

Emergence of Proactive Self-Initiated Self-Repair as an Indicator of L2 IC Development

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1. SECOND LANGUAGE INTERACTIONAL COMPETENCE AND DEVELOPMENT

Engaging in conversation does not only require an extensive vocabulary, fluent delivery of speech, and complicated syntactic rules. Speakers take turns, open and close conversation, or address problems, all of which involve socially coordinated actions. Both speakers and recipients focus constantly on local details of interaction to finely tailor their actions contingent on what others do. Participants in conversation are equipped with interactional competence (IC), or the ability to organize the interactional conducts in ways to be accepted and understood by the recipients. As highlighted in Firth and Wagner's (1997) seminal critique, some second language acquisition (SLA) scholars in recent decades have criticized the main principles of cognitivist research as being mechanistic and individualistic, and have stressed interactional and sociolinguistic dimensions in second-language (L2) learning. In response to this reconceptualization of L2 learning as coconstructive and

contextually situated, many recent SLA studies have demonstrated that language learning can be done through social engagement and that L2 learners are capable participants who can display observable and systematic interactional practices for accomplishing social actions and establishing intersubjectivity (Young 2011; Kasper and Wagner 2014; Pekarek Doehler and Pochon-Berger 2015).

'Crystallized in the intersection between conversational analysis (CA) and language education is their common interest in and commitment to the enterprise of interactional competence' (Waring 2017: 4). Empirical research on L2 IC has mainly been supplemented by an ethnomethodological approach to CA. CA uncovers 'the practices and competences underlying the organization of social interaction' (Drew and Curl 2008: 22). Practices, methods, or patterns of conduct refer to what the members of a society take for granted when accomplishing everyday social activities, and competence refers to the mastery of such methods whereby a group of people becomes members of a particular society (Garfinkel 1967). In studies of CA-SLA (Kasper and Wagner 2011), IC is thus recognized as a member's display of L2 practices in publicly observable ways, and the development of IC can be stated as 'the development of "methods" for action, ..., in systematic procedures ... by which members of a social group organize their interactional conduct' (Pekarek Doehler and Berger 2018: 556). IC developmental studies have either taken a longitudinal approach to track changes of or a cross-sectional approach to compare the methods of deploying interactional resources in a particular interactional practice such as turn-taking (Cekaite 2007; Barraja-Rohan 2015; Watanabe 2016), sequence organization (Hellermann 2008; Lee and Hellermann 2014; Pekarek Doehler and Berger 2018), or repair (Hosoda 2006; Hellermann 2009, 2011). Participants in these developmental studies displayed L2 speakers' increased ability to accomplish social actions through the diversification of their methods, which ultimately involves 'a growing ability to recipient design talk and to deploy context-sensitive conduct, that is, conduct that is better tailored to the local circumstantial details of the interaction' (Pekarek Doehler and Pochon-Berger 2015: 262).

The purpose of this study is, in line with the previous CA-SLA research, to find evidence of L2 IC in one of the interactional practices, namely, repair. Repair has attracted attention in IC studies as it is an important aspect to understand the processes whereby coparticipants in conversations address breakdowns to produce mutually acceptable resolutions. This study, however, attempts to differentiate itself by comparing different practices of employing self-repair. The previous research on repair in IC has focused on L2-related problems and examined the ways in which a speaker identifies and rectifies these linguistic troubles in talk (e.g. Hellermann 2009, 2011; Farina et al. 2012). The central function of repair in such cases is mainly to correct lexical or grammatical errors in L2 talk. This study, on the other hand, places the main focus on cases in which there are no L2-related problems with the previous utterance, but L2 speakers practice self-repair nevertheless in order to provide 'precise formulation' (Lerner 2013: 102) by tuning granularity to a finer level

(Schegloff 2000). This study, which compares these two opposing practices of self-initiated self-repair (SISR, Schegloff et al. 1977) by speakers with differing L2 proficiency, shows that, whereas less advanced speakers repair for corrective function, more advanced speakers repair for a pre-emptive purpose. This study views the development of IC as an increased ability to deploy SISR in a proactive way, projecting upcoming actions and pre-empting possible problems, thereby presenting situationally suited talk for the coparticipants.

