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EFL 상황에서의 상호작용능력에 대한 연구: 제 2언어 화자의 자기 교정 실행을 중심으로

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EFL 상황에서의 상호작용능력에 대한 연구: 제 2언어 화자의 자기 교정 실행을 중심으로

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ABSTRACT

Exploring Interactional Competence in EFL Context:
Focusing on L2 Speakers' Self-repair Practices

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In our everyday life, we speak. We speak of others, we are spoken by others, and we speak for others. Speakers carefully tailor their talk in a way to be accepted and comprehensible for the co-participants, who make interpretative efforts to understand and to provide relevant next actions to the prior speaker. Second Language Acquisition (SLA) has recently focused on the importance of actual language use collaboratively with the other participants, which displayed their interactional competence (IC). The abilities to construct and allocate turns, to provide sequentially appropriate response, and to repair for maintaining intersubjectivity are all essentially based on L2 speakers' IC.

Taking the advice from Skogmyr and Marian Balaman (2018) to broaden the interactional practices, the
purpose of this cross-sectional study was to find the evidence for IC development from repair practices by L2 speakers with different oral proficiency. Three groups of L2 speakers participated and their talk-in-interaction was transcribed and analyzed within the methodological framework of Conversation Analysis (CA). The study classified the usage of self-initiated self-repair practices into six categories adapting the study by Schegloff (2013): recycling, inserting, parenthesizing, replacing, reformatting, and searching. 'Recycling' in turn-beginning practice displayed that even the novice speakers were able to preempt the possible mishearing which might have been caused by overlapping. However, compared to the intermediate and advanced L2 speakers, L2 novice speakers sometimes failed to use syntactic resources for managing turn-taking, and ended up launching turns in a place where turn transition was not relevant. The L2 participants also used 'inserting' to add more information which contributed to enhancing clarity. More importantly, the intermediate and advanced speakers inserted additional elements to be specific in the meaning range. This insertion preempted the possible misunderstandings which might have been caused from the ambiguity. The advanced speakers also used 'parenthesizing', or the addition of clausal turn constructional units (TCUs), to clearly add specific information before the other recipients raised the problems of understanding. 'Replacing' was a type of self-initiated self-repair (SISR) in which L2 speakers changed the
previously produced items into the new one. While the novice speakers repaired on their way of searching the target word and the intermediate speakers mostly replaced for fixing the grammatical errors, advanced speakers repaired for narrowing down the meaning range, by orienting to "granularity" (Schegloff, 2000a). This suggested that repair is not necessarily for fixing the evident language trouble, but preempts the potential mishearing in advance. 'Reformatting' is changing of already produced TCU with a new TCU with a different structure while retaining the same meaning. The intermediate L2 speakers heavily used this type of SISR not only to correct the grammatical problems but also to change the perspectives to produce their talk in the clear. This is an important clue for the IC development, as L2 speakers displayed their ability to use repair “with an eye to their co-participants” (Schegloff et al., 2002, p. 5). The participants deployed 'searching' when they were temporarily unable to find the target item due, possibly due to L2 deficiency. Compared to the novice speakers who frequently depended on silence or non-lexical perturbations which made their actions ambiguous, the advanced speakers used metalinguistic remarks to explicitly demonstrate that searching was still under way to maintain the progressivity of talk.

The results of the study demonstrated that the participants, regardless of L2 proficiency, were able to initiate and complete the problems of interaction to re-establish intersubjectivity and maintain the overall
progressivity of talk-in-interaction. This is an important clue of IC. The results of the study still suggested, however, that there were the important clues for the development of IC, which were related with language development. Language was the main resource for coordinating actions, and proficient L2 speakers had more linguistic resources to project actions and to diversify the methods that were more suitable for the local contexts of talk-in-interaction. Development of IC was not just being able to carry out the interaction anyhow, but to organize their social conducts in a way to be more acceptable and comprehensible for the recipients using linguistic and other interactional resources.

It is hoped that the current study described pedagogically useful interactional features of IC and have expanded the scope of the L2 IC development into diverse interactional contexts. The results of the study can also hopefully contribute to understanding the significance of the diversification of practices and of fine-tuning the levels of granularity in talk-in-interaction for recipient-designed talk.

**Keywords**: interactional competence, self-initiated self-repair, second language conversation, conversation analysis, recipient-design, granularity

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Chapter 1. Introduction

Interactional competence is not the knowledge or the possession of an individual person, but it is co-construction by all participants in a discursive practice (Young, 2008, p. 101).

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 interactional problems, all of which involve socially coordinated procedures. The participants in interaction focus constantly on local details of interaction to tailor their actions contingent on the actions of others. Because talk-in-interaction results from “a minute synchronization and coordination of mutual conduct” (Pekarek Doehler & Pochon-Berger, 2015, p. 263), the participants in conversation are equipped with interactional competence (IC), or the ability to organize the interactional conducts to be accepted and understood by the recipients.

As highlighted in Firth and Wagner’s (1997) seminal critique, 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 co-constructive and contextually situated, recent SLA studies have demonstrated successfully that language learning can be accomplished through social engagement and that L2 learners are capable participants who can demonstrate observable and systematic interactional practices for accomplishing social actions and establishing intersubjectivity (Kasper & Wagner, 2014; Pekarek Doehler & Pochon-Berger, 2015; Young, 2011).

As Waring (2016) stated, “[C]rystallized in the intersection between CA and language education is their common interest in and commitment to the enterprise of interactional competence” (p. 4). Empirical research on L2 IC has mainly been supplemented by an ethnomethodological approach to Conversational Analysis (CA). CA uncovers “the practices and competences underlying the organization of social interaction” (Curl & Drew, 2008, p. 32). 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 become members of a particular society (Garfinkel, 1967). In studies of CA-SLA (Kasper & Wagner, 2011), IC is 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” (Pakarek Doehler & Berger 2016, p. 2). IC developmental studies have either taken a longitudinal approach to track the changes of or a cross-sectional approach to compare the methods of deploying interactional resources in a particular interactional practice such as turn-taking (Barraja-Rohan, 2015; Cekaite, 2007; Watanabe, 2016), sequence organization (Hellermann, 2008; Lee and Hellermann, 2014; Pekarek Doehler & Berger, 2016), or repair (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 involved “a growing ability to recipient design talk and to deploy context-sensitive conduct, i.e. conduct that is better tailored to the local circumstantial details of the interaction” (Pekarek Doehler & Pochon-Berger, 2015, p. 262). However, as Skogmyr and Marian Balaman (2018) suggested, L2 IC studies have mostly focused on limited interactional practices. To find the empirically solid constructs for IC, the studies on finding the evidence of IC are required in various practices.

The current study, therefore, attempted to conduct a cross-sectional study to discuss interactional competence and its development through the usage of self-initiated self-repair (SISR, Schegloff et al., 1977). Repair has attracted the attention in IC studies as it is an important aspect to understand the processes whereby co-participants in conversations address breakdowns to
produce mutually acceptable resolutions. The present study, however, attempted to differentiate itself by examining different practices of employing self-initiated self-repair (SISR). The previous research in L2 IC had limitedly investigated repair practice in searching the target words due or replacing for correction. These studies only focused on the cases when there were evident problems in the previous talk, and examined the ways in which a speaker identified these problems and rectified them (e.g., Farina et al., 2012; Hellermann 2009, 2011). The central function of repair in such cases was mainly to correct a lexical problem or a grammatical error in conversation. This study, on the other hand, involved the other types of SISR to demonstrate that they could self-initiate repair even when nothing was wrong with the previous utterance to avert the possible misunderstanding in advance. The current study viewed the development of IC as an increased ability to deploy repair in a proactive way, projecting upcoming actions and preempting possible problems, thereby presenting talk situationally suited for the co-participants.

The result of the study is expected to consolidate the normality of L2 talk in that L2 speakers, regardless of their proficiency, are capable of creatively deploying SISR in times of interactional difficulties in order to successfully achieve a social action. The result is also expected to provide the empirical evidence of IC and its development by showing how L2 speakers
can project ahead and preempt the potential interactional problems in unfolding talk-in-interaction.

In the next chapter, the current study introduced the prior studies on CA-SLA with the discussion of IC and its development. The gaps in the previous research would lead to research questions for the study. In the following chapter, the study described the participants and procedures of the study. In Chapter 4, the study analyzed and compared the practices of SISR by L2 speakers with different oral proficiency, which led to discuss the evidence of IC development. In the last chapter 5, the study summarized the result, pointed out limitations, and suggested a few comments for the future study.
Chapter 2. Review of the Literature

2.1 From L2 Learner to L2 Speaker

Rather than depictions of interactional success in an L2, we found an overwhelming emphasis on and preoccupation with the individual’s linguistic and pragmatic failure. Rather than talk, we found input. Rather than achievement, we found an abundance of problem-sources. Rather than collaboration, invention, and an extraordinarily creative use of shared resources, we found references to errors, input modifications, interference, and fossilizations (Firth & Wagner, 2007, p. 801).

