPRS-PST
   he had at the age of thirty they wanted
4. ‘jalga ‘maha võtta.
   leg-PAR off cut-INF.
   to cut off his leg already.

V begins her turn with the utterance tal on juba ammu ‘he has had it for a long time already’ (line 2). She then abandons the ongoing construction and makes a restart by beginning a second possessive construction beginning with tal plus a form of olema (line 3). She uses oli ‘had’ (literally: ‘was’) in the past and the time adverbial kolmekümne aastaselt ‘at the age of thirty’. After that V replaces the verb oli by the verb complex taheti /.../ maha võtta ‘[they] wanted to cut it off’ in the impersonal mood (lines 3 and 4). Here three replacements are made: the verb olema is replaced by the more concrete verb complex tahtma maha võtta, the personal mood is changed to the impersonal (oli > taheti), and the clause type is changed from the possessive to the normal (tal oli > taheti maha võtta). This construction is a borderline PC. It has a continuous intonation contour and it is not completed at the pivot. The word tal at the beginning of the utterance is semantically necessary for the whole. However, the semantic coherence between the pre- and post-pivot is weak due to the different replacements by which the speaker redesigns the utterance and changes the direction of the talk.

4.1.2. Noun replacements
There are six cases of noun replacements. Five of them represent replacement of the pronoun in the pre-pivot/pivot by a concrete full noun in the post-pivot. In example (15) two friends H and V discuss a planned skiing trip.

(15)
1. H: aah? ja ja sis ma veel tahtsin ota selle kohta ka kūsida=et
   oh, and and then I wanted to ask also about that whether
2. (0.5) et kas ‘suuski saab sealt laenutada.
   whether it is possible to rent skis there.
3. V: <jaa, see oli: ‘sada krooni’ oli
   yes, it be-PST-SG3 hundred kroon-PAR be-PST-SG3
   yes, it was a hundred kroons was
4. vist ee {üks} ‘laenutus.
   probably PRT {one} rental.
   probably {one} rental.

H opens her turn by asking about the possibility to rent skis, using a yes-no question (line 2). V answers with the response particle jaa ‘yes’ and adds the price in the next TCU (lines 3 and 4). She begins with the pronoun see ‘this + NOM’ and
follows with the verb _oli_ 'was' and the price _sada krooni_ 'a hundred kroons', which completes the turn grammatically. Then V recycles the verb and replaces _see_ by the phrase _üks laenutus_ 'one rental' in the post-pivot.

The replacement is used to specify the referent (_see_ > _üks laenutus_). At the same time the replacement establishes a stronger and more accurate cohesion with the previous turn (_laenutada_ > _üks laenutus_) as _see_ does not refer unambiguously to any unit in the previous turn.

The sixth noun replacement is the only insertion in the data. In example (16) daughter D and mother M are discussing the daughter's new apartment by phone.

(16)
   _where the kitchen is then._

2.  (1.3)

   enter-PRES-SG2 door-ELA into then right be-PRES-SG3 such  
   you enter then right ahead is such

4.  ‘vannitu- ‘tuba, nagu ja=sii=’on  ‘vannitoa tag-  
   bathro- room PRT and then be-PRES-SG3 bathroom-GEN behind  
   a bathro- room,and then is behin- the bathroom round the corner

5.  ‘nuka taga on  ‘kõök.  
   corner-GEN behind be-PRES-SG3 kitchen.  
   _is the kitchen._

M asks about the location of the kitchen. D begins her answer by localizing the bathroom with regard to the door (_astud uksest sisse_ [you enter]) (line 3). She then uses the conjunction _ja sii_ 'and then', here: 'and after it', which is followed by the verb _on_ and the adverbial phrase _vannitoa tag-_ 'behind the bathroom'. She cuts off the word _taga_, inserts the word _nuka_ (corner + GEN), and completes the phrase by recycling the word _taga_ (lines 4 and 5). The outcome construction _vannitoa nuka taga_ 'behind the bathroom's corner' specifies the place location by comparison with the first version.