2. REPAIR PRACTICES AS EVIDENCE OF INTERACTIONAL DEVELOPMENT

Everything is ... a possible repairable or a possible trouble-source.
(Schegloff 2007: 300)

Speakers of any language, regardless of their oral proficiency, routinely face problems in conversation. Repair constitutes 'the self-righting mechanism' (Schegloff et al. 1977: 381) that addresses 'problems or troubles in speaking, hearing, and understanding the talk in conversation' (Schegloff et al. 1977: 207). As problems may endanger intersubjectivity, 'repair actions can supersede all other actions' (Hall 2007: 513), since the course of action along the way can only be re-established after participants collaborate to generate reciprocal comprehension. Repair is thus 'a proof procedure' (Sacks et al. 1974: 729) that demonstrates 'the identification of what participants perceive to be interactional trouble in a discursive practice' (Young 2019: 107). As IC is fundamentally based on 'the construction of a shared internal context or sphere of intersubjectivity' (Kramsch 1986: 367), the practice of repair, or how L2 speakers build collaborative efforts to reestablish intersubjectivity, has been a classic object of study in IC development (e.g. Kurhila 2005; Hellermann 2009, 2011).

Empirical CA-SLA studies of L2 IC development thus far have investigated how members of a community use particular methods to conduct repairs, which include (i) who is initiating and completing the repair and (ii) how speakers have progressively diversified the methods of repair practices. The former IC studies demonstrated that more interactionally competent L2 speakers are able to initiate and complete repair on their own and not by others, that is, they are able to follow a 'preference for self-repair' (Schegloff et al. 1977). For example, Martin and Sahlström (2010) captured a change of participation in repair organization in recordings of physiotherapist and patient encounters. They observed a developmental process as a patient displayed successive changes from other-repair to self-repair, becoming sufficiently competent to identify and solve the problem independently. Farina et al. (2012) also witnessed a decrease in the amount of other-repair in an adolescent French L2 speaker (Julie) experiencing difficulty in word searches. Compared to the initial stage in which she directly asked for help, Julie later became able not only to point out the trouble source in her talk but also to provide a possible solution to repair it. Moreover, Hellermann (2009) reported a quantitative increase

in the number of self-repairs and a decrease in other-repair over five terms of instructions. These previous studies revealed that L2 speaker's increased ability to recognize the produced item as a repairable and to provide a solution was the central evidence for IC development, as it demonstrates their capacity to monitor grammatical details of their ongoing speech to ensure comprehension.

The latter IC studies of repair have focused on the diversification of methods in repair completion. Hellermann (2011) observed that the L2 participant had become progressively more able to use various techniques when initiating other-repair. For example, rather than merely employing *no* to mark some unspecified trouble-source in co-participants' prior turns, the L2 speaker later provided sufficient comments in addition to the negative marker, so that she could appropriately deal with what was potentially face-threatening to recipients. Furthermore, Farina et al. (2012) documented that the focal L2 participant became capable of using diverse methods when practicing self-initiated repair for word searches. While she resorted to hesitation in the initial stage, she later used metalinguistic questions to make an explicit call, and finally diversified her ways of seeking help by using paraphrasing or changing the intonation. This variation in methods demonstrates how L2 speakers become able to coordinate their talk finely to local contexts of interaction, which ultimately leads to development in IC.

Nevertheless, many (if not all) of these previous studies of repair in L2 IC development have concentrated on the corrective function of repair. The study by Hellermann (2009), for example, examined a post-recycled repair format in which the trouble-source involved grammatical errors, and the study by Farina et al. (2012) analyzed speakers' failure to find the target lexical items. These authors found the evidence of IC development by focusing on how the speakers overtly corrected L2-related errors in talk.

However, the trouble-source does not only refer to evident flaws in talk. Repair is a broader term than just the correction of errors. Recipients can initiate repair when they mishear or do not understand an utterance that is clear to others. Speakers can repair where there are no apparent grammatical or lexical problems to be corrected, or evident errors can remain uncorrected (Schegloff et al. 1977, 2002; Jefferson 1987). A speaker may choose to repair the previous talk if it can possibly involve contextually inappropriate or morally infelicitous implications to the recipients (Arminen 1996). In other words, repair 'does not necessarily have anything to do with *objective* errors' (Theodórsdóttir 2018: 30, my italics). Any talk-in-interaction has the potential to be a trouble-source. As Schegloff et al. (1977: 363) described, '[N]othing is, in principle, excludable.'

To expand the discussion of self-repair initiated in the absence of objective errors and by objective (grammatical, lexical, or phonetic) problems, we should refer to English as a Lingua Franca studies by Mauranen (2006) and Kaur (2009, 2011). In the following, for example (1), W is repairing in order to right the wrongs, as the previous utterance (*he play where?*) contains a syntactic error that needs to be reformulated into the correct structure (*where does he play?*). On the other hand, in example (2), V's initial formulation *a kind of interaction* does not involve any grammatical problem. She nevertheless halts

her on-going speech to add *trading* in the replaced formulation to clarify a specific type of *interaction*.