As the above citation argued, traditional studies in SLA were mostly theory-driven, based on exploring cognitive and mental states of individuals. It presupposed that L2 speakers were deficient learners who needed to minimize the errors in speech so that they became more like native speakers. The scholars in this stance emphasized that language acquisition and use were distinctive domains of language. They asserted language learning is “essentially a cognitive, context-free phenomenon” (Markee & Kasper, 2004, p. 491).

On the contrary, the seminal critique by Firth and Wagner (1997), which called for reconceptualization of SLA, argued that SLA scholars should “(a) develop its awareness of the interactional dimensions of language use in contexts, and (b) adopt an emic
approach, and (c) broaden the traditional SLA database” (p. 286). The paper asserted that the scope of SLA should include social dimensions of language use. The scholars who supported this point of view stated that language is not a static system in one’s mentality, but “a dynamic set of resources used for the accomplishment and interpretation of social actions, which can be constantly negotiated and renegotiated through interaction” (Mori, 2007, p. 850). That is, language acquisition cannot be separated from language use, and language learning can be achieved through interaction (e.g., Liddicoat, 1997; Markee, 2004). Hall (2004) accounted for the importance of interaction in language learning as follows:

If what we know as language knowledge is really a dynamic, constantly evolving set of recurring regularities, the shapes of which emerge from their frequent and predictable use, and if use is fundamentally interactional, then in order to understand how language develops and the outcomes that arise in terms of acquired language knowledge, we need to begin our examinations with the interactional practices that learners are involved in (p. 610, my italics).

Studies in SLA started to concentrate on 'interactional practices' through which participants produce and comprehend their interaction. The studies investigated how L2 speakers used language in the actual process of social interaction and found that they were not deficient learners with insufficient L2
knowledge but normal speakers who used linguistic and interactive resources to accomplish actions. Therefore, how L2 speakers achieved interactional success by deploying shared resources with co-participants became the critical issue for scholars who attempted to follow the new direction of SLA.

Although there was no direct reference to CA in Firth and Wagner (1997), Waring (2017) examined that “given its potency in describing and detailing the practices of social interaction, CA became the natural candidate for answering that call” (p. 3). The main goal of CA is “to discover and explicate the practice through which interactants produce and understand conduct in interaction” (Drew, 2005, p. 75). CA examines how participants construct their own talk in response to their interlocutors in sequential contexts by questioning ‘why that now’ (Schegloff & Sacks, 1973). Put in other ways, CA asks for why a particular talk is uttered in that particular way in that particular moment of interaction. Button and Lee (1987) commented that conversation analysis has enormous implications for SLA as it reveals the “social organization of natural language-in-use” (p. 2), which brings the real life language use in authentic situations into L2 learning. Wong (2000) also suggested that “CA methodological framework may provide a sounder foundation for the study of interactive SLA than SLA approaches that are only focused on linguistic form” (p. 264). In recent decades, enormous body of SLA research has taken this ethnomethodological
approach of CA, or what was labelled CA-for-SLA (Markee & Kasper, 2004) or CA-SLA (Kasper & Wagner, 2011) “to unpack second language user-learners’ common sense understanding of their own and their interlocutor’s real time, embodied language learning behaviors” (Markee & Kunitz, 2015, p. 426). With CA’s emic point of view and its thorough investigation in every single detail, it has become one of the powerful methods in the studies of second language acquisition. As CA views “language as a resource for constructing intersubjective meaning in social life” (Brouwer & Wagner, 2003, p. 31), SLA scholars apply CA to analyze how L2 speakers develop intersubjectivity through interaction.

As Gardner and Wagner (2004) asserted, one of the important findings in CA-SLA is the “normality of L2 conversations” (p. 3). They found that every single linguistic item in talk, however it might seem problematic, was an useful interactional device for successful interaction. The CA-SLA scholars investigated what initially appeared as disfluent or L2-indicative in second language talk and showed how it could become an interactional tool to manage conversational sequences. Mori (2004), for example, examined the role of code-switching in Japanese as a foreign language (JFL) classroom. Against the general stereotype that L1 use in L2 conversation was undesirable, she found that using English (participants’ L1) “serves as a resource for managing sequential boundaries, and at
the same time, affects the way in which their interactive activities are organized” (p. 354). Carroll (2005) focused on the addition of vowel to word-final consonants as in *what-o iz-u zat-o shing-u* for what is that thing? (p. 214), or what he called "vowel-marking" in novice Japanese speakers of English. While such phenomenon was treated as the problem due to negative transfer from Japanese, his analysis displayed that participants did not orient to vowel-marking as a pronunciation error, but deployed as a resource for word search or a signal to produce further speech in the current turn. Hosoda (2006) summarized such findings and argued that “second language conversations are normal conversations in which the basic methods of conversational organization found in first language conversations also operate” (p. 28).

These studies which emphasized the interactional success rather than linguistic deficiencies, discovered the L2 participants’ ability to design their turns to follow basic rules of turn-takings, to repair the present or upcoming problems in talk, and to coordinate sequential organizations regardless of speakers’ L2 proficiency. Gardner and Wagner (2004) wrote:

...whilst second language speakers may not be highly proficient in the language, they are not 'interactional dopes.' They are able to engage in quite exquisite activities in the interaction. In other words, they are in this respect just like any other speakers in a socially embedded situation (p. 15).
The studies in Wagner and Gardner's (2004) demonstrated that just as L1 speakers, L2 speakers were able to display interactive performance through employment of any linguistic or interactive devices which were available. That is, L2 speakers are 'normal speakers' with “the knowledge and ability to participate in social interactions through the use of linguistic and other semiotic resources” (Ishida, 2009, p. 351), which is interactional competence (IC). The next section described the features of IC and introduced the previous studies which explored its development.

2.2 Interactional Competence and its Development

Hymes (1972) was one of the first scholars who asserted the importance of contextualized view of language use. He argued that competence does not only refer to speaker's cognitive knowledge but also involves how the speaker can use language in a given context. Hymes called such ability to use language appropriately in a real situation communicative competence, which made contrast with Chomsky's (1965) linguistic competence, i.e., individual's underlying abstract system of language which is realized through actual production. Hymes' communicative competence became the basis for Canale and Swain (1980) and Canale (1983), which differentiated four types of
communicative competence: grammatical competence, sociocultural competence, discourse competence, and strategic competence. He and Young (1998) further expanded this model by incorporating interactional competence (IC). While IC might simply appeared as the fifth component of communicative competence, He and Young (1998) accounted for the difference in that, while communicative competence is cognitive and static based on individual’s knowledge, IC is distributed among conversational partners and co-constructed by the participants in conversation. IC displays how the participants collaborate by utilizing interactional resources together to maintain intersubjectivity throughout the interaction. That is, "IC is not what a person knows, it is what a person does together with others" (Young, 2011, p. 430, italics in original). More recently, Young (2019) characterized the four defining features of IC as follows:

▶ IC has been described (and its absence noted) in spoken interaction and/or face-to-face interaction.

▶ IC is characterized by participants’ understanding of the pragmatic meaning of communicative acts.

▶ IC is not the knowledge of the possession of an individual; rather it is co-constructed by all participants in a discursive practice.

▶ IC is participants’ participation in specific discursive practice—recurring episodes of spoken interaction in context, episodes that are of socio-cultural significance to a community of speakers (p. 96).
Young (2019) emphasized two central differences of his conceptualization contrary to Hymes (1972). Firstly, all the interactional resources used by the participants are contingent on others. Secondly, IC is neither the possession of the specific speaker nor the ability to other co-participants as each talk-in-interaction is unique.

More specifically, as IC is the knowledge and use of the communicative resources which contribute to creating and enhancing intersubjectivity, Young (2008) categorized three resources further divided into seven subcategories, which are distributed across the participants.

- **Identity resources**
  - participation framework: the identities of all participants in an interaction, present or not, official or unofficial, ratified or unratified, and their footing or identities in the interaction

- **Linguistic resources**
  - register: the features of pronunciation, vocabulary, and grammar that typify a practice
  - modes of meaning: the ways in which participants construct interpersonal, experiential, and textual meanings in a practice

- **Interactional resources**
  - speech acts: the selection of acts in a practice and their sequential organization
  - turn-taking: how participants select the next speaker and how participants know when to end one turn and when to begin the next
  - repair: the ways in which participants respond to interactional trouble in a given practice
-boundaries: the opening and closing acts of a practice that serve to distinguish a given practice from adjacent talk (p. 71)

Such theoretical backgrounds of IC are aligned with CA based approach. Instead of a fixed and static assumption, “CA presents competence as variable and co-constructed by participants in interaction” (Seedhouse, 2011, p. 348). IC scholars agreed that competence not only refers to individual’s knowledge in the formal system of linguistic rules, but also involves how L2 co-participants collaborate to co-construct intersubjectivity in talk-in-interaction. CA has great implications in SLA for viewing talk-in-interaction by L2 speakers as achieving order and social organization and taking learning as socially distributed knowledge among the co-participants (Mondada, 2006).

