13. Extending Sequences of Other-initiated Repair in Finnish Conversation

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This paper explores other-initiated repair, or more specifically, extended repair sequences. In extended cases, the repair turn does not immediately resolve the trouble, and the speaker needs to produce a new repair initiation. Drawing on a collection of 458 other-initiations of repair in naturally occurring everyday interaction in Finnish, we show how the distribution of the outcomes of different types of initiations clearly differs. Typically, candidate understandings and open class repair initiations do not lead to extended sequences, whereas repeats (with question words) are more often followed by a second repair initiation. The type of trouble, as well as the typological specificity of different initiations, explains the outcomes of the repair sequences.

Keywords: other-initiated repair, non-minimal repair, extended repair sequence, open class repair initiator, candidate understanding, repeat, question word

1. Introduction

Intersubjective understanding in conversation is ultimately achieved and maintained on a turn-by-turn level; each turn-at-talk makes a response from the recipient relevant, simultaneously demanding the recipient to display their understanding of the previous turn. On occasion, recipients have

problems processing the previous talk; they may not have heard it or parts of it, or they may not have understood the turn or what it was doing in that specific slot in the conversation. On these occasions, one regularly employed option is that the recipient produces an action that indicates they have problems processing and responding in a way that would progress the conversation. These actions thereby make it relevant for the previous speaker to try to repair the problem. In conversation analytic terms, the recipient can launch a sequence of other-initiated (OI) repair. (See e.g. Schegloff, Jefferson & Sacks 1977, Schegloff 2000, Sidnell 2010: chapter 7.)

In more general terms, conversation analysis describes the organization of repair as ways of managing problems of speaking, hearing and understanding in interaction (see e.g. SJS 1977). Thus, it is seen as a system of intersubjectivity maintenance (see e.g. Schegloff 1992, Hayashi, Raymond & Sidnell 2013: 9, Couper-Kuhlen & Selting 2018: 112). This organization comprises a wide variety of phenomena from self-repair and word searches to other-correction. The focus of this paper, however, is on the aforementioned type of repair sequence: the recipient of a trouble source initiating repair and leaving the repair work for the producer of the problem. This sequence type has been described and analysed in numerous studies (for a synthesis, see e.g. Couper-Kuhlen & Selting 2018: 138–201), and can be schematized as:

T1 A: trouble source

T2 B: repair initiator (e.g. *mitä* ‘what’)
T3 A: repair (e.g. repetition of turn T1)
T4 progressivity of the conversation continues[1]

This schema covers a world of real-life variety. Repair is an omnirelevant phenomenon in interaction; thus, recipient (B) can index whichever previous turn as a trouble source turn. Trouble sources are thus recognizable only retrospectively, through repair initiation at stage T2. (See e.g. Schegloff 2007: 100–101.) Repair initiators come in different shapes and sizes. However, much research has shown that specific format types and turn formats are used for performing this type of action, and they seem to be quite similar across languages and cultures – with some local flavours in the syntax and prosody of the formats (see e.g. Dingemanse, Blythe & Dirksmeyer 2014, Dingemanse & Enfield 2015). The central format types are: 1) open class initiators (see Drew 1997), which target the whole previous turn as a trouble source (e.g. Finnish *mitä* ‘what’), 2) more specific question words (e.g. Finnish *kuka* ‘who’), 3) partial or full repeats of the previous turn, 4) combinations of 2 and 3, and 4) candidate understandings that offer the speaker’s understanding of the previous turn or a part of it to be either confirmed or corrected. (See e.g. SJS 1977, Sidnell 2010, Kitzinger 2013.) Actions at T3 thus vary according to the repair initiation type to which they are responding.

[1] On some occasions, T4 consists of a repair receipt (Koivisto 2019).

In a recent study we analysed sequences of other-initiated repair in Finnish everyday conversation (Haakana, Kurhila, Lilja & Savijärvi 2016). Aiming to determine what type of turn-formats Finnish speakers use for OI repair, we showed the range of interactional problems that the various formats target. In this paper we continue our work by turning to the subsequent positions of T3 and T4 of the schema. In our data, most of the problems targeted by other are resolved as the schema shows: after the repair-initiator, the first speaker produces a repair, and this resolves the problem, i.e. the main line of talk can proceed. However, in some cases this does not happen, and the problem continues after the attempted repair. For the focus of this paper, we schematize our cases in the following way:

T1	A:	trouble source
T2	B:	repair initiator 1
T3	A:	repair
T4	B(/C):	repair initiator 2
T5	A:	repair 2
T6		progressivity of the conversation continues // ?