- (1) W: he-he play where? he- he- where does he play? (Kaur 2011: 2708)
- (2) V: so it is a kind of interaction ... (1.4) a kind of trading interaction (Kaur 2011: 2710)

Why is such a distinction important? It is because the speakers in the example are using different techniques to accomplish different actions. W is correcting what needs to be fixed, while V is editing the talk to be clearly understood by the recipients. Mauranen (2006: 137) termed the first repair 'retroactive self-repair', while the second repair is called 'proactive self-repairs'. Retroactive repair refers to the correction of errors, which is used for a 'remedial purpose' (Kaur 2009: 109). Proactive repair, on the other hand, refers to a repair that does not involve correcting what has been said incorrectly, but a speaker still deploys repair for 'preventative purposes' (Kaur 2009: 109) to address prospective problems in the interaction. The following quote from Schegloff (2013: 46) distinctly shows the two different functions of self-repair.

If I may invoke an analogy from the craft of tailoring clothing, a suit that someone tries on may be torn at the underarm; this is a trouble-source and is in need of repair. But it happens as well that there is nothing wrong with the outfit, but tailor remarks that it would be more flattering to the wearer if the lapel was a tad narrower.

Pekarek Doehler and Pochon-Berger (2015: 263) argued that L2 speakers with greater IC were able to demonstrate 'the emergence of new interactional purposes that a given linguistic form is used to accomplish'. L2 speakers can repair for a remedial purpose; they should address the obvious problems such as failures to find a word, misinterpreted word meanings, or mispronunciation. The speaker who is more developed in IC, however, will display the ability to use repair for new interactional purposes by making his or her speech more readily interpretable by and comprehensible for the coparticipants before anyone mentions the problems with the talk.

Therefore, the current research assumes that one can discover evidence of IC development by making distinctions between the two practices of SISR. Repair is essentially interactive conduct and is a prerequisite to establish mutual intelligibility. As previous studies have demonstrated (e.g. Hellermann 2009), using retroactive self-repair, being able to detect the problem and correct it, is an important step in IC development. Although this research does not depreciate the importance of retroactive self-repair, it still argues that we can discover the evidence of IC development in the change from retroactive to proactive repair. L2 speakers, who are more interactionally competent, not only correct what is wrong, but also take actions to clarify the meaning for the recipients. This study analyzes the different purposes of the same type of SISR (replacement) by the speakers with different oral proficiency to demonstrate and discuss the evidence

of IC development. This study aims to contribute to expanding the range of possible observable features in IC development.

3. THE STUDY: DATA AND PROCEDURE

Twenty-four Korean university students participated in this study. Their major academic fields were all different, but none of them specialized in English or language-related fields. The participants were divided into three groups according to the score on TOEFL speaking section—novice, intermediate, and advanced, each group consisting of eight students (see Table 1 for more information on the participants). Although there is still more to be discussed on what should be the criterion for dividing the participants, cross-sectional IC studies in general have divided groups according to standardized test score or school levelling (e.g. Hellermann 2008; Pekarek Doehler and Pochon-Berger 2011; Kasper and Wagner 2014).

Half of the speakers in the novice group had stayed in English-speaking countries for less than six months, and the other half said that they had

Table 1: Participants (pseudonyms) of each group and topics for conversation

Group	Participants	Length of staying in English-speaking countries	Score in speaking section (out of 30)	Topic	Recorded time (min:sec)
Novice A	Ave, Beth, Curt, Den	None or less than six months	20 (18~21)	English	29:15
				Travelling	31:15
Novice B	Emma, Fan, Gail, Han			English	27:13
				Travelling	29:43
Intermediate A	Ian, Jun, Ken, Liz	More than one year but less than two years	23 (22~24)	English	35:40
				Travelling	32:55
Intermediate B	Mila, Neil, Oli, Pam			English	29:53
				Travelling	33:29
Advanced A	Rig, Sam, Tim, Uli	More than three years	27 (25~29)	English	43:11
				Travelling	28:58
Advanced B	Van, Will, Yun, Zoe			English	37:28
				Travelling	33:47

never been abroad. Some speakers showed low confidence, saying, 'I'm not good at English' or 'I suddenly get dumb if I have to speak in English.' However, they believed that being able to speak in English was essential for their future careers and were spending great deal of time daily to study English. Participants in the intermediate group had studied in English-speaking countries for more than a year but for less than two. They also believed that studying English was important and six of them were engaged in a weekly English study group. The last advanced group displayed high confidence in speaking in English. They responded, 'I don't get nervous when talking in English' or 'I am ready to work for foreigners or foreign companies.' All of them had at least three years of experience studying at colleges in English-speaking countries.