The findings of IC have contributed to viewing L2 speakers as competent enough to manage interactions, but the research were more about the actual usage of language in the real contexts than cognitive acquisition of L2, which incurred expected criticism from traditional SLA scholars. Such problem is unavoidable considering that CA is a behavioral discipline that does not provide static, cognitive mental states of individuals (Wagner, 2004). He (2004), for example, argued “CA is not a learning theory and thus is not designed to document language acquisition” (p. 579). As Ellis (2010) asserted, studies in SLA “must necessarily account for change in learners’ use of the L2 over time” (p. 44).
CA for SLA? It all depends. Saying that something has been learned, saying what has been learned, when it has been learned, and the reason it has been learned are big challenges for all SLA researchers, cognitivists as well as those who practice CA. Yet these are the challenges which CA researchers must confront if they want to move CA to the center of the field (Larsen-Freeman, 2004, pp. 606-607)

As Lee and Hellermann (2014) pointed out, “tracing development changes is possible only when there are recognizable objects of learning for analytic comparison” (p. 2). IC studies turned its attention to tracing development changes of L2 speakers within CA framework. Just as CA describes how members in a community deploy interactional semiotic systems to achieve every day social actions in ordinary conversation, IC researchers applied CA to describe the methods that speakers deploy to accomplish specific interactional practices in talk-in-interaction. The IC development studies (e.g., Hellermann 2008, 2009, 2011; Pekarek Doehler & Pochon-Berger, 2011; Pekarek Doehler & Berger, 2016) interpreted different methods of managing interactional contingencies as the evidence of IC. In other words, the development of L2 IC has been conceptualized in terms of change of the methods especially in turn-taking, sequence organization, or repair practice. Such research discussed how those differences or changes contributed to increased context-sensitive conducts and mutual understanding in interactional contexts (Pekarek Doehler & Pochon-Berger 2015). Compared to early CA-SLA studies which have focused on the
normality of L2 speakers through interactional competence (e.g., Firth, 1996; Wagner & Gardner, 2004), recent studies now focus on tracing the development of IC through longitudinal or cross-sectional data (Kasper & Wagner, 2014). Wong (2013) even argued that CA has already won its place on SLA table so that researchers no longer have to “advocate for CA as the phrase CA-for SLA or CA-SLA imply” (p. 16). The next section would introduce a number of L2 IC studies which compared different methods in a specific interactional practice and found the clues for IC development.

2.2.1 Longitudinal Studies on L2 IC

L2 IC longitudinal data have displayed how L2 speakers accomplished the practice in comparable contexts over time. Pekarek Doehler and Pochon-Berger (2011) argued that developing interactional competence reflected developing ‘methods’ for a particular interactional micro-practice, or more specifically, “the increased diversification and local efficacy of such methods” (p. 209). The longitudinal studies in general concentrated on the specific interactional practice such as turn-taking practice, sequence organization, or repair organization, and have demonstrated how such methods have changed in ways to be more understandable and acceptable for the recipients.
Turn-taking, among different interactional practices, is ‘a basic form of organization of conversation’ (Sacks et al., 1974: 696). Speakers in conversation coordinate timely entry to hold the floor and organize conditionally and sequentially relevant actions through turn-takings. Successful turn-takings, therefore, result from the collaboration of the speakers who display possible transition places and the receivers who monitor and anticipate those points so that they can either pass up, join, or take the next turn. Learning to manage turn-taking, therefore, should be the very basic start when learning how to communicate in second language (Wong & Waring 2010). One example for turn-taking study was Cekaite’s (2007), who showed how a seven-year-old Kurdish girl (Fusi) had changed in self-selecting practices. Fusi abruptly interrupted to self-select her turn in the beginning stage of instruction, heavily relying on attention-getting devices such as loud voice or imperatives. She later was able to practice successful turn-takings in non-disruptive ways and diversified language choices appropriate for ongoing interaction. The study by Watanabe (2017) also had a research relevance, which investigated how a young EFL learner (Eisaku) managed self-selected turns in post expansion sequence. Although he initially took turns at transitionally irrelevant places which frequently resulted in interruptions, he later found appropriate timing to start the turn.

How L2 speakers gradually became able to organize the
sequence, or “a course of action implemented through talk” (Schegloff, 2007, p. 9) also attracted scholars in CA-SLA as well (Dings, 2014; Hellermann, 2008; Pekarek Doehler & Berger, 2016). A sequence is basically composed of adjacency pairs such as greeting-greeting or questioning-answering, but it can extend over multiple turns as in storytelling. In order to organize the sequences, speakers should display the type of sequence under way and project upcoming course of action to be recognizable and understandable for the recipients. One good example is Pekarek Doehler and Berger’s (2016), who investigated French L2 speaker’s story-opening techniques over nine months. The focal student Julie was able to use only a limited set of story-opening devices which were minimally tailored for the recipients. However, she became able to develop systematic prefatory techniques with time, by using disjunct markers to connect upcoming talk from the preceding one, providing referential works to project upcoming story, or securing recipiency through turn-taking designs. The study demonstrated that the development of IC entails “a growing ability to design turns and actions so as to provide for their fittedness to the local circumstantial detail of the ongoing interaction” (Pekarek Doehler & Berger 2016, p. 21).

Repair organization has been a classical object to study in L2 IC, as the ability to address interactional problems for maintaining social interaction and reestablish intersubjectivity is
the important evidence for IC (Pekarek Doehler & Pochon-Berger, 2015). This also includes L2 speaker’s competence to monitor linguistic details in talk and the ability to resolve the trouble independently without the help of others (e.g., Hellermann, 2009, 2011).¹)

Kasper and Wagner (2014), however, pointed out two major methodological problems for longitudinal studies. First is that “analysis cannot abstract from the co-participants’ conduct” (p. 198). That is, how L2 speaker construct their own talk is largely influenced by others. For example, in the study of Ishida (2009), when the researcher gathered the data from eight conversations to compare chronologically, there was a change in the conversational partners during the time of data collection. In the initial term the focal student talked with his host family, but in the final term, the interlocutor was an American friend. Such changes of interlocutors entailed the methodological problem.

The second problems is that “interactional competence development cannot be separated from the development of the participants’ social relations” (Kasper & Wagner, 2014, p. 199). It is almost impossible for one focal student to consistently interact with the same partner over the data collection, and even if she did so, the change in the interactional or linguistic resources might have resulted not from speaker’s interactional competence

¹) As the current study was about repair practice, L2 IC repair studies would be discussed in more detail in section 2.3.
but from affiliated social relationship. Therefore to collect more significant empirical data, a cross-sectional study should be conducted together, which would be described in the following section.

### 2.2.2 Cross-Sectional Studies on L2 IC

L2 IC Cross-sectional studies have compared how novice and advanced L2 speakers deployed different methods to accomplish the social actions in particular interactional practices, and discussed how such difference can contribute to describe the development of IC. A book-length study by Hellermann (2008), for example, has been mostly cited for his comparison of the prefaces of non-elicited story by ESL learners taking novice and intermediate courses. Novice ESL speakers began storytelling with little prefatory devices and launched a story rather abruptly, but intermediate ESL learners were capable of recipient-designing talk by deploying wider lexical-grammatical resources for pre-sequence so that the story could be easily accepted and understood. Intermediate L2 speakers provided story-opening devices beforehand to lay contextual grounds for the recipients to comprehend and to anticipate actions.

Pekarek Doehler and Pochon-Berger (2011) conducted a cross-sectional study in French L2 classrooms to compare how
two levels (8th and 12th grade) of L2 speakers displayed disagreements. Compared to 8th grade learners who resorted to *yes/no* polarity with rare elaborations, 12th grade learners were able to use diverse techniques, such as prefaces, hedges, discursive elaborations or exemplifications. That is, 12th grade students were able to use 'dispreferred action turn-formats' (Pomerantz, 1984), which were typical for L1 speakers (Sacks, 1987). The advanced speakers in the study used various techniques for managing the preference organization for agreement in ways that were similar to L1 talk-in-interaction. This study viewed the development of interactional competence as “increased capacity for context sensitive conduct” (Pekarek Doehler & Pochon-Berger, 2011, p. 238) to the local contingencies of conversation.

2.2.3 Methodological Challenges

L2 IC studies have grown exponentially from the last two decades and substantial amount of research contributed to providing empirical evidence for IC and its development. However it faced with a few methodological challenges which still remain up to now. Although resolving these issues is beyond the scope of the study, this section would address the major concerns about applying CA approach in the study of IC development.