In other words, we investigate cases in which the OI repair sequence extends beyond the first (attempt at) repair and solving the trouble at hand requires more than one repair initiator[2] from the same speaker, or sometimes, in multi-party interaction, from another interactant (C). In

[2] More than one OI can figure in the sequences in several ways. An interactant can produce a combination of two repair initiators in one turn, e.g. question word + candidate understanding. Sometimes, in multiparty interactions, two participants produce an OI simultaneously before any space for repair. However, these two types of cases are not the focus of this paper.

principle, the above schema can continue with further steps of repair initiation. However, in our data the sequence usually did not involve more than two repair initiators.

Although OI repair across languages has been the focus of a substantial amount of work, repair sequences that extend beyond the basic three-part structure have so far attracted little attention. Studies focusing on OI repair usually only mention extended sequences in passing. Kendrick (2015: 167) explicates three ways in which a basic three-turn repair sequence can be extended. First, the repair solution for the first OI can become a new trouble source that is reacted to with another other-initiation of repair. Second, in multiparty interaction, multiple speakers can initiate repair on the same trouble turn, and this may lead to an extension of the basic sequence structure. Third, the first repair solution may not solve the problem, and the receiver of the trouble source turn may issue new OIs until the problem is solved. In this paper, we focus on the third type of case, i.e. on situations in which the participants need to issue several other-initiations to the same trouble source turn to solve the problem and re-establish mutual understanding.

Dingemanse and Enfield (2015) refer to extended repair sequences as *non-minimal OIR sequences* (see the special issue on other-initiated repair in Open Linguistics 2015). Schegloff (2000) calls such sequences *multiples* and observed that three subsequent OIs were the maximum in his data. This observation seems to also hold for many other studies. Even if the number

of OIs in extended sequences is not always mentioned, the excerpts exemplifying such sequences usually consist of three subsequent OIs at the most (see also Dingemanse 2015). A recurrent observation is that in extended sequences, subsequent OIs become more specific. For example, if the first OI is an open-class format type, the next one is of a more restricted format type, for example, a question word (see e.g. SJS 1977: 369, Dingemanse et al. 2015 and the other papers in the special issue). The studies that mention non-minimal repair sequences do not focus on analysing the problem types that lead to the need to extend the sequences. Sometimes auditory problems are mentioned (see Floyd 2015: 469) and sometimes comprehension problems (Gisladottir 2015: 312–313). Sometimes the analysis also shows how mutual understanding is built step by step in the sequences, i.e. the problem is solved one part at a time (Dingemanse 2015: 235–236).

All the above-mentioned studies have analysed data on everyday interactions between friends or acquaintances. In asymmetrical interactions, in which participants do not share the same linguistic resources or have differing cognitive abilities, extended repair sequences seem to be more frequent. For example, in second language interactions, troubles in understanding the language of interaction are sometimes observable in very long and complex repair sequences (see e.g. Egbert et al. 2004, Lilja 2014). Similar observations have been made of data with aphasic speakers (see e.g. Goodwin 1995, Klippi 1996), with participants who have Parkinson's

disease (Griffiths et al. 2015) or acquired dysarthria (Bloch & Wilkinson 2011), and with participants who use augmentative and alternative communication devices (Mayes 2020). In some of these cases, the repair sequences are extended because articulatory problems add to the challenges of resolving the original trouble. However, these studies have also observed a general tendency of repair initiators to become increasingly specific as the sequence unfolds.

In sum, even though extended OI repair sequences have been mentioned in prior research, they have not been the focus of analysis in studies of symmetrical everyday interactions. This study aims to remedy this. The data for our study consist of 37.5 hours of audio and videotaped interactions: both telephone and face-to-face interactions, both dyadic and multiparty conversations. All the speakers are adult native Finnish speakers in non-institutional, everyday settings.

For the purposes of this study we counted all the other-initiations of repair that occurred as the first one in relation to the trouble source (N=458) in the data of 37.5 hours of everyday interaction. We classified them according to type of OI: the data included open class initiators (OCRI), question words, repeats, combinations of a question word and repeat, candidate understandings, and finally, interrogative clauses. The number of each initiation type is shown in Table 1. Then we analysed each sequence in terms of its continuation: whether the sequence ended after the first repair turn or was extended. Table 1 shows the overall picture. The first column

shows the number of each initiation type as the first reaction to the trouble source, and the number in the second column shows how many of these first initiations were followed by another repair initiation.