Each group was divided into two subgroups with four students in each to promote more opportunities to talk and to respond for interaction (Long and Porter 1985). The researcher asked each group to have an informal conversation about two general topics, 'studying English' and 'traveling', for about 30 min.

Before their conversations were recorded, participants were given about 10 min of free conversation time in order to feel comfortable when speaking in English, even though they were well acquainted with each other. Participants did not know the purpose of the study so that they would not be conscious of using self-repair. The participants consented to have their conversations recorded and analyzed for the purpose of the study. Although the previous literature highlighted the importance of visual information in CA research (e.g. Gullberg 2006; collections in McCafferty and Stam 2009), the pilot data showed that the participants were too much aware of the visual recording. Some participants looked at the camera while listening to the other, and some speakers gazed frequently at the lens when searching for a word or launching a new turn. The data were thus only audio-recorded by one of the participants on request to minimize such presence of interruption. However, due to the absence of visual information in the data, this SISR study admits that it might have missed the repairs which were initiated by the nonverbal cues such as gaze or facial expression, or even by the lack of such visual uptake by the recipients (Egbert 1996; Stivers 2008; Seo and Koshik 2010).

The recorded data were transcribed using the standard CA transcription conventions (see Supplementary Appendix, adapted from Wong and Waring 2010: xv). Transcribing second-language data using CA caused difficulties when hearing what might appear as the L2-indicative pronunciation of the participants. Even though the use of detailed transcription keys and orthographically modified transcriptions appears to be more exhaustive, as it incurs the risks of representing an L2 speaker in a stereotypical fashion (Roberts 1997; Giles and Watson 2013), the transcription of the data did not employ orthographic modification unless the heavy foreign accents disturbed co-participants' comprehension (Kasper and Wagner 2011).

After transcribing the verbal data, all instances of self-repair activities were identified. The researcher analyzed the episodes of talk which involved interruption in the progress followed immediately by the repair of a part of the

previous production. Among the different types of SISR, this study focuses only on the cases of *replacings*, or ‘speaker’s substituting a wholly or partially articulated element of a turn construction unit (TCU)-in-progress another, different element, while retaining the sense that “this is the same utterance”’ (Schegloff 2013: 43). Speakers may cut off to initiate replacements or repeat a part of the previous talk to locate the trouble-source in replacement (Schegloff 2013). The next section describes the different interactional functions of SISR used by the participants, which leads to the discussion of L2 speakers’ ability to adapt their talk to be situationally suited to their recipients.

4. DIFFERENCE IN L2 SELF-REPAIR PRACTICES

The total number of replacings found in the data is 39, and the study has found that, although not exclusive, the participants in each group have a tendency to use a specific type of replacing in their conversation. There were three main functions of self-repair as displayed in [Table 2]. Novice speakers self-repair mostly for changing what is unavailable into another accessible item, while intermediate speakers mainly use replacement for correcting grammatical errors. Advanced speakers frequently change the previous items into ones which are specific in the meaning range. This section introduces these different usages of replacement and compares self-repair practices in each group in detail, which leads to discussion on how such different replacings can account for recipient-design and IC development.

Table 2: Frequency of the different types of replacement in each group

Group	Unavailable → available	Incorrect → correct	General → specific
Novice	6 (86%)	3 (14%)	0
Intermediate	1 (14%)	11 (52%)	1 (9%)
Advanced	0	7 (33%)	10 (90%)

4.1 Novice speakers: Correcting what is unavailable into what is accessible

- (3) Novice Group A
- 01

Ceil: although although people have (2.0) um poor
- 02

communicate English skills? people but they
- 03

uh speak (2.0) loudly? it will be good uh to uh
- 04

enhance English=
- 05 →

Den: =an- and Korean people uh commu- °communi°-

- 06 → uh uh people speak in English they want to
07 make a per- perfect sentence.

Novice speakers in the current data use SISR mostly when the target lexical items are suppressed. In (3), while talking about the ways to improve English-speaking skills, Den (line 05) cuts off the first trial *commu*- and initiates another repair *communi*- on the same trouble-source, but fails to move forward to a resolution. Den (line 06) abandons the initial item *communi*- (possibly *communicate* as Ceil utters in line 02) and opts for a new element *speak* to complete a projected turn. A similar case can be found in (4), in which a speaker abandons the production of the target item and replaces it with the alternative that is syntactically congruent with the ongoing TCU.

(4) Novice Group B

- 01 Emma: how uh >how you< find study group?
02 Fan: well last month I:: searched (1.0) s- some
03 internet and could uh find this and I could
04 → apl- appli:- uh I go hhh
05 Gail: me me too.