The methodological power of CA can demonstrate how L2
speakers minutely coordinate linguistic resources contingent on what others do, but it does not mean CA can demonstrate actual process of language learning, as briefly mentioned in the previous section 2.2. One of the critical methodological challenges in cross-sectional studies is whether one can judge one speaker group was better than the other, just because a certain linguistic or interactional feature was present in one group but not in the other. CA is the study to explore what is observable in the transcript, not to gauge what is hidden. The longitudinal studies as well face this problem, since the research is fundamentally based on the comparison of two or more periods of time. IC development studies involve "same but different analysis" (Koschmann, 2013, p. 2) between different points of time or place.

The absence of a 'learning mechanism' creates a dilemma for L2 researchers who wish to apply CA not only to the study of L2 interaction, but to second language development (Kasper, 2009, p. 11).

Young (2019) summarized two approaches in recent CA-SLA in answering the above dilemma. The first group of researchers focused on L2 pragmatics (e.g., Ishida, 2009; Lee, 2010; Markee, 2017; Taguchi, 2014). They called themselves "purists" (Markee & Kunitz, 2015, p. 430), as they stayed strictly on traditional CA, stressing "the relationship between the meaning of an utterance and the context in which the utterance is
produced" (Young, 2019, p. 106). As pragmatics is a study on how context contributes to a meaning, L2 pragmatics focused on a specific linguistic form or a lexical item and investigated how L2 speakers use it as an interactional resource for establishing intersubjectivity, serving different functions in different contexts (e.g., Ishida, 2009; Taguchi, 2014). For this reason, the real language use in every changing context becomes the priority. The scholars in L2 pragmatics "focus on what participants actually do (versus what they are supposed to do) in terms of their observable language choices during specific moments of language behavior" (Markee and Kunitz, 2015, p. 433, italics in original). The researchers of this approach believe that comparisons in CA developmental studies are not possible, because speaker’s actions are contingent on every changing context which cannot be controlled for comparison. Because of this methodological challenge, L2 pragmatists argued that IC developmental studies "take a more prescriptive view of learning than what natural interactional details in CA studies allow us to see" (Lee, 2010, p. 404).

The second approach is labelled "developmental CA" (Pallotti & Wagner, 2011), or "microgenetic CA" (Pekarek Doehler & Lauzon, 2015). They "stayed away from presenting IC as a full-fledged theory and instead focused on observable, micro-levelled interactional aspects of speakers’ competence" (Skogmyr Marian & Balaman, 2018, p. 3). Microgenetic CA research concentrated on a
specific interactional practice (turn-taking, repairing, disagreeing, story-opening, etc.) in everyday talk-in-interaction, and investigated how L2 participants have changed their ways of accomplishing social activities.

The important theoretical background for IC development research started from CA’s notion of cognition that knowledge exists in situ, inherently and actively bound with social contexts (Schegloff, 1991). Mondada and Pekarek Doehler (2004) adapted this "situated cognition" (Brown, Collins & Duguid, 1989) to account for the process of language learning in that cognition is distributed in and emergent from every mundane talk-in-interaction. Therefore, the process of learning is "not tucked away in a black box, but is deployed and made publicly available in interaction" (Pekarek Doehler, 2010, p. 4).

Another important theoretical background is Garfinkel's (1967) notion of 'methods,' which refer to systematic procedures through which the members of a community structure their actions accountable for others. In other words, cognition, or language learning is observable through the deployment of such methods. IC researchers emphasized the fact that CA is basically the study of these 'methods.' CA explores how social order is co-constructed and how the speakers maintain intersubjectivity through these methods: the systematic organization in talk-in-interaction (Sacks et al., 1974; Schegloff, 1991). Mondada and Pekarek Doehler (2004) conceptualized 'methods' in IC research as follows:
CA methods are systematic procedures (of turn-taking, repairing, opening or closing conversations, etc.) by which members sustain, defend, and adjust their interpretations and their conduct in order to make them mutually understandable (p. 503).

They argued that these methods are practical cognitions which are deployed through social activities. Methods allow the participants to engage in interaction and to accomplish social actions. In other words, methods are "the very object of developing the ability to interact in a (second) language" (Pekarek Doehler, 2010, p. 4). Learning a language therefore involves learning the 'methods' of accomplishing actions.

...learning a language involves a continuous process of adaptation of patterns of language-use-for-action in response to locally emergent communicative needs, and the routinisation of these patterns through repeated participation in social activities (Pekarek Doehler, 2010, p. 3).

Members of a community use a series of certain methods in socially acceptable and accountable ways by deploying linguistic, paralinguistic, or other interactional resources, and thus these methods are not unique or distinctive, but expectable and recognizable as the members of the same community use the mutually shared methods for accomplishing actions. Therefore, learning a language means knowing this shared, routinized techniques to accomplish actions. This routinization of methods, or "consistency" (Pekarek Doehler, 2010, p. 19) is
competence and the change of methods (in a way to be more comprehensible and acceptable by others) is the development of competence. Previously stated, these methods are observable by powerful analytic tool of CA (Lauzon & Pekarek Doehler, 2013; Pekarek Doehler, 2011; Pekarek Doehler & Lauzon, 2015). In other words, L2 speakers use 'consistent methods' to organize their conduct by deploying specific linguistic and interactional devices in talk-in-interaction which are observable and hence trackable by CA. It is the observable cognition and the consistent methods that make the comparison of the data available in IC development studies.

Even still, there are constant criticism from L2 pragmatics' side. Because in order to make comparison work, they need to find the similarities and differences from naturally occurring interaction "which are inherently contingent and co-constructed" (Mori & Nguyen, 2019, p. 234).

In fact, the comparison of data for the discussion of development is not something new. Wong (2000) initially found the specific type of repetition, which she called "first and second saying\(^2\)," was only present in native but not in nonnative English speakers' conversation. Wong suggested the absence or rarity of this linguistic feature can contribute to the discussion of language development as follows:

\(^2\) This is a type of repair in which the current speaker halts before completing so far projected turn to insert additional turn unit. The use of this repair is discussed in detail in the section 4.3 of the current study.
Of course, an analyst adhering strictly to a conversation analysis framework might not consider what the absence of this phenomenon suggests in nonnative talk. An analyst might only be interested in the absence of this interactional feature if the absence were shown to be something to which participants orient. But one at least can raise concerns here in an exploratory manner, especially because we know very little about the talk of speakers who are conversing in a language for which they do not have native competence. Future research can clarify what might be going on when nonnative speakers do not produce this seemingly simple form of repetition or use it "rarely," and how its absence or rarity might be tied to concerns in language development (Wong, 2000, p. 417, my italics).

Moreover, the scholars have tried to solve this issue by focusing on the specific discursive practices. Pekarek Doehler and Berger (2016) explicitly showed how they attempted to resolve such methodological challenges. They investigated "comparable environments of relevant possible occurrence" (Schegloff, 1993, p. 103, cited from Pekarek Doehler & Berger, 2016, p. 558). The study focused on a specific interactional practice (story opening), and to narrow down the specific contexts for comparative analysis, the setting (conversations at lunch and dinner table) and the co-participants (members of a host family with whom the focal participant stayed) remained the same.

The longitudinal study of social interaction calls for a research design suitable for tracking specific conversational actions or practices over a period within specifiable and comparable (or, if possible, identical) sequential environments, speech exchange systems, and more generally social settings. This is what we
attempted to do in the present study (Pekarek Doehler & Berger, 2016, p. 558).

In sum, microgenetic CA scholars argued that the methods used in dicursive interactional practice are shared and thus consistent among the members, and that researchers can observe what methods are being deployed *in situ*. The competence is the use of methods in this specific interactional practice, and the development of competence is the development of methods in context-sensitive, recipient-designed ways.

Therefore, if one group of L2 participants deployed different methods of accomplishing action that were not present in the other, especially in mutually understandable and acceptable way, this becomes the important evidence of IC development. For example, going back to Pekarek Doehler & Pochon-Berger’s (2011) disagreement study, as previously mentioned, the researchers found more occurrence of discourse markers and weak agreement in one group (12th grade) than the other (8th grade). They discussed whether these linguistic features could account for context-sensitive and recipient-designed talk. According to Pekarek Doehler & Lauzon (2015), such difference was a critical evidence of IC development:

As a consequence, the cited features cannot be merely a function of different communicative cultures at different levels of schooling or age differences between 8th graders and 12th graders. Rather, they are indicative of interactional development in a second language.
involving students’ increased sensitivity for the preference organization of talk (as evidenced in the turn-architecture of their disagreeing turns) and their growing capacity to monitor the linguistic details of co-participants’ talk (as seen in their use of format-tying techniques) (p. 420).

The main standard for the IC is recipient-designed talk, just as "CA’s interest in context-sensitive conduct is also crystalized in its most general principle of recipient design" (Waring, 2018, p. 59). While the absence of certain linguistic feature in one group does not necessarily mean incompetence, such difference is significant for the development of IC, if such feature accounts for recipient-designed talk.