4.2. _SISR in PCs with two pivots_

Another main group of PCs in the analyzed data are constructed with two consecutive pivots within the same construction. These utterances are all examples of post-positioned self-repair. In three cases the verb _olema_ was replaced by more concrete verbs (example 5: _old > old_ > _käsid_'had > had > visited'). These examples are similar to the third type of PCs with a single pivot (example 11). The forth case represents the only instance of error correction in the data.

In example (17) two women are speaking by phone. In the first line N makes a topic shift by asking K to say something.

(17)
   _how is it going then, say something too._

2. K:  mis meil= meil ‘praegu on .hh Aivar ‘kõhib jälle puh puh  
   what we-ADE we-ADE now be-SG3 Aivar cough-SG3 again pooh pooh  
   what we have now Aivar is coughing again pooh pooh

3.  kõvasti=oli  täna oli  lasteaias ei ‘olnud,  
   heavily be-PST-SG3 today be-PST-SG3 kindergarten-INE NEG be-PST  
   heavily was today was in kindergarten was not

4.  muidu käsid  väga ilusti ’lasteaias.  
   _generally_ go-PST-PL3 _very nicely_ kindergarten-INE.  
   _generally they've been attending kindergarten very nicely._
K begins her turn with partial repetition of the question and continues with the sentence *Aivar kõhib jälle puh puh kõvasti* ‘Aivar is coughing again pooh pooh heavily’. Then she initiates a new utterance without an intonation break (line 3). She begins with the verb *oli* ‘was’ in the affirmative without a subject. She then adds the time adverbial *tänä* ‘today’, recycles the verb, and adds the place adverbial *lasteaias* ‘in the kindergarten’. Now the PC is brought to a possible syntactic completion. However, the speaker continues by replacing the affirmative verb form by the negative form (*oli > ei olnud* ‘was > was not’) and only then completes the turn prosodically. The reason for the verb form replacement is to correct an error in the information conveyed by the affirmative PC construction.

The particle *muidu* ‘usually, generally, otherwise’ is used typically in the sequences where the first part of the sequence describes some specific case which is in contrast/opposition with the typical situation (*tänä – muidu* ‘today – generally’). It is possible that the repair is used as the means which enables the speaker to make the contrast between two circumstances.

5. Discussion and conclusions

The first section of the article presented structural types of Estonian PCs. Two important conclusions can be made. First, the quantitative analysis brought out the structural types of Estonian PCs. The typical Estonian PC is characterized by four features:

(1) it is not syntactically completed at the end of the pivot;
(2) the pre-pivot contains the verb *olema* ‘be/have’ plus other ‘light weight’ elements (pronouns, pronominal adverbs);
(3) it is only verbs that are recycled in the post-pivot;
(4) in most cases it contains word searches or post-positioned self-repair.

Second, in addition to single-pivot PCs, the Estonian data revealed PCs with two pivots (and as a consequence: three pre-/post-pivots segments), which have not been mentioned in the literature before. In those cases the evolving process of utterance production yields a first post-pivot which is then retroactively made into the second pre-pivot. It has therefore a double role in the whole construction (post-pivot/pre-pivot) (examples 5 and 6).

The PCs with two pivots require modification of the definition of the prototypical PC that was provided in the introduction. The modified feature concerns the number of parts in the basic PC structure: the PC is an intonationally and semantically coherent structure which consists of *minimally* three adjacent parts (pre-pivot, pivot, and post-pivot) and includes *minimally* one pivot and two predicate verbs.

The next section analyzed PCs as a (word-)searching resource in Estonian interaction. The analysis showed that PCs with searches could be divided into four groups according to the location of the initiation and outcome of the search with regard to the pivot: (1) the whole process takes place in the pivot or (2) in the post-pivot; (3) the search process initiated in the pivot finds its completion in the post-pivot; and (4) there are two separate searches in the pivot and in the post-pivot. The first two types have been previously described in the literature (e.g. *Betz, 2008:106–117* for German) and *Norén (2007:241)* describes a different variant of the third type for Swedish. The Estonian data suggest addition of the forth type (example 8).