The speakers in (4) are talking about ways to enhance the ability to speak in English, and Fan shares her experience of having an English study group. Fan performs two successive self-repairs, *apl*- and *appli*- (line 04), but fails to load the full phonetic information on the target item. She then produces a new verb *go*, and the reply (line 05) displays Gail's understanding of *go* in this context.

The two examples are similar in that replacement is caused by a speaker's failure to locate the target word. Although the second repair adds to the prior (*commu* → *communi*, *apl* → *appli*), which shows progression in the word search, the second attempt does not move forward to completion of the repair. Speakers Den and Fan no longer attempt to search for the target item, but use a new element to progress the ongoing TCU instead (Schegloff 1979). The following instance (5) also shows how a speaker succeeds in replacing the target item to complete the word search in the projected turn.

(5) Novice Group B

- 01 Han: my major is law so so I hh read uh newspaper?
02 Gail: o:: h
03 (2.0)
04 Fan: you read uh law uh poli- politic?
05 Han: yes uh like uh tsk make society better?
06 Fan: mmhm?

- 07 (1.0)
 08 → Han: and how conger- con uh politi- uh that that kind o-
 09 → hh how that kind of peo[ple]
 10 Fan: [politicians politicians]
 11 Han: yeah. uh how politicians make our society uh better

After Han introduces her major in (5), she tells the recipients that she likes to read political sections in newspapers. Han's first attempt *conger-* and *con* do not proceed to a successful resolution, and a further repair to the same trouble-source *politi-* does not lead to the completion of the repair either. Han abandons the target lexical word and resorts to the formulaic expression *that kind of people*. The fact that Fan provides the solution *politicians* in the next turn (line 10), which Han accepts (line 11), indicates that the participant has understood the referents indicated by *that kind of people* and that the replacement was initiated by the current speaker's failure to find the target lexical items.

The novice participants replace the trouble-source with another linguistic item that is more accessible in that moment to complete the repair. This type of self-repair is triggered by speakers who are unable to produce the target item at the time of interaction; thus, the use of such replacement by novice speakers is employed as a retroactive practice.

4.2 Intermediate speakers: Correcting grammatical errors

Whereas novice speakers use self-repair mainly to deal with the problems in word searches, the intermediate speakers in the study frequently use repair in their progress of grammatical searches. Intermediate speakers use repairs mostly for correcting grammatical problems in their prior talk.

(6) Intermediate Group A

- 01 → Ken: yeah this summer I go to- I went to Hong Kong
 02 but I'm just taking a rest in accommodation↑

In (6), while recalling his recent trip, Ken makes a change in the verb tense by substituting *went* for *go* as he is talking about the past. Such a replacement shows that Ken uses replacement for correcting what was wrong in the previous talk.

(7) Intermediate Group A

- 01 Jun: so it is really nowadays I think when (2.0)
 02 → when I was young? hh I should do my- I
 03 → should done I I should have done my best
 04 to learn about another language? a: nd maybe

- 05 tsk I think effective learning program
 06 something o: r learning way? is go to USA.

In (7), Jun does successive self-repairs during a grammatical search. He replaces *should do* with *should done*, and finally with *should have done*. His turn progresses even though Jun continues to initiate a repair on the same item *should do*. Successive self-repairs are done in a way to move towards resolving the grammatical trouble-source.

(8) Intermediate Group B

- 01 Mila: uh I've been to several countries but I don't
 02 have any special place to recommend? because
 03 (1.0) uh the most impressive place I've been
 04 to is Shanghai=
 05 Neil: =Shanghai
 06 → Mila: yes since I go to I went to there (1.0) I traveled
 07 → there with my uh old friends and >I think that<
 08 I uh I cannot go there with the- with them. u:: h
 09 in near future.

Excerpt (8) shows that Mila's repair is used to correct what is clearly a repairable in the previous talk. Mila corrects grammatical error by replacing *go to* with *went to* and deal with another grammatical error by changing *went to* into *traveled there*. This excerpt shows that the speakers are constantly addressing syntactic errors in their talk when using repair. Each repair progresses towards a solution for the trouble-source (Schegloff 1979) until it becomes error-free.

(9) Intermediate Group B

- 01 Pam: yeah maybe hh he looks tired
 02 → Neil: you drank? did you dra- (1.0) did you dri: nk hh
 03 last night?
 04 Oli: a:: h hh just tired [○]just tired[○]

In (9), Neil uses self-repair to fix even a minor grammatical error in his talk. When Neil asks if he drank last night, the first trial *you drank* is not a bad choice, given that one can form a question simply by raising the intonation. However, Neil undertakes three successive repairs to the repairable utterance. As Neil does in (9), intermediate speakers in this study use replacements, often in successive repairs, to fix grammatical, if minor,

errors in the previous talk. Repairs by intermediate speakers are thus retro-active, as they overtly target a linguistic unit that is problematic or can be 'erroneous according to the norms of the standard language' (Kurhila 2001: 1086).