Just because the current study took microgenetic CA approach over L2 pragmatics, it did not suggest that the study assumed microgenetic studies have all clearly worked out on methodological issues. The controversy is still going on and judging which approach is better is beyond the scope of the study. The study would not further discuss the methodological problems but would like to finish this section with the citation of Waring (2018):

... while it is true that any ‘non-target’ behaviour (e.g. absence of story preface in one’s telling) does not necessarily constitute evidence of incompetence and successful interaction can be achieved with resources beyond those already documented in L1 interaction, it would still be pedagogically profitable to teach students how, for example, to launch tellings with a story preface (p. 61).
2.3 Repair and IC Development

As the target interactional practice in the study was self-initiated self-repair, this section introduced repair organization and discussed how a repair practice has been conducted in CA-SLA studies to investigate IC and its development.

2.3.1 Repair: Definition and Organization

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

The seminal CA work on repair (Schegloff et al., 1977) explained that repair is sequentially organized process in which a part of talk is treated as trouble-source and a possible solution is followed. Trouble-source, or repairable, is an umbrella term to subsume correction and errors. Repair can be initiated by the current speaker who produced the trouble-source (self-initiated) or by a co-participant (other-initiated), and a trouble can be either fixed by the speaker who is responsible (self-repaired) or by a co-participant (other-repaired) (Schegloff et al., 1977). Liddicoat (2007) explained that, though not always, trouble-source and repair initiation can be related, as grammatical mistakes are mostly self-initiated, while hearing problems are other-initiated.

Schegloff et al. (1977) argued that participants in talk have “preference” for self-repair in that the speaker who produces a trouble has the priority to do any repair deemed necessary. The speaker gets the first opportunity to fix the trouble-source and other-repair is mitigated. This explains why a major number of repairs are self-initiated self-repair (SISR). Although some repairs may fail, repair in most cases is achieved successfully and quickly (Schegloff, 1979). For this reason, a majority number of SISR are done in the same-turn, which means that trouble-source for repair and its completion occur in
the same turn.

The same-turn repair tends to be initiated by non-lexical perturbations (Schegloff, 1979; Schegloff et al., 1977) such as cut-offs, lengthened vowels, pauses, or filled pauses (uh/um). Although the deployment of the initiators were misunderstood as the indicative of disfluency or deficiency in traditional SLA, the application of CA, as discussed in the previous section, has demonstrated that these markers are useful especially when gaining time for word search.

(1) Schegloff et al., 1977, p. 367
01→A:  w- when's yer uh, weh- you have one day y'only
02      have one course uh?

As displayed in (1), the speaker A used cut-offs (w-, weh), a filled pause (uh), and repetition (when, weh-), which signaled the initiation of self-repair. These repair initiations generally occur when the production of the next word due halts and serve to gain more time to delay the production for a search (Liddicoat, 2007; Rieger, 2003; Wong & Waring, 2010)

When speakers do SISR but are not satisfied with the resolution, they may deploy another repair for the same trouble. The speakers may rearrange, change the bound morphemes, or change the whole structure of what has been formerly uttered to construct a satisfactory turn unit. Schegloff (1979) explained that such successive repairs have an orientation to “progressivity” (p.
in that they display the ordering which heads for the solution of the trouble. Schegloff (1979) accounted for the five orderings in the procedure of two or more self-repair in the same turn (pp. 278-279).

1. Each next try adds to the prior tries
2. Or each next try changes an element of prior tries.
3. Each next try backs up less far than its predecessor.
4. Marking time leads to overt search.
5. Regressive tries are last tries.

The following examples displayed how a series of self-repairs were ordered in talk-in-interaction.

(2) Schegloff, 1979, p. 278
01→ Bee: yihknow theyd- they do b- (0.2) t- hhhh they try
02 even harduh then uhr- yihknow a regular instructor.

Bee in (2) showed the first order in that the second try (they do) added to the first trial (theyd-), and the second order in that the next subsequent trial replaced the earlier element (they do → they try). This example also displayed the third order in that each next try backed up to "frame" (p. 279) the repairable, as Bee returned to they when adding to the first trial (theyd- → they do) and returned to they again in the next trail (they do → they try).
(3) Schegloff, 1979, p. 279
01→ Bee: I don'know. the school- school uh, (1.0)
02→ bookstore doesn't carry anything anymo(h)uh,

Example (3) showed the fourth ordering in which the speaker did not progress but ended up repeating the same element (school- school), which overtly demonstrated that the speaker was engaged in searching activity. Bee rather switched the initial element into another (school → bookstore) as a solution to repair.

(4) Schegloff, 1979, p. 279
01  Bee: -eh-ye:h, ih-a, she ws rea::lly awful, she ha-duh
02→ she's the wuh= she ha:duh southern accent too.

(4) is the example which showed that successive repairs do not necessarily lead to a solution of trouble-source. Bee replaced the initial elements (she ha-duh) with the next elements (she’s the wuh=) but returned back to the first trial (she ha·duh) abandoning the second trial. Schegloff (1979) labeled this repair as "regressive" (p. 279) and this repair was the last trial in a series of SISR.

2.3.2 Different methods of self-repair

Although the methods of SISR were initially categorized into four categories (Schegloff, 1979: Wong & Waring, 2010), Schegloff (2013) analyzed ten different methods on how speakers deal with trouble-sources. This section described these ten methods
(recycling, inserting, parenthesizing, replacing, reformatting, searching, deleting, aborting, sequence-jumping, reordering3)) of self-repair in which the speaker intervened "to interrupt the progressivity of talk" (p. 43) in order to fix the repairables or to alter the previous talk in contextually meaningful ways.

'Recycling' referred to "a speaker's saying again some stretch of TCU- almost always less than a full TCU- that they have previously said" (Schegloff, 2013, p. 59).

(5) Schegloff, 1987, p. 75

01 R: they must have grown a culture, you know, they
02 must’ve- I mean how long- he’s been in the
03 hospital for a few days right? takes
04→ a[bout a week to grow a culture]
05→ K: [I don’t think they grow a ] I don’t think
06 they grow a culture to do a biopsy

In (5), K was repeating a part of her talk that overlapped with the prior speaker R (lines 04-05). K restarted a part of her turn I don’t think they grow a from a point where she escaped from the overlap. The trouble-source for recyclings is thus overlapped part of talk. Such turn beginning recycle indicated how speakers were sensitive to moments of turn-taking when starting the next turn.

'Inserting' is a practice when a speaker stopped the ongoing turn to add the new items to the previous talk.

3) Schegloff (2013) wrote that he preferred using '-ing' terms to '-tion' as in inserting (rather than insertion) to emphasize that these SISRs were operations not pre-packaged products.
In (6), Bee articulated the first sound ($v-$, line 01), which was cut by the inserted element ($fat$ $ol'$, line 02). This insertion did not correct the linguistic error in the previous talk but used to describe the person that Bee referred to. Schegloff (2013) distinguished inserting from 'parenthesizing', which is the addition of clausal TCUs.

In the progress of her turn in (7), Shelley added *I don’t know if I told you this* to tell the recipient that she might have told this before and returned back to the main sequence of talk-in-interaction. While inserting was adding more information on the content itself, parenthesizing was used, though not necessarily, to provide metalinguistic information to regulate and control the content of her talk.

'Replacing' referred to one of the same-turn repair methods of dealing with a trouble-source by changing it into a...
different element. The repaired unit should make sense as a replacement for the formerly uttered problematic unit (Fox and Jasperson, 1995). The following data (8) showed the practice of replacing in telephone conversation.

(8) Schegloff, 2013, p. 44
01 Bee: =was I sid no I sid but we’re supposetu know what
02→ it is (fuh Weh-) ‘hh yihknow fu tihday’s
03 [class. ‘n,

Bee in (8) initiated a repair after the trouble-source Weh- (Wednesday’s class), and replaced it with today’s class (line 02), which indicated that replacing do not only refer to fully articulated items but partially produced ones as well. The trouble-source to be repaired and the replaced item do not always have to be, but can be the same linguistic or grammatical object as Wednesday was replaced by today. Replacing may involve repetition of elements preceding or following the trouble-source as Bee repeated the preposition for in the replacing process, which functioned to locate what was being treated as a trouble-source (Schegloff, 2013).

'Reformatting' is a kind of replacing in that it changes a whole or a part of the previous structure into a new one. Reformatting is not only done for corrective reason but also for "perspectival" (Schegloff, 2013, p. 64).
Mom in (9) halted while saying *I would-* and replaced it with *That would be great* in response to Virginia's offer. This indicates changing of the perspectives from the speaker (*I*) to other speaker's suggestion (*that*).

'Searching' refers to finding the next word due. Brouwer (2003) defined searching as a type of repair "where a speaker in interaction displays trouble with the production of an item in an ongoing turn at talk" (p. 535). Schegloff (2013), however, pointed out that it should not be too restrictive to searching for one target word, but also include searching for 'delicate' or 'precise' words as well. Word search can be resolved by the speaker in ongoing turn (SISR), by the other speaker who joined to provide the possible target item (self-initiated other-repair, SIOR), or abandoned by the speaker who initiated searching.