Table 1: Frequency and Format of First Initiator of Repair Sequence, and Frequency of Subsequent Repair Initiators.

Type	1st OI N=458	Extended N=42	%
OCRI (open class repair initiator)	155	10	6.5
Question Word	71	7	9.9
QW + repeat	47	10	21.3
Repeat	42	9	21.4
Cand. understanding	115	1	0.9
Interrogative Clause	28	5	17.9
TOTAL	458	42	9.2

The first thing the table shows is that sequences of OI repair are relatively rarely extended (42/458): in more than 90% of the cases, one initiator was enough to solve the problem at hand. Thus, repair initiators are quite powerful devices for solving problems of intersubjective understanding. Furthermore, it should be noted that, even if it is not visible in the table, if the sequence was extended, two initiators were usually enough; i.e. the data included only very few instances of three repair initiators targeting the same trouble turn. Secondly, the table shows that different types of repair initiators led to extended sequences in different frequencies: from virtual zero (candidate understanding) to around one-fifth of the cases (repeats, question word + repeat). This is the guiding observation in the following analytical sections. We first discuss the cases in which extensions rarely happened (candidate understandings and OCRIs) and then the cases in which they were noticeably more common (repeats, question word + repeat)[3]. The analysis shows how the sequences typically extended and examines the possible reasons for the different frequency of extensions with respect to the different initiation types.

2. When Extensions are Rare: Candidate Understandings and Open Class Initiators

[3] Space limitations prevent us taking up all the initiation types in detail. Furthermore, the 'interrogative clause' is a somewhat heterogeneous category and will be discussed in a separate paper (Haakana, in preparation).

The major types of repair initiation have a ‘natural ordering’ based on their power to locate the trouble in the previous turn (see e.g., SJS 1977: 369, Sidnell 2010: 117). On this continuum, open class initiators are the ‘weakest’ and candidate understandings the ‘strongest’. As shown in Table 1, in our data, these initiation types are the ones that only rarely lead to extension of the repair sequence. For candidate understandings this is not a surprise. They are indeed a strong way of dealing with a problem: in producing one, the interactant not only displays encountering a problem but also engages in solving it by offering their understanding of the previous turn or a part of it, and then leaves it to the producer of the trouble source turn to either confirm or correct the understanding. Our data had only one case of a candidate understanding being followed by another repair initiator – another candidate understanding offering an alternative understanding of the original trouble turn (data not shown). Furthermore, our previous study (Haakana et al. 2016: 275–276) showed that interactants are quite successful in designing their candidate understandings: they were overwhelmingly confirmed to be correct, and seldom corrected (only 8% of the cases, N=11/135).

However, it is less evident why open class initiators seldom lead to extension of the repair sequence; in fact, because of their ‘weak character’, one could imagine that this type would have great potential for extending the sequence. Minimally, OCRIs (such as *mitä* ‘what’) merely display that

the producer has heard (or thinks they have heard) the co-interactant saying something (see e.g. Drew 1997, Haakana 2011). Thus, basically, all other repair operations would still be available after the initial repair turn. However, our data show that most of the problems dealt with OCRIs were fairly simple: acoustic problems caused by overlapping talk, noise, changes in the participation framework, and so on. Furthermore, the response (repair) for this initiation type was also simple: merely repeating the trouble source turn as such (or in a slightly modified form) is always a viable option (see e.g. Haakana 2011, Haakana et al. 2016: 258–260).

Speakers extend the repair sequences that begin by open class repair initiators in two major ways. First, in some cases, after the initial repair, the recipient still has a problem grasping the trouble turn as a whole. Excerpt 1 shows such a case. In lines 1 and 2, Reijo and Pekka are in overlap, addressing different aspects of a trip they are about to make together:

Excerpt 1: *Open class* [Sg94-7 1A1 Yawning.telephone]

```
01 REI: oot sä< [(maistanu)- ]
        have you tasted

02 PEK:         [m'olla aika<] pitkää siellä joo,mhh
                 we are there for quite long yes

=> REI: >m'täh,<
         what

04 PEK: .mt mehä ollaa aika pitkää siellä,
        .tch we are there for quite long, y'know

05      (1.0)
```