4.3 Advanced speakers: From the broad to the specific in Meaning

(10) Advanced Group A

- 01 Sam: I could learn from many experience at Korean
 02 Army?
 03 Rig: instead of English?
 04 Sam: English. right. I had to uh maintain my English
 05 → capability there? so I bought some English books.
 06 → some English novels?=
 07 Uli: =uhhuh?

Most cases of replacements by advanced speakers in this study are due to word clarification. When talking about ways to improve English proficiency in (10), Sam replaces *some English books* with *some English novels* to refer to a specific genre, even though no recipients initiate repair on the first choice. Sam also raises the intonation after providing an alternative to elicit a recognitional response from the next speaker (line 07) ('try-marking,' Sacks and Schegloff 1979: 17).

(11) Advanced Group A

- 01 → Rig: especially my university days undergraduate days
 02 I tried to go abroad to study uh at that time I had uh
 03 um (0.6) rela- relatively a high score?
 04 Sam: yeah?
 05 → Rig: I got money uh s- scholarship from Jungsoo?
 06 Uli: Ju- uh is it famous?
 07 Rig: yeah it was such a kind of great uh great=
 08 Sam: =honor?
 09 Rig: honor. they encouraged me to study abroad

Replacing the prior linguistic item with one that is more specific in meaning can be also found in (11) when Rig talks about how he missed an opportunity to study abroad. He changes *university days* into *undergraduate days* to refer to a specific time when he received an offer from one of the scholarship foundations. Rig also replaced *money* with *scholarship* to refer to the specific type of funding he was offered.

(12) Advanced Group B

- 01 Zoe: he enjoyed very much but I worried about that
 02 at first because uh he learned English from
 03 → slangs? >from bad [words<?
 04 Yun: [o:: h okay.

When talking about how her little brother learned English in (12), Zoe changes *slangs* into *bad words*. Zoe's replacement here narrows her point to a few aspects of slang, possibly vulgar or nonstandard words, which made her worried about her brother (line 01). Zoe raises her intonation while replacing to confirm Yun's comprehension.

The examples from the current data demonstrate that advanced speakers often use replacement even when there are no objective errors. The self-repairs here are not retroactive because they do not correct grammatical or lexical problems in the previous talk. What is it then that triggers advanced speakers to repair, and how is this related to IC development?

5. FROM RETROACTIVE TO PROSPECTIVE SELF-REPAIR AND IC DEVELOPMENT

So far, the previous section has demonstrated three main functions of self-repair found in each group. This section compares these different self-repair practices between novice and intermediate, novice and advanced, and intermediate and advanced, which finally leads to discussion of recipient-design and IC development.

Both novice and intermediate speakers repair for a remedial purpose, to fix an evident error overtly. However, the trouble-sources triggering replacements in the novice speakers' data mainly stem from insufficient L2 lexical knowledge. The lack of lexical knowledge is a critical problem that should be addressed immediately, as it gives rise to the problems of intersubjectivity.

(13) Novice Group A

- 01 Beth: so English study is very difficult (2.0) if- if
 02 (2.0) English study? I think u: h s- sen
 03 (3.0)

- 04 Ave: sentence?
 05 Beth: u: h hhh sentence uh
 06 (5.0)
 07 Ave: make sentence?
 08 Beth: I memo- memo-
 09 Ave: memorize?
 10 Beth: uh memorize sentence

The novice speakers in (13) are talking about their experience of studying English. Beth keeps initiating self-repair because she faces difficulty finding the target words. There are other grammatical issues such as problems with word order (*if English study*) or the lack of an article (*make sentence*), but the main focus here is only on searching for a word. Beth's TCU can only progress when she finds the target item with Ave's help.

The trouble-sources for intermediate speakers, on the other hand, are grammatical deviations. Such problems rarely create difficulty in terms of intersubjectivity, and the recipients in a conversation are rarely oriented towards syntactic errors and mistakes (Gardner and Wagner 2004). In other words, the errors produced by intermediate speakers are not as critical as are those made by novice speakers. Nevertheless, intermediate speakers deploy successive repairs even for minor trouble-sources (Egbert et al. 2004). This indicates their high self-monitoring skills (Griggs 1997; Kormos 2014), which results from more knowledge about lexical entities and the rules of grammar. As Pekarek Doehler and Pochon-Berger (2015: 263) stated, 'language is a central resource for social interaction, and interactional development is tightly and complexly interrelated with linguistic development.'