'Deleting' is a practice when "a speaker deletes one or more elements already articulated in part or fully in the turn-so-far" (Schegloff, 2013, p. 47) before continuing the turn under way.
Curt in (10) proceeded her turn deleting the word *still*. He repeated what was before the deleted item (*that’s*) to clearly show the item which was deleted ("pre-framing," Schegloff, 1979).

'Aborting' can be confused with deleting, but different in that it is not about deleting a part of TCU but about abandoning an already started TCU.

(11) Schegloff, 2013, p. 54
01  Mom: what [happened.
02→ Kal: [it's just (. ) too: it's just (. ) too: uhm
03→ (but it's) barely open skin.

Kalin in (11) called his mom who was engaged in the other work to ask for a help to remove a splinter. As he could not find the appropriate words due next (*it's just too what?*), Kalin abandoned already started turn and launched a new turn (*but it's barely open skin*).

'Sequence-jumping' is similar with 'aborting' in that it abandons what has been projected, but different in that it does not yield the same result. Kalin in (11) abandoned the initially started TCU, but changing it to a different TCU (*it’s barely open skin*) achieved the same result with the initial TCU (*possibly it’s just too embedded*). However, the following (12) showed that sequence-jumping was used to give up the production so far projected and to launch a new turn which was not related to the prior turn.
(12) Schegloff, 2013, p. 56
01  Fre: you know we're gonna in fact I'm she I haven't
02                   seen her since I spoke to you but I'm going to
03→     talk to=what a you making?

While extending her turn in (12), Frieda stopped projecting further about her TCU (I'm going to talk to whom?) and asked the recipient what she was making. The abandonment of the prior TCU was not an attempt to restart the turn afresh, but was a shifting from one sequence to another which was not related with the previous TCU.

Finally, the last 'reordering' is "an operation speakers use when trying to work out the order in which elements of a turn-in-progress should be arrayed" (Schegloff, 2013, p. 64). The following (13) showed a case in which a speaker changed the order of sequence.

(13) Schegloff, 2013, p. 67
01  Irn: hello:
02→JM:   hello. ih- this is Jan's mother.
03  Irn:   oh yes.
04→JM:   is Jan there by any chance?

Jan and Irene's daughter were friends, and Jan's mom in (13) called Irene. Before asking if her daughter was there (ih-, line 02), Jan's mom identified herself (line 02), and after receiving the recognition (line 03) from Irene, Jan's mom made her request. This displayed the ordering of two sequences: identification and request.
This section discussed the different types of SISR found from native speaker’s talk-in-interaction. The next section would account for SISR in nonnative speaker data, specifically in L2 IC studies.

2.3.3 L2 IC Studies on Repair Organization

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

Empirical CA-SLA studies of L2 IC development so far have investigated how members of a community used particular methods to conduct repairs, which included (i) who initiated and completed the repair and (ii) how speakers progressively diversified their methods of initiating and completing a repair.

The former IC studies demonstrated that 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 “preference for self-repair” (Schegloff et al., 1977). For example, Martin and Sahlstrom (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 number of other-repairs from an adolescent
French L2 speaker (Julie), who experienced difficulty in word searches. Compared to the initial stage in which she merely used hesitation markers or remained silent, 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 demonstrated 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 pinpoint the trouble-source in co-participants’ prior turns, the L2 speaker later provided substantial comments in addition to the negative marker, so that she could appropriately deal with what was potentially face-threatening to the recipients. Furthermore, Farina et al. (2012) documented that the focal L2 participant became capable of using diverse methods when practicing self-initiated repair when searching for words. 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 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.

Although the previous studies showed IC development through repair practices, there were a few research gaps which led to the research questions of the current study. Firstly, compared to the traditional CA studies which analyzed various techniques of repair practices in native speakers’ talk-in-interaction, L2 IC studies on repair so far were restrictive in that they mostly focused two types of repairs: searching for the next word due (Farina et al., 2012) and replacing what was linguistically problematic in the previous talk (Hellermann, 2009). As demonstrated in the previous section (2.3.2), there are other types of repair deployed for different purposes, and the L2 IC repair research should involve these repair operations.

Secondly, and more importantly, many (if not all) of these previous studies of repair in L2 IC development only investigated repair when there were clearly objective troubles in talking. 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 locate the target lexical items. It
seemed that the prior L2 IC repair studies were mostly interested in the repair caused from the lack of L2 control, as these studies found the evidence of IC development by focusing on how L2 speaker dealt with linguistic deficiency in talk.

However, it is significant that the trouble-source does not only refer to evident flaws in talk. 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 (Jefferson, 1987; Schegloff et al., 1977). Repair is thus "not only done in a context, but also as the context" (Arminen, 1996, p. 451). In other words, repair “does not necessarily have anything to do with objective errors” (Theodórsdóttir, 2018, p.30, my italics). Any talk-in-interaction has the potential to be a trouble-source. As Schegloff et al. (1977) described, “[N]othing is, in principle, excludable” (p. 363)

Therefore the IC repair research not only has to involve the other types of repair practices, but also needs to consider the trouble source which has made the current speaker initiate a repair, as talk is characterized as repairable by repair itself. The study assumed that L2 speakers, who are more interactionally competent, would use SISR not only to correct what is objectively wrong, but to avert any possible interactional problems in advance.
2.4 Research Questions

This chapter so far introduced newly conceptualized SLA which emphasized the use of linguistic and interactional resources for the accomplishment of social actions. Such successful interaction involves speakers' ability to deal with interactional troubles through repair practices, and thus it is important to analyze the process of how L2 speakers initiate and resolve the trouble. Contrast to so far conducted L2 IC studies which have mostly dealt with the practice of searching the next items due and replacing for correcting objective language problems, this study attempted to involve other types of SISR to find the evidence of IC from repairs whose trouble-sources were other than the objective linguistic flaws. The research questions for the current study were:

1. What types of SISR did L2 speakers deploy in repair practices?
2. What trouble-sources made L2 speakers stop and deploy SISR in the progress of talk-in-interaction?
3. What differences can be found in the practice of SISR in accordance with L2 proficiency, and how these differences can account for the IC development?
Chapter 3. Methodology

In this chapter, the study described the participants categorized into three groups based on their L2 proficiency for finding the clues IC development. The study also described the procedures of collecting and analyzing the data based on the types of SISR found in the study.

3.1 Data Collection

Twenty-four Korean college and graduate students participated in the current study. Their major academic fields were all different, but none of them were specializing in English or language-related fields. The participants were divided into three groups – novice, intermediate, and advanced – and each group consisted of eight students. Although there have been much discussion on what should be the criteria for dividing the groups for L2 IC studies, cross-sectional studies in general divided groups according to standardized test score or school leveling (e.g., Hellermann, 2008; Pekarek Doehler & Pochon Berger, 2011). In addition to the score on English test (TOEFL speaking section), the current study also considered the length of residence in English-speaking countries when grouping L2 participants. While staying in English-speaking countries do not necessarily guarantee higher proficiency, since
IC is based on language learning through interaction, the study assumed that the participants in advanced groups had more chance to interact in English. The participants in the same group knew each other well since they were at the same school, at the same church or were studying at the same study group. They believed that being able to speak in English was essential for their future careers and were studying English every day. The information of the participants is summarized in [Table 1] below.

<table>
<thead>
<tr>
<th>Group</th>
<th>Name</th>
<th>Gender</th>
<th>average score</th>
<th>length of stay in English-speaking countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novice Group A</td>
<td>Ave</td>
<td>F</td>
<td>20/30</td>
<td>less than six months</td>
</tr>
<tr>
<td></td>
<td>Beth</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ceil</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Den</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice Group B</td>
<td>Eve</td>
<td>F</td>
<td>20/30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fan</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gail</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Han</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Group A</td>
<td>Ian</td>
<td>M</td>
<td>23/30</td>
<td>more than a year but less than two</td>
</tr>
<tr>
<td></td>
<td>Jun</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ken</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liz</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Group B</td>
<td>Mila</td>
<td>F</td>
<td>23/30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oli</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pam</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Group A</td>
<td>Rig</td>
<td>M</td>
<td>27/30</td>
<td>more than three years</td>
</tr>
<tr>
<td></td>
<td>Sam</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tim</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Uli</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Group B</td>
<td>Van</td>
<td>M</td>
<td>27/30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Will</td>
<td>M</td>
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<td></td>
<td>Yun</td>
<td>F</td>
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<td></td>
<td>Zoe</td>
<td>F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 1. Information of the participants (pseudonyms)*
3.2 Procedures

Each three group was divided into two subgroups with four participants in each, which made six groups in total. The researcher asked each group to have an informal conversation about two general topics, ‘studying English’ and ‘traveling’, for about thirty minutes. However, it did not mean they always had to stick to the topic. The topics were given because the initial pilot recording displayed that the speakers suddenly became silent and asked the researcher what they should talk about. The participants talked freely about other topics such as pastime activities or recent social issues in the beginning of talk-in-interaction, but mostly they ended up sharing their personal experiences of learning English and travelling. In order to avoid any stereotypes, participants did not know the purpose of the study and the fact that they were divided according to L2 proficiency, of which they were informed after the conversation. The participants consented to having their conversations recorded and analyzed for the purpose of the study. The data were only audio-recorded by one of the participants on request. The recorded data were transcribed using the transcription conventions (see Appendix)\(^4\).