-> REI: **>mä en kuullu viel<,=**
I still didn't hear

07 PEK: **=et me ollaa aika PI:Tkään siellä (.) [(-),**
=so that we are there for quite long

08 REI: **[ollaan**
yes we are

Reijo's first OI in line 3 is the most typical open class initiator in Finnish (*mitä* 'what') (Haakana et. al 2016: 258).[4] After Pekka's repair turn, the repetition of the trouble turn, Reijo displays that he still is having trouble processing the previous turn. He does this using a turn that explicitly states (*mä en kuullu* 'I didn't hear') that he had a hearing problem (line 6), and the adverb *viel* 'still' implies that Pekka's initial problem was also one of hearing. After Pekka's second repair, the problem is solved (line 8).

In our data, the speakers never produced another OCRI after their initial OCRI of the 'what' type. If after the first repair, the interactant still had a problem with the whole trouble turn, they did what we see in Excerpt 1: made it explicit that they had a problem either hearing or understanding.[5]

Second, and more typically, sequences initiated by open initiators are extended with a stronger form of initiation that shows that the speaker already has a grasp of at least some aspects of the initial trouble source turn.

[4] Out of the 156 OCRIs in the data, 109 are performed with *mitä* ('what'). The particle *tä(h)* was the second most popular format (N=29). The rest of the cases included the particle *häh* (8), apology-based *anteeks(i)* (2), sound object *mhy* (1) and some interrogative clauses of the 'what did you say' type (7).

[5] Repair initiations of the type 'I didn't hear/understand' never occurred as a first OI in our data.

Usually the second initiator is a candidate understanding, targeting some part of the trouble turn, as in Excerpt 2. Prior to the excerpt, Missu has asked Viivi if she has already seen her new roommate in the place she has just moved to. Viivi's answer is somewhat vague, and it is this vagueness on which Missu's question in lines (1–6) picks up:

Excerpt 2: [Sg112b9 Room mate.telephone]

```
01 MIS: ni mitä: yks tyttö siinä pyöri et et sää
        so what some girl was hanging around there so you

02      tiedä onkse sun,
        don't know if she's your

03      (.)

04 MIS: .hh kämppis vai,
        .hh roommate or

05      (.)

06 MIS: °vai mi[tä°,
         or what

=> VII:        [>ai mitä<,
                PCL what

08 MIS: .hh et sää tiedä onkse sun kämppis.
        .hh don't you know if she's your roommate

09      (0.5)

-> VII: >ai se,<
        PCL that

11 MIS: nii.
        yes

12      (.)

-> VII: >tyttö.<
         girl
```

14 MIS: **ni[i**
yes

15 VII: **[↑juu se oli siellä.**
yes she was there

16 MIS: **JAA eiku mä[ä aattelin**
PCL no I just thought

Viivi obviously had trouble understanding Missu's question: the response is delayed (lines 5–6) and takes the form of an open class repair initiator *mitä* ('what') prefaced by the particle *ai*.[6] In response, Missu repeats the gist of her previous turn (line 8). This is followed by Viivi's repair initiators in lines 10 and 13, which are candidate understandings concerning the person reference in Missu's turn in line 8,[7] after which the repair sequence is brought to an end in lines 15–16.

In sum, repair sequences are only very rarely extended if the first repair initiator is the most specific OI (candidate understandings) or the least specific OI (open class). Next, we investigate cases in which extended sequences are more common.

[6] *Ai* is one of the many particles in Finnish that displays that the speaker is treating the previous talk as containing something 'new' (Koivisto 2017). It is our strong intuition that the combination *ai* + *mitä* ('what') indicates that the speaker is having understanding problems (see also Haakana 2011: 56). However, the combination was very rare in the data, and the hypothesis should be confirmed with a larger data set.

[7] Viivi's turns in lines 10 and 13 can be seen as either two separate candidate understandings, or as one, so that line 13 is an increment of line 10.

3. When Extensions are More Frequent: (Partial) Repetitions of Trouble Turn and Repetitions with Question Words

The two OIs that were most often followed by another OI in our data were those including a repetition: (partial) repeats of the trouble source turn and repeats together with a question word. In this section, we focus on these OIs which are most prone to lead to extended sequences and discuss the possible reasons behind this skewed distribution. We begin by exploring partial repeats.