Such linguistic development leads to successful self-repairs. Schegloff (1979) argued that the replaced item is not always discarded by the participants since repair solution does not always lead to repair completion. Although novice speakers have replaced the item, their failure to track the original target words can continue to be another trouble-source. As illustrated in (5), even after Han's replacement (*that kind of people*), Fan does not take it as repair solution and takes the next turn to provide the target word (*politicians*), which results in self-initiated other-repair (SIOR), not SISR. Using approximation to complete a repair may keep the speakers in an even longer process of re-establishing intersubjectivity. The successful outcomes of SISR by intermediate speakers indicate more developed linguistic competence, which is essentially interrelated with greater IC development (see Eskildsen 2011).

Both novice and advanced L2 speakers in the data use replacements for content words. The data from the advanced speakers show that the first choice is replaced by the words with more specific meanings. This clarification of content words narrows the possible range of meanings. *Novels* are a

subcategory of *books*, and a *scholarship* is a specific type of *money*. Whereas advanced speakers select items that are narrower, novice speakers resort to words that are simpler or broader in terms of the semantic range. The words replaced by novice speakers are sufficiently generalizable to include the meaning of the target word. *Go* is a broader term that can include other types of an action such as 'join'. *Speak* is phonetically simpler than *communicate* but still includes its meaning. The formulaic phrase *that kind of people* can describe any particular group of people easily without much elaboration of the people to whom *that* refers. In other words, the speakers are changing the levels of 'granularity' (Schegloff 2000) through self-repair; whereas novice speakers expand to the broader domain, advanced speakers hone in on the point.

More interactionally competent speakers would design their talk according to recipients' stance so that they do not need further explanations (Deppermann 2015). The completion of the repair should thus guide the recipient to develop a collaborative understanding of the repaired item (Mazeland and Zaman-Zadeh 2004). In other words, the replaced word should reduce the interpretative work of the recipients in order for both speakers and recipients to share more common ground. Broadening the meaning range allows more possible interpretations of a target item and requires extra work in order for the recipients to interpret the intended meaning, which may cause the problems of uncertainty. Refining the granularity of the content word to the specific meaning, on the other hand, indicates going straight to the essence, thus decreasing the possible ambiguity in advance (e.g. Paribakht and Wesche 1997; Kelley et al. 2010). The linguistic item replaced by advanced speakers has the effect of overtly displaying a particular referent in the contexts to increase clarity.

The use of self-repair for proactive purposes is also found when replacing pronouns. Schegloff (1987: 205) explained that pronouns possibly trigger an 'interpretive error,' which is caused by mismatching a pronoun with a referent. As Auer (1984: 628) stressed, 'referring parties are required to tailor their referential expressions to the perceived individual needs of their recipients.' Replacement of the pronoun with the correct referent before the recipient expresses the problems with ambiguity thus pre-empts the possible problem of misunderstanding. Clarifying the antecedent is found exclusively in advanced speakers' conversations, as in (14).

(14) Advanced Group A

- 01 Tim: even even though I got the permission from
 02 → KATUSA but hh he uh my uncle lib- he canceled
 03 and put me to [the]
 04 Rig: [oh] my God.

Tim specifies to whom *he* refers to by replacing it with *my uncle*. From the preceding part of Tim's storytelling, there are a few candidates for *he*—his

brother, his uncle, and his teacher—and this replacement prevents potential misunderstandings by pointing directly to *uncle*. Just as advanced speakers restrict the scope of meaning by replacing general content words with more specific items, among the potential candidates, advanced speakers point to a particular referent. Again, such a repair is a preventative practice, which becomes an important clue for detecting developed IC. Calibrations of granularity to a finer level for the recipients is essential for enhancing intersubjectivity.

While advanced speakers repair potential sources of interpretational ambiguity, intermediate speakers repair for grammaticality. It has frequently been stressed that IC does not abandon the roles of L2 linguistic competence, since ‘without these linguistic resources, turn-taking, sequencing, overall structuring and repair would be non-existent’ (Waring 2018: 64). However, the different functions of self-repair by intermediate and advanced speakers show evidence of IC development.