\(^4\) The present study by no means disagreed that video-recordings are significant for CA research (e.g., Gullberg, 2006; McCafferty and Stam, 2009), and the study accepted the importance of gazing, facial expressions or gestures of recipients (e.g., Stivers, 2008). However, the current study attempted to put more significance on the role of the linguistic resources in
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 appeared to be more exhaustive, it incurred the risks of representing an L2 speaker in a stereotypical fashion (Gilson & Watson, 2013; Roberts, 1997). For this reason, the transcription of the data did not employ orthographic modification unless the heavy foreign accents increased the difficulty of understanding for the co-participants (Kasper & Wagner, 2011).

After transcribing the verbal data, all the instances of 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, mostly starting with repair initiators. This especially referred to current speaker’s halting so far projected turn construction unit (TCU)\(^5\) to initiate a repair and restarting from where she left off after completing the repair. As the current study aimed at finding what kinds of interactional problems L2 speakers took as trouble-source and resolved it, the study

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interaction. Moreover, the pilot video-recording clearly showed that the participants were highly aware of this interference.

5) The principles of turn-taking are based explicitly on the ideas of Sacks et al. (1974) that the potential completion of a turn construction unit (TCU) is a place where speaker transition is relevant. TCUs can be sentences, phrases, lexical items or phonetic realizations which constitute basic units of turns. See Chapter 4.1 recycling for the further notion of TCUs and turn-takings.
focused on self-initiated self-repair (SISR), in which the speaker responsible for the trouble-source initiated and completed the repair.

The study attempted to analyze the different types of SISR based on Schegloff's (2013) study, which was introduced in the previous section (2.3.2). However, the application of this classification faced a few problems. First, some types of repair practice occurred so rarely to be discussed in the current study. Second, one type overlapped with another, such as 'replacing' can be one way of doing 'searching'. The study thus selected the six types of SISR and made adaptations on the definition of each type of SISR to be suited for the current study as presented below:

1. **Recycling** referred to speaker's repeating a part of initial TCU when overlapped with the previous talk.
2. **Inserting** referred to the addition of an item within the already projected TCU.
3. **Parenthesizing** was the addition of the clausal TCU to the already projected TCU.
4. **Replacing** was a change of an initially produced item into another within the same TCU.
5. **Reformatting** referred to a change of the already produced TCU into a new TCU with a different structure while retaining its content.
6. *Searching* referred to speaker’s finding a target item due next which was temporarily unavailable. The searching completion here did not involve addition, deletion, or replacement of an already produced item.

In the next Chapter 4, the study analyzed each type of SISR practices and investigated to what trouble-source L2 speakers initiated repair practice. The study discovered the differences of practicing each type of SISR in accordance with L2 speakers’ proficiency. Such findings led to the discussion on how these differences of practicing SISR could account for IC development.
Chapter 4. Research Findings and Discussion

This section described the operations of six types SISR practices found in the data. Each section described the different types of SISR used by L2 participants and analyzed to what trouble-source the participants initiated and completed the repair. The difference of repair practice depending on L2 proficiency would lead to the discussion on the evidence of IC and its development.

4.1 Recycling

This section displayed the cases in which the L2 participants repeated a part of TCU-beginnings when overlap occurred. The data showed that the participants regardless of L2 proficiency used recycling to overcome the problems of the overlapping.

(14) Novice Speakers A
01 Den: uh I think we have to study uh pronunciation.
02 Beth: a:h yes. just memorize not- not try to
03→ pro[nounce ]
04→ Den: [I think] I think we have to uh (2.0) uh
05 pronoun- pronunciation is the goo:d (2.0) goo:d
06 English studying. English method?
While the speakers were talking about the ways to enhance English speaking ability in (14), Den argued that they should study pronunciation (line 01). Beth agreed and complained that they only memorized but did not try to pronounce English vocabulary (line 02). Den took the next turn before Beth finished uttering *pronounce*, and Den recycled *I think* after coming out from the overlapping (line 04).

Carroll (2004) investigated recycled turn beginnings by novice English speakers and found the similar results. His study showed that a great number of false starts, which were often considered as an indication of disfluency or deficiency of communicators, were used as the device to emerge from overlap with another speaker. Carroll explained that recyclings in TCU-beginnings demonstrated that novice speakers oriented to no-gap no-overlap in turn-takings just as native speakers did (Schegloff, 1987a). In other words, recycling is not an L2 indicative, but a universal strategy to resolve interruption.

(15) Novice Speakers A

01 Ave: there are many bad method. first uh just watching.
02
03→ Den: but if watching? uh [(you)]
04→ Ave: [just ] just reading books.
05 (1.0) not speaking?

Similarly, while talking about ineffective ways of studying English in (15), Ave argued that *just watching* (possibly *reading*
as she replaced in line 04) was not good enough and Den (line 03) took the next turn to talk more about *watching* which was interrupted by Ave (line 04), who took the next turn again to repair her previous turn. Ave recycled *just* to restart her turn without interruption.

(16) Intermediate Group A

1. Ian: I think um (1.0) like memorizing vocabulary? is um best. >but it< costs too uh too many time and
2. Liz: eff[orts?]
3. Liz: [so I ] so I prefer like watching drama (0.5)
4. Liz: or listening to music like pop songs?

Intermediate speakers' usage of recycling was similar to that of novice speakers'. In (16), when talking about the effective methods of studying English, Ian argued that memorizing vocabulary required too much effort. Liz attempted to take a next turn (line 04) to tell him about her own strategy of studying English, but there was an overlapping in the final part of Ian’s TCU (line 03). As a solution to the overlap and to keep the speakership, Liz restarted *so I* (line 04) so that she could start her talk without intervention. This was not much different from advance speakers' deployment of recycling.

(17) Advanced Group B

01. Zoe: so that's why I quit my studying in the States.
02. Yun: but you're so fluent [though].
03. Zoe: [no ] no I'm the person
that if you're not too sure about the topic then I never speak.

Zoe in (17) finished her story about going to the US to study but having given it up for the language problem (line 01). Yun said Zoe was still good (line 02) and while Zoe denied it, her initial TCU overlapped with Yun, and Zoe recycled no again (line 03). Just as the speakers in the other groups, Zoe used recycling to resolve from overlapping. She repeated no which was buried so that they could start without the possible disturbance.

When a speaker completes a TCU, another speaker might get a chance to take the next turn. According to the study of Sacks et al. (1974), there are two ways of allocating turns: whether the current speaker selects the next speaker or one of the interlocutors self-selects to start the talk. When it comes to the second case, the main principle to be applied for turn-taking is “the first starter gets the turn” (Sacks et al. 1974, p. 718). Under this pressure, the self-select speaker has to mind the projectability of ongoing talk. As more than one speaker may wish to take the next turn, potential speakers compete each other to be the first starter at the transition point. For this reason, the speakers deploy turn-entry device for the possible overlapping in turn transitions, or what is also called “sentence’s beginnings” (Sacks et al. 1974, p.719). Sentence's beginnings are also called "turn-entry devices" (Sacks et al., 1974, p. 719) which do not project much about the current turn, such as well, but, you know, or yeah. Such entry
device should not reveal much of the construction and semantics of the original sentence in order to minimize any potential damage incurred by overlaps. Recycled turn beginning is one of the overt strategies of sentence's beginnings to resolve the trouble in overlapping. Schegloff (1987a) asserted that recycling accomplishes "the absorption of overlap with prior turns, without impairing an actual turn's beginning" (p. 74).

The trouble source for recycling was the overlapping with another co-participant. The speaker initiated repair not because she made linguistic error in the previous saying. They recycled for the coordination of timely entry with other co-participants and for the possibility that hearing might have been impeded. This can be a good evidence of IC as speakers used recycling to raise the clarity for the recipients. The participants were able to display "how closely even novice L2 speakers monitor, and react to, the unfolding interaction" (Carroll, 2000, p. 93).

However, there were a few differences of using recycling in the progress of talk-in-interaction among the groups, which may lead to the discussion of IC development. The careful analysis of turn-taking by the novice speakers displayed that recycling was frequently not placed in transition relevant places. The projection of TCU and turn-transition are primarily in relation to syntactic resources (Ochs et al., 1996; Sacks et al., 1974) as seen in (18).
The subject (a) projects a verb (*I what?*), and (b) projects verb complement (*wanted what?*). (c) projects an object (*know what?*), and (d) projects a clause (*if what?*). (e) is a possible completion point (PCP) of the turn where it no longer syntactically projects more elements. The listeners project forward to a possible termination point, where a next speaker can hold a floor in this transition relevance place (TRP). The next speaker takes the turn at a place where the syntactic unit being produced possibly completes, thereby allowing smoother transition with minimal gaps or interruptions (Sacks *et al.*, 1974).