One important dimension of other-initiations of repair is that different initiations typically deal with different types of trouble (Haakana et al. 2016, see also Sidnell 2010, Benjamin 2013). Partial repeats are particularly used in Finnish conversations when the problem concerns the acceptability of the co-participant's turn (Kurhila & Lilja 2017, Stevanovic, Hakulinen & Vatanen 2020). Different trouble types yield different remedies: in the case of auditory problems, a repetition of the original turn often resolves the problem. In contrast, acceptability problems may involve misunderstandings and elements of disagreement, and remedying such problems requires more work than just a second saying of the original turn. The following excerpt illustrates a case of misunderstanding which is not resolved by a single repair initiator.

Excerpt 3: *Repeat 1* [telephone, Sg344)].[8]

01 JOU: **MORO,**
Hello

02 PEK: **MOI mis meet,**
Hi whereabouts are you wandering

03 (0.5)

04 JOU: **mä oon täällä Europassa jo,**
I'm here in Europa already

05 (0.6)

=> PEK: **Europassa,**
in Europa

07 (.)

08 JOU: **mä oon täällä jo,**
I'm here already

09 (1.0)

-> PEK: **Artturissa,**
in Artturi,

11 (0.8)

12 JOU: **Europassa,**
in Europa

13 (1.0)

14 PEK: **ei kun Artturissa.**
no but in Artturi

15 (0.3)

16 JOU: **Europasta oli puhe alunperin,**
we talked about Europa originally

17 (0.3)

18 PEK: **eipäs ollu ku Artturista. (.) Euro[paan just**
no we didn't but about Artturi not to Europa

19 JOU: **[ä-**

[8] *Europa* and *Artturi* are names of bars.

20 PEK: **sen takia ei< ei kun siä< (.) tulee porukkaa**
precisely because< because there will be so many

21 **nii paljon.**
people

22 (1.0)

23 JOU: **jaa:,=eilen< eilen juniori puhu Europasta**
I see yesterday yesterday Junior talked about Europa

In this mobile phone conversation, the caller enquires about the recipient's location through a dynamic verb *me[n]et* 'go, wander' (line 2). Thus, the caller displays an assumption that the recipient is in motion. The recipient, however, responds by providing his static location, the name of a bar (line 4). This response becomes the trouble turn: Pekka repeats the name of the bar (in the locative case, *Europa-ssa*, line 6). The first syllable of the repeat is heavily stressed (*Eu*), indicating astonishment or unexpected information (see Kurhila & Lilja 2017: 234). In his next turn (line 8), Jouko seems to be treating the temporal dimension as the source of astonishment: his attempted repair turn (line 8) specifically reverbalizes the temporal reference, that he is already at the location. The location itself is referred to through only a deictic proadverb (*täällä* 'here').

However, the source of the trouble is not the time, as becomes clear in the subsequent turns. Pekka's next turn (line 10) is a second repair initiation, a candidate understanding. He no longer focuses on any elements in Jouko's prior turn; instead he provides the name of another bar (Artturi), again in the locative case. Since Pekka's turn consists of only replacing one linguistic element by another, it comes close to other-correction; the boundary

between candidate understandings and outright other-corrections is not always clear-cut (Haakana et al. 2016: 273, Haakana & Kurhila 2009). In this excerpt, the 'correctivity' of Pekka's turns gradually increases: whereas the turn in line 10 offers *Artturi* as the right place, his next turn (line 14) is clearly a correction. It begins with the repair particle *ei kun*, explicitly negating the prior reference and substituting it with another alternative (see Haakana & Visapää 2014, also Laakso & Sorjonen 2010).

It is clear that the speakers in this excerpt have differing ideas of the piece of information (= the meeting place) that they thought they shared. During their conversation it gradually becomes clear that a misunderstanding has occurred. It takes the participants several turns to remedy the problem and establish intersubjective understanding of the situation; Pekka produces two repair initiations (lines 6 and 10) and two other-corrections (lines 14 and 18) to clarify the situation.

In addition to misunderstandings, acceptability problems include cases that come close to disagreements. The next excerpt illustrates an instance in which the problem that is targeted by repair initiators involves possibly conflicting views on the matter of piracy and computer games.