Verb recycling has two roles in the searching activity. If the searching takes place in the pivot, it signals that a subsidiary activity is completed and the speaker returns to the main sequence in the post-pivot segment (*Scheutz, 2005:124; Norén, 2007:309; Betz, 2008:103*). If the searching takes place in the post-pivot, it allows the speaker to gain further search or processing time (*Betz, 2008:103*). Search types (3) and (4) above call for a discussion of the role of the verb in recycling PCs. In both cases the recycling allows more time for searching, but it does not mark the boundaries between the subsidiary and the main activities.

In type four, the use of verb recycling signals that the subsidiary activity is completed and another subsidiary activity begins, that is, the recycling signals a boundary between two activities. On the other hand, recycling in the type three variant indicates somehow that the same activity (searching process) is still in progress. There are not enough examples to determine how the speaker could mark continuation. One possibility is to use a placeholder as the searching marker in the pivot, which projects continuation (as in example 6).

Apart from the searching PCs, the data also contains *post-positioned self-repairs* made by PCs. The analysis showed that most self-repairs within these constructions are replacements to offer alternatives by modification of the problem source (repairable). The analysis presented one instance of insertion and one instance of error correction (examples 16 and 17).

The modifying replacements could be further divided into noun and verb replacements. There were only a few noun replacements, and they were used to replace the pronoun in the pre-pivot/pivot by an appropriate full noun in the post-pivot (example 15). The majority of all examples in the data Corpus are modifying verb replacements.

The result of the verb replacement is a PC where two parts (pre-pivot + pivot and pivot + post-pivot) are semantically and/or syntactically different by varying degrees (see also *Franck, 1985:237*, for a similar comment on PCs in Dutch).
Estonian data enable us to suggest a detailed typology of these differences and to identify the key ways in which the replacement by PC modifies the utterance.

The data revealed six variants of verb replacement in the data, which could be combined into four groups:

1. replacement of a morphological form of the same verb (example 9);
2. replacement of the verb which could be semantically different from the first verb by different degrees: replacement of a neutral verb by its narrower or more emotive synonym (example 10); replacement of a generic verb olema (‘be/have’) by a more concrete and active verb (example 11); or replacement of a verb by another verb with a different referent/meaning (example 12);
3. changing the syntactic role of the verb olema from the copula to the predicate of the possessive construction (example 13);
4. more radical changes where different grammatical, semantic, and syntactic replacements are used at the same time (example 14).

Group (3) is a special variant which could be used only in the languages where the verb be has two syntactical functions (e.g. Estonian and Finnish).

All these repairs are associated with the purpose of making information more accurate, precise, or specific. Replacement or insertion could be used to specify an insufficiently specific referent (example 15). Verb replacement could also be used to make the information gained by the verb more accurate (example 12). Finally, the speaker could perform two different changes by the same replacement (example 9). She could indicate that the degree of accuracy of her information is different from what is shown by the first verb form. At the same time she uses replacement to show more precisely the degree of accuracy of her knowledge.

From the viewpoint of the whole syntactic constructions there are two variants. In some cases only verb replacement occurs and the whole construction remains the same (e.g. example 10), and in some cases the syntactic construction is redesigned more radically (e.g. example 14). In previous literature, this categorization has been described in terms of a mirror image construction type, and a Janus-head construction type (see e.g. Franck, 1985; Norén, 2007).

Why do speakers use the post-positioned self-repair replacements with PC? One explanation is the possibility to ‘hide’ the repair process. By using a PC instead of an overt repair operation, speakers address problems “as unobtrusively as possible” (Scheutz, 2005:126). Emma Betz has interpreted self-repair by PC as embedded self-repair which is a kind of correction or modification that is not marked overtly and syntactically but is rather “embedded” within another action (Betz, 2008:137–138, 166–167; Jefferson, 1987).

Another possible reason could be that use of a PC enables the speaker to perform different actions (repair + some other action) simultaneously or consecutively. Several actions performed by PC have been found: fusion of focus and topic position (shifting the perspective), establishing cohesion, intonational portioning of information which allows two strong focus areas to appear separately (Scheutz, 2005:117–126); framing of reported speech, resolving overlap, steering the emerging direction of the talk, correcting an action, managing turn transition space, and building long turns (Norén, 2007; Betz, 2008:7–8).