Although intermediate speakers are able to detect and correct the morphophonological problems in talk, they are not yet able to use repairs to clarify content. This finding corresponds with earlier studies on L2 self-repairs (e.g. Van Hest 1996; Kormos 2000, 2014), which found that less competent speakers tended towards grammatical or lexical search repairs, whereas more competent speakers repaired to change the informational structure or to increase the clarity. According to Matea Kovač and Milatović (2013: 239), ‘more proficient speakers allocate their attentional resources to enriching the propositional content, whereas less proficient speakers ... concentrate on repairing errors arising at lower levels of language processing.’ Intermediate speakers in this study frequently correct grammatical forms but not actual content for intersubjectivity. Although Mila’s substitution of *travel* for *go* in (8) can be seen as an example of narrowing down the meaning for clarity, we cannot ignore the fact that there was an obvious grammatical error in the first place (*went to there*, line 06), which initiated her self-repair. However, this example may indicate that Mila is at the stage of becoming a more competent L2 speaker as are the advanced speakers in the study.

Advanced speakers, on the other hand, use self-repair to achieve mutual understanding. They fine-tune the levels of granularity to increase the clarity of the message being conveyed. The following two examples by intermediate and advanced speakers show how granularity appears in talk-in-interaction and how the selection among alternative terms ‘embodies a different action and stance’ (Schegloff 2000: 715).

(15) Intermediate Group A

01 Liz: uh one of my friend really liked the musical?

02 Ken: mm

03 → Liz: and when she get uh got to Europe?

- 04 Ken: yes?=
 05 → Ian: =what is Europe? Eu- Europe the England?
 06 Liz: yeah. she kept going to the the musical for Cats
 07 → Ian: in London?
 08 Liz: yeah.

As can be seen in (15), while Liz is talking about her friend who loved musicals so much that she went to London by herself just to watch them, Ian (line 05) initiates a repair by asking Liz to specify the place and he initiates another repair (line 07) to confirm if the place he thought of was correct. Liz conducts a self-repair to resolve a problem with the tense (line 03, *get* → *got*), but Ian takes *Europe* as a repairable to initiate a repair. As (15) demonstrates, the intermediate L2 speakers in the study did not use self-repairs to conduct prefatory work to establish the reference (Auer 1984). Although Liz's talk is successfully repaired from a grammatical point of view, the repair does not counter the potential ambiguity that is 'internal to the data' (Schegloff 1997: 520), which leads to two successive other-initiated repairs in the following turn.

(16) Advanced Group B

- 01 Yun: I think um tsk (0.5) uh let's see: uh I think when I
 02 → was traveling England the southern part of England
 03 was quite impressive
 04 Will: oh?
 05 Yun: looking back it was quite pastoral like uh kind of
 06 atmosphere with along with the um like the ocean
 07 stretching out forever and bird flying? all the all the
 08 peaceful memories hh uh I miss the place=
 09 Zoe: =wh- what's the name of the city?
 10 → Yun: u: m Corn- was it uh Cornwi- uh I'm not quite sure
 11 but it was like at the wa: y at the end of England.

Whereas Liz fine-tunes the level of granularity (from Europe, England, and to London) in her process of responding to Ian's request in (15), in (16), Yun narrows the range of the place (from England to southern part of England) before a recipient initiates a referential repair (line 02). Although her description of the place does not pre-empt a request for further information by Zoe (line 09), there is a possibility that this might have been due to her lack of knowledge (line 10, *I'm not quite sure*). This contrasts with Liz in (15), who knows the place is London (line 08) but does not provide the recognized term

until she is asked. Self-repair for the finer granularity can be a way to pre-empt possible repairs and thus to be recipient-designed in the first place. The emergence of this interactive function results from L2 speakers' ability to project upcoming actions and to coordinate their speech carefully in accordance with the speech of others.

6. SHIFTING GRANULARITY FOR RECIPIENT-DESIGN

This study demonstrates the cases in which speakers address either evident linguistic flaws or prospective problems that may arise in talk. Regardless of their L2 proficiency, the participants in the study are able to replace the problematic item with an alternative linguistic unit in order to establish intersubjectivity. However, the major difference between novice/intermediate and advanced speakers is that the former groups mostly repair in order to remedy what is linguistically problematic, while the latter group mainly repaired to pre-empt what might be problematic for understanding. The L2 speakers with greater IC use SISR not only for retroactive but also for proactive.

Waring (2018: 61) stated, 'key to the deployment of the various interactional practices is still the most general principle of recipient design'; moreover, Auer (1984: 629) argued 'the principle of recipient design involves uncertainties.' As there is no single word that suits all different recipients and contexts, how an L2 speaker in talk-in-interaction deals with the problems of ambiguity by a careful selection of alternatives is important evidence of IC development. Advanced speakers shift granularity to a more detailed level to make the referent as unambiguous as possible. Proactive self-repair is, therefore, significant evidence of recipient design and IC development in that L2 speakers deploy context-sensitive and collaborative efforts to fulfil local communicational needs.

SUPPLEMENTARY DATA

Supplementary material is available at *Applied Linguistics* online.

Conflict of interest statement. None declared.

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