Excerpt 4: *Repeat 2* (telephone, SG 094-097 2b14)

01 LEO: **se kopiohomma vaa p: pilaa markkinoita**
the copying thing does ruin the market

02 **aika hyvin kyllä,hh**
pretty much

03 KAI: **no: kyl niis on aika hyvii suojauksii**
well they do have quite good protection

04 **tehty tiettyihin pelei[hin,**
developed for certain games

05 LEO: **[kyllä nykyään ne**
well nowadays

06 **kakrut pääsee aika hyvin kyllä,[.hhh läpi**
kids are pretty good at getting through

07 KAI: **[joo mut**
yea but

08 LEO: **kaikesta,**
everything

09 KAI: **ei ku se: vaatii värikopiokoneita ja**
no 'cause it requires colour copying

10 **tämmösii s-**
machines and like

11 (1.7)

12 KAI: **se:, ei se: oo aina [niin,**
it it's not always so

=> LEO: **[väri<koppareita,>**
colour copiers

14 Kai: **nii,**
yes

15 (0.5)

-> LEO: **siis jonkun::, korpun: monistamine,**
y'mean copying some diskette,

17 KAI: **e:i korpun kyllä sä sen voit, mutta .hh**
no not a diskette you can do that but .hh the

18 **se (0.5) arvalla vetää se kone aina eri**
machine draws lots always different codes

19 **koodeja sinne millä se pitää jollain**
to where it has to be recognized by

20 **väriliuskalla esimerkiks tunnistaa,**
some colour scheme for example

The excerpt is from a telephone conversation between two friends in the late 1990s. Kai's comment (lines 1–2) about the 'copying thing' (i.e. pirated

copies of computer games) launches a sequence in which the speakers provide competing views about the seriousness of piracy, Leo considering piracy a more serious issue than Kai. The turn that launches the repair initiation is the turn in which Kai defends his position: he rejects Leo's prior claim that 'kids get through everything' by giving evidence why this cannot be the case: such piracy requires specific physical equipment, namely colour copying machines (lines 9–10). Leo initiates repair on this turn in overlap with Kai's continuation (line 13). He repeats a more colloquial variant (*värikoppareita*, 'colour copiers') of the key word slowly, stressing the latter part of the compound word. Even though these prosodic features can be heard as displaying scepticism (see Kurhila & Lilja 2017), Kai simply provides confirmation without explanations (line 14). Leo, however, does not accept Kai's position; he produces a second repair initiator, a candidate understanding (line 16), through which he verbalizes the activity for which the copier is supposedly needed. Even this second repair initiation is produced slowly, stretching the ends of the words (line 16).

Leo begins his second repair initiation with the concluding particle *siis*, which has been observed to preface utterances in 'competitive positioning', that is, when two parties insist on incompatible viewpoints (Hakulinen & Couper-Kuhlen 2015: 117, Sorjonen 2018). In these environments, a speaker can use *siis*-prefaced utterances to tie back to their own previous turn and insist on their own standpoint (Hakulinen & Couper-Kuhlen 2015: 128). This is precisely what seems to be occurring in Excerpt

4: Leo does not accept the standpoint introduced by Kai (that piracy is too difficult for kids). Through his repair initiators, Leo targets elements that could potentially be problematic in terms of Kai's position.

In sum, the reason why repeats may lead to extended repair sequences more often than other OIs appears to be connected to the type of trouble a repeat deals with as a repair initiation. Acceptability problems may involve misunderstandings or competing views between participants, and hence a simple second saying of the trouble turn is usually not enough as a repair. Rather, the speakers may need to clarify the details or the source of the misunderstanding, or they may use repair initiations to challenge the view of their co-participant. The second OI following a repeat is often a candidate understanding, as in Excerpts 3 and 4 above. If the speaker has displayed scepticism through a repetition (as in Excerpt 4), a candidate understanding is a way of highlighting a more specific problematic aspect of the prior speaker's position. In case of misunderstandings (as in Excerpt 3), the candidate understanding is already a step toward solving the trouble after the initial (perplexity-indicating) repeat.

The other OI format that is more often followed by extended repair sequences in our data consisted of partial repetition and a question word. Instead of acceptability problems, these OIs often target another type of trouble source: a referent that has been marked as known and familiar to all participants, but which turns out to be unfamiliar (see Haakana et al. 2016). In Excerpt 5 (in which the participants talk about tyres), the trouble source

is in Susa's question addressed to Paavo (lines 1–2). Susa uses the word *vanne* ([wheel] rim) and marks it as known with the determiner *se* (*sitä* in the partitive case) (see Laury 1997, 2001, Etelämäki 2009). Paavo recognizes the referent and answers the question in the following turn (line 3). One of the other participants, Ina, however, marks the referent as problematic with two subsequent OIs (line 6, 11–13).