The Estonian data show similar actions here. For example, one can find fusion of focus and topic (example 9), separation of two elements with a strong accent (example 1), establishment of (stronger) cohesion with the previous turn (example 15), and steering the direction of the talk (example 13).

In addition, there are three more actions performed in Estonian data with PC. First, the PC is used to change the type and direction of cohesion. In example (6) the particles at the beginning of the utterance connects it to the previous sentence in the same turn (ennem ‘at first’ & ja sis ‘and then’). The change of word order in the first post-pivot (mul on > on=mul) moves the time adverbial to the topic position and connects the whole construction much closer to the time in the previous turn of the partner (pool kümme ‘at half past nine’ & pool künnest on=mul ‘at half past nine I have’). At the same time the type of cohesion is changed from time relationships to repetition. Second, verb recycling brings grammatically closely connected syntactic constituents side by side, and they are bonded closely together, especially in those PCs that are non-completed in the pivot. In example (1) verb recycling moves the parts of complex predicate side by side (ei võta ühendust ‘does not get in touch’), and in example (7) the same happens to the verb and the subject (on see okei ‘is this okay’). And third, the verb replacement enables the speaker to adjust the turn more accurately to the expectations of the partner (example 11).

The analysis of data has shown that there are several cases which contain searching or offering the alternative and some other action simultaneously (e.g. examples 9, 11, 13, 15). PCs with two pivots constitute a special case. Here the actions are divided between two pivots. In all cases one pivot is used to establish cohesion or to shift the perspective, and the other pivot is almost always (except for one doubtful example without SISR) used as a resource for SISR (example 6).

PCs constitute only one possibility to make post-positioned self-repair in the same utterance. If we compare the SISR made with PC and without PC in the data Corpus used for this article we can find that 47 searches were made by PC (none of them is a verb search), and 347 searches were made without PC. 50 replacements were made by PC, including 46 verb
replacements (92%), 110 replacements without PC and only thirteen verb replacements (12%) among them. The analysis showed that there is a large statistical difference between verb replacement, on the one hand, and searching and noun-replacements, on the other, in using PC as a SISR resource. At the same time, the analyzed data revealed only one instance of error correction by PC. One can conclude that PC constitutes the main post-positioned self-repair resource for offering an alternative verb by replacement, and it constitutes a highly peripheral resource for the replacement of other syntactic constituents, error correction, and searches.

In order to analyze this finding, one has to proceed from the fact that the speaker could initiate replacement in different positions after a problematic verb: cutting off the verb > immediately after the verb > cutting off the next word after the verb > after the next word (or phrase). Only the last variant could yield a PC as a result.

If verb replacement is initiated after the syntactic constituent following the problem verb, it results in a PC if this constituent fulfills the same syntactic function with respect to both verbs. However, the result could be also a non-PC if this constituent is deleted during the repair process, fulfills different syntactic functions with respect to different verbs, or is repeated as a post-frame after the new verb. The analyzed data did not reveal any such instances. All the constructions in the data, where verb replacement begins after the new syntactic constituent after the verb, are PCs.³

One can conclude that in Estonian there is division of labor between verb replacements by PC and those without it. Repair without PC is used to abandon an utterance and almost always for error correction. If an alternative is suggested without abandonment, two main strategies are used. If replacement is initiated immediately after the problematic verb, the repair without PC is used; in case it is initiated after the post-verb word, PC is used for repair.

The present article analyzed PC as a (word-)searching practice and post-positioned self-repair made by PC in Estonian conversation. The analysis showed the principal ways how the self-repair modifies the utterance. All repairs are associated with the purpose of making information more accurate/precise/specific. The analysis showed also that there is a division of labor between verb replacements by PC and those without it. PC is always used if an alternative is suggested without abandonment and the repair is initiated after the post-verb word. The analysis determined the structural types of Estonian PCs, but also presented a type previously un-described in the general literature on PCs – the PC with two pivots. The typical Estonian PC is similar to Finnish and German PCs but is different in some aspects from the Swedish PC (Scheutz, 2005; Norén, 2007; Lindström, 2013). Future research is needed to establish more similarities and differences between PCs in different languages and to find out more about PCs with two pivots in other languages.