Excerpt 5: *question word + repeat* [multiparty, Sg445]

```
01 SUS:  nii sä et oo enää sitä
         so you're not going to

02       vannetta ottamas kuitenkaa?
         get that rim anymore

03 PAA:  een en     (.) en [(  -]-)
         no I'm not no  no

04 MAI:                    [.mff]

05 SUS:  [okei.   ]
          okay

=> INA:  [mikä van]ne?
          what rim

07       (0.4)

08 PAA:  se [yks se yks va]nne?,
         that ((one)) that ((one)) rim

09 SUS:     [mhhihhh      ]

10 SUS:   .hhh

-> INA:   mikä [vanne siis auton]
          what rim d'you mean a car

12 PAA:       [au- auton       ]
                    car

-> INA:   [vanne?   ]
           rim

14 PAA:   [auton van]ne nii.
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                a car rim yeah
15 INA:    okei,
           okay
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The first OI (line 6) is a combination of a question word and a partial repetition. The second repair initiation (lines 11 and 13) includes two OI formats. First, Ina repeats her prior OI, and this format is then followed by a candidate understanding that suggests that the talked-about rim belongs to a car. This second OI turn illustrates that the first repair attempt (in line 8) has failed to clarify to Ina what the problematic noun (*vanne*) refers to. This understanding is then confirmed in the next turn (line 14) and the conversation continues.

In our data set, the OI repairs of a question word + repeat differed from the previous cases in that it was not just the type of trouble but also the number of interlocutors that seemed to contribute to extending the sequence. The question word + repeat initiations that led to extended sequences typically occurred in multiparty conversations in our data. In other words, the type of trouble (not recognizing a referent that is marked as identifiable) need not be a complex trouble to remedy *per se*. Rather, it seems that this type of trouble possibly occurs more easily in multiparty conversation: several co-participants mean several epistemic positions, and knowledge and identification of various referents may be shared between certain participants but not between others (see also Haakana & Kurhila 2009: 174–175). This can pave the way for extended repair sequences, given that the

intersubjective understanding between the knowledgeable participants is not necessarily halted at any stage. As in Excerpt 5, Susa and Paavo have no problem understanding each other's turns in terms of the referent, the rim. It is only the third participant, Ina, who does not recognize the referent and tries to enter into the conversation through her repair initiations (see also Egbert 1997). The progressivity of the conversation (between the initial speakers) is not halted, and therefore the pressure to repair the trouble source may not be so great. For example, in Excerpt 5 above, the first repair attempt is fairly vague ('that one rim'), which leads to a second repair initiation by the same speaker.

4. Discussion

In this paper, we have analysed extended sequences of OI repair, that is sequences in which a problem is not resolved by one repair initiator but another is needed for the conversation to proceed. Our analyses show that extended cases are rare: only about 9% of first-position OIs led to extended sequences in our data. In other words, in more than 90% of cases one OI is enough. Even in the extended cases, virtually no more than two OIs are needed. This shows that the repair organization is indeed an effective mechanism. Initiating repair is an interactional routine, and the breaches in intersubjectivity are mainly short and non-fatal.

In our analysis, we found differences with respect to the type of repair initiation and the extendedness of the sequence: some other-initiation types led to extended sequences more often than others. Particularly two types of OI – repeat and question word + repeat – led to extended cases (approximately one-fifth of the cases). In contrast, the otherwise most frequent types of OIs, candidate understandings and open class repair initiators, only rarely led to extended cases (about 1% and 6.5% of the cases, respectively). The rare occurrence of candidate understandings leading to an extended sequence can be explained by its being the most specific type of OI. Speakers tend to choose as specific an initiation type as possible when initiating repair, so no more specific options are available if the repair is initiated through candidate understanding. However, the opposite is not true for open class repair initiations. Even if the whole range of more specific OIs is available, only rarely do the OCRIs lead to extended repair sequences. This can be explained by the fact that the problems that the OCRI deals with are more often auditory than problems of understanding and are typically resolved through a simple repetition (Drew 1997, Haakana 2011). Thus, the repair sequences initiated by an OCRI are mostly simple and routine.

The two OI types leading to extended cases – repeat and question word + repeat – are often used when the problem concerns reference issues or acceptability, that is, issues that interfere with the speakers' common ground. A typical case of a reference problem is one in which the speaker