Acknowledgements

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Appendix A. Transcription symbols

<table>
<thead>
<tr>
<th>Sign</th>
<th>Sign description</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>.</td>
<td>Full stop</td>
<td>Falling, final intonation</td>
</tr>
<tr>
<td>?</td>
<td>Comma</td>
<td>Fall not too low, continuation</td>
</tr>
<tr>
<td>(</td>
<td>Question mark.</td>
<td>Raising intonation</td>
</tr>
<tr>
<td>)</td>
<td>Full stop within parenthesis</td>
<td>Silence less than 0.2 s</td>
</tr>
<tr>
<td>(1,2)</td>
<td>Digits within parenthesis</td>
<td>Silences in tenths of a second</td>
</tr>
<tr>
<td>::</td>
<td>At the beginning of the stressed syllable</td>
<td>Prolongation</td>
</tr>
<tr>
<td>do-</td>
<td>Hyphen at the end of a word</td>
<td>Stress or emphasis</td>
</tr>
<tr>
<td>.hhh</td>
<td>Full stop before 'h'</td>
<td>Cut off word or prosodic unit</td>
</tr>
<tr>
<td>=h</td>
<td>Equal mark (at the end of a word)</td>
<td>Audible in-breath (inhilation)</td>
</tr>
<tr>
<td>[</td>
<td>Square bracket pointing right</td>
<td>Audible breath (exhalation)</td>
</tr>
<tr>
<td>]</td>
<td>Square bracket pointing left</td>
<td>Latching (no silence between two items)</td>
</tr>
<tr>
<td>&lt; text &gt;</td>
<td>Arrows pointing outwards surr. talk</td>
<td>Beginning of turn overlap</td>
</tr>
</tbody>
</table>

³ Verb replacement without PC is almost always initiated immediately after the problem source (example 2). The analyzed data in this corpus include only two examples where verb replacement is initiated by cutting off the next word after the problem source (example 3).
Appendix A (Continued)

Sign | Sign description | Indicates
--- | --- | ---
> text < | Arrows pointing inwards surr. talk | Faster talk
* text * | Star signs surrounding talk | Lowered speech volume
@ text @ | Ampersat signs surrounding talk | Change of speech (voice quality)
$ text $ | Dollar signs surrounding talk. | Laughing voice
hehe text | Talk marked with bold face | Smile
** text ** text | Talk marked with gray shading | The pivot construction segment in turns

The pivot segment within a PC

Appendix B. Glossing symbols

<table>
<thead>
<tr>
<th>Case</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>NOM</td>
</tr>
<tr>
<td>Genitive</td>
<td>GEN</td>
</tr>
<tr>
<td>Partitive</td>
<td>PAR</td>
</tr>
<tr>
<td>Illative</td>
<td>ILL</td>
</tr>
<tr>
<td>Inessive</td>
<td>INE</td>
</tr>
<tr>
<td>Elative</td>
<td>ELA</td>
</tr>
<tr>
<td>Allative</td>
<td>ALL</td>
</tr>
<tr>
<td>Adessive</td>
<td>ADE</td>
</tr>
<tr>
<td>Translative</td>
<td>TRA</td>
</tr>
<tr>
<td>Terminative</td>
<td>TER</td>
</tr>
<tr>
<td>Comitative</td>
<td>CMT</td>
</tr>
</tbody>
</table>

Other abbreviations

1, 2, 3 | Person
COM | Comparative
CON | Conditional
IM | Imperative
IMPRS | Imperpersonal
INF | Infinitive
NEG | Negation
NFV | Non-finite verb form
PL | Plural
PRES | Present tense
PRT | Particle
PST | Past tense
PTCL | Participle
SG | Singular

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