presents a referent as known, but it turns out that the recipient or some of the recipients do not recognize it. These cases often occur in multiparty conversations in which the participants may have differing knowledge of the topics talked about. Therefore, more intersubjectivity work is needed in order to keep all the participants on the same track. The cases of acceptability problems dealt with issues of alignment. In some cases, as in the one in Excerpt 3, the extended repair sequence led to overt correction and disagreement between the participants. The complexity of the problem seemed to function in two ways, both of which increased the risk of the sequence extending: 1) the resolution of the problem required more work, and 2) it was not always clear what would be relevant next turn, in comparison to the cases in which the problem was solved by repeating the previous utterance. Thus, when the problem was a complex one, the risk of failing in the first repair attempt was greater.

According to previous studies, the maximum number of OIs is three; in our data, two was nearly always enough. In all the cases, the OI speaker did not extend the sequence with the initial OI type but moved on to a more specific one. Even in the cases in which the speakers did not extend the repair sequence, they tended to choose the most specific OI possible. In terms of intersubjectivity, this indicates that people orient towards the specificity principle, acting in a way that offers as much information as possible for the recipient to resolve the trouble. By choosing the most specific type of OI, the speaker initiating the repair ‘displays altruistic

behaviour' and orients towards minimizing joint cost (Dingemanse et al. 2015: 9).

In his study on repair after next turn, Schegloff (1992) investigated the organization that provides resources for the interactants to recognize breakdowns of intersubjectivity and to repair them (ibid. 1295). Schegloff determines such breakdowns as 'trouble in the socially shared grasp *of the talk and the other conduct in the interaction*' (1992:1301, italics original). However, as intersubjectivity is a broad concept and can refer to, for example, different levels of engagement, joint attention, stance sharing (e.g. Sidnell 2014), it is not always clear what constitutes a breakdown in intersubjectivity. Based on the analysis of our data, as well as on previous research, we argue that repair organization operates within intersubjective understanding rather than being something that emerges when intersubjectivity fails. We see repair not only as a remedy for breaches in intersubjective understanding, but also as part of the conventionalized intersubjective machinery of interaction. The grounds for our argument are as follows: 1) Repair organization is a systematic and routinized way of dealing with problems that arise, and are dealt with, in talk-in-interaction. Thus, repair mechanisms operate within the sequential organization of talk (e.g. as insertion sequences, see Schegloff 2007). 2) The majority of cases are quickly resolved, and extended cases are rare. The most frequently used OI types (OCRI and candidate understanding) are least frequently extended, whereas the less frequently used OI types are more likely to be extended.

Thus, the most typical repair sequence is a routine-like recovery of something not heard or clearly understood. 3) Even in cases in which the repair sequence is extended, the maximum amount of OI is limited, and 4) the subsequent OI(s) is/are more specific than the first, which shows an effort to achieve mutual understanding as soon as possible. Typically, repair-sequences are quickly resolved without any real risk of intersubjectivity breaking down.

In cases in which intersubjectivity is more fundamentally threatened, for example, if the participants do not share a common language, repair practices may not be the way to resolve interactional problems. Savijärvi (2011, 2018) analysed Finnish-speaking children in a Swedish immersion kindergarten, and showed that the children did not initiate repair on the educators' turns at the beginning of their immersion, even if they did not understand any Swedish. They only started initiating repair on the educators' turns after several months of immersion – at the same time they also started displaying understanding of the educators' verbal turns by other means, for example, by tying their utterances to the educators' turns. Thus, even if intersubjectivity is at a higher risk during the first months, and even if children could initiate repair in their first language, they do not do so until they already understand quite a lot of the educators' verbal turns and have hence reached some level of intersubjective understanding.

Moreover, it has been reported that speakers sometimes let understanding problems pass rather than employ multiple repair practices in

interaction with people who suffer from dementia (Kurhila & Lindholm 2016). If there is serious doubt about the level of intersubjectivity – for example if the speaker does not know whether the other participant can recognize the action they are about to perform – repair practices may not be a useful resource. Thus, fundamental breaches in intersubjective understanding may require other remedial means than OI repairs. More research is needed on the situations in which participants have serious doubts about their intersubjective understanding, and the role of repair practices as a remedy for such intersubjective breakdowns.

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