Going back to (14), Den started his turn by recycling *I think* in a place where the previous speaker had more to project (*try to pronounce what?*). Similarly in (15), Ave started repairing the trouble-source (*watching*) by cutting in, even when Den had not completed his TCU (*watching you what?*). In other words, although it was true that the speakers in the examples recycled to restart the new turn so that the recipients could solve

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6) Different interpretations are also available if it was a reply to a question such as *Who wanted to know?* (Wong and Waring, 2010, p. 19).
7) Considering that Ave replaced her previous talk in the next turn, Ave might have taken Den’s turn (*but if watching?*, line 03) as initiating a repair on the trouble-source *watching* and dealt with this beforehand.
possible hearing problems, they did so by interrupting others in the places where turn-transition was not relevant. This showed that they were not yet much aware of how to use syntactic resources for finding the relevant places of turn-taking.\(^8\)

Contrary to novice speakers who recycled in a place where turn transition was syntactically not relevant, intermediate speakers used this recycling in a place where the prior turn was possibly complete. Liz in (16) took her turn when Ian’s TCU was possibly completed and had no more to project (*It costs too many time and efforts*).

\begin{align*}
(19) \text{Intermediate Group B} \\
01 \text{ Pam: waterfall show?} \\
02 \text{ Neil: yeah right on the uh (0.5) Banpo Banpo Bridge?} \\
03\rightarrow \text{ [so ]} \\
04\rightarrow \text{ Pam: [but] but< Tuesday is holi[day].} \\
05\rightarrow \text{ Neil: [next] next Tues[day].} \\
06 \text{ Pam: [o:h].}
\end{align*}

In (19), the speakers were talking about the waterfall show held in one of the bridges in Seoul, to which Neil wanted to invite Pam (line 02). While Pam asked whether there would be a

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8) The projection of TCU, evidently, does not solely depend on syntactic resources. Sacks *et al.* (1974) discussed intonation contour can determine the unit. Ford and Thompson (1996) found that speaker changes occurred mostly in CTRP (Complex Transition Relevant Point), where all three (syntactic, intonational, and pragmatic) types of completion occurs. Other CA scholars have found additional resources such as gazings (Goodwin 1981), body movements (Goodwin 2000), prosody (Couper-Kuhlen 2001), and other multimodal resources (Mondada 2007).
water show on Tuesday because it was a holiday. There was an overlap with Neil so (line 03) that she repeated but to resolve the trouble (line 04). Neil also repeated next (line 05) to tell her that he referred to next Tuesday not to this Tuesday. There was no obvious linguistic error in (19), but the speakers recycled the beginning parts of TCU so that they could restart anew. What's more, the speakers were able to use syntactic resources in managing turn-taking. Pam launched a new turn (line 03) when Neil reached a place where his TCU possibly syntactically completed (right on the Banpo Bridge?). Neil (line 05) also attempted to took his turn when Pam's turn was possibly completed (but Tuesday is holiday). In other words, the intermediate speakers launched a new turn in a legitimate place, without interrupting the progress of other speakers' turn.

As demonstrated in the previous (17), advanced speakers too showed that they recycled in a place where turn-taking was relevant. Zoe launched a turn (line 03) when Yun's turn was syntactically possibly completed (you're so fluent). The intermediate and advanced speakers both started a new TCU in a place where the prior TCU approached its completion. Unlike novice speakers, their overlappings in turn transition places were the usage of recyclings was not an interruption but a legitimate turn-entry device. This displayed that intermediate and advanced speakers could coordinate their timely entry using syntactic and other interactional resources for taking turns.
Han in (20) talked about his recent trip to one of the famous markets called *Jagalchi* and complained that there was nothing much to see. Gail asked why he went there in the first place (line 03), which had an overlap with a part of Han’s following turn. Han recycled the overlapped part *so we* (line 04) so that he could restart his TCU in the clear. Han recycled in a place where the prior speaker Gail’s turn was syntactically completed (*why at *자갈치시장*?), which suggested that he was able to use syntactic resources for turn-taking. However, when Gail asked for the reason to go to the market (line 03), Han replied *so we feel very tired* (lines 04-05). The sequentially relevant action for Han would be answering to the question (Schegloff & Sacks, 1973): explaining why he went to the market in the first place. However, Han did not receive Gail’s question but took his turn to elaborate more about his trip. In other words, there was little sequential relevance. This blocked the progressivity of talk as there was no contingent sequence between the speaker and
the recipient, and they failed to maintain intersubjectivity at least in this instance.

As the studies by Schegloff (1987a, 2000b) argued, by repairing a part of turn beginning which is buried in overlap, the speaker could produce the talk “in the clear” (Schegloff, 2000b, p. 34). That is, repair in turn beginning is the strategy to get the next turn and to start the talk free of possible interruption. In other words, by using a recycling repair, the participants regardless of L2 proficiency preempted the possibility that the recipients might have missed their talk because of overlapping.

As previously mentioned, turn-taking becomes relevant when the current speaker reaches to the place where TCU is possibly complete. A potential next speaker not only has to mind the projectability of prior TCU for timely entry, but also needs to be aware of the possible overlaps with the competitors (Schegloff, 1987a). Turn-taking in L1, if not always runs off automatically, is generally organized in smooth, effortless ways. For L2 speakers, however, turn-taking becomes ‘doubly problematic’ (Carroll, 2004, p. 21), since they have to deal with linguistic difficulties as well as have to finely calculate the right time to start a turn. Gardner (2007) also argued that "it is necessary to recognize that the level of development of their grammar and lexis will affect the production of their turns" (p. 62). Turn-transition can be done by analyzing the grammatical structure and other interactional resources of TCUs which project the potential terminating points
of current speaker’s turn. Novice L2 speakers, however, were not linguistically and interactionally competent enough to concentrate on structural details of unfolding turns, and ended up starting new turns while interrupting others. The intermediate and advanced speakers were able to use recycling in a place where turn-taking was a relevant action thereby maintaining the intersubjectivity and progressivity of talk. They could coordinate their timely entry using syntactic and other interactional resources for taking turns.

4.2 Inserting

Inserting in this study referred to an addition of a lexical item which could be congruent with the TCU so far projected. L2 participants inserted a new item in the previous talk.

(21) Novice Group A
01→Beth: Ko:: rean people speak (2.0) only Korean people
02     speak English=
03 Ave: =not to not to try to=
04 Ceil: =new English words.
05 Ave: ju- just Korean words

The speakers in (21) were talking about the problems of English education in Korea and Beth argued that Korean students were not trying hard enough to speak in English. Beth inserted
*only* (line 01) which might turn recipients' attention specifically to Korean people. Although novice speakers did not show the other usage of insertion throughout the conversation, this example did indicate that they could add adverbs to emphasize their argument. What's more, Ave collaborated to expand Beth's turn (line 03), and Ceil also received her turn to complete what was so far projected by the previous two speakers. Ave (line 05) also expanded the previous TCU commenting 'Korean people only spoke in Korean.' This displayed novice speakers' IC, in that they could work together with the co-participants for the construction of turns.

Adding an adverb to the previous talk was also found in advanced speakers' interaction as shown in the following (22).

(22) Advanced Group A

01 Sam: yeah my older brother-hhe could listen to pop
02 songs and wrote down the ly:rics and he *scolded me*
03 to use English-Korean dictionary
04 Uli: [o:h.]
05→ Sam: I don’t know- I *still* don’t know how he learned
06 English

Sam in (22) talked about his older brother who helped him to study English when young, which was received by Uli's continuers (line 04) which acknowledged Sam's taking the next turn to elaborate more of his story (Mandelbaum, 2013; Stivers, 2008). While Sam expanded his turn, he added *still* (line 05) to the previous talk to emphasize that he did not know even today
about how his brother was so good at English. Adding an adverb to emphasize a particular point was similar to the example (21), in which the novice speaker added *only* to stress her dissatisfaction. Regardless of L2 proficiency, inserting adverbs is a universal strategy to stress speaker’s point of view.

L2 participants not only added an adverb but also a series of lexical items which could specify the object the speaker referred to. This was not found in novice speakers' data, but was frequent in intermediate speakers' interaction.

(23) Intermediate Group A

01 Ian: but you know my girlfriend also uh was in the
02→ United States i- in her thee: fif- fifth grade
03 in the United states. so: (1.0) she could uh
04 study she could uh went went to the elementary
05 school.

While talking about how to be a fluent English speaker, Ian in (23) introduced his girlfriend who was fluent in English since she had once stayed in the United States (US) when young. Ian added *in her fifth grade* to provide the specific time that she lived in the US (line 02). Ian repeated *in the United States* after the inserting to clearly display the items that were added to (“post-framing,” Schegloff, 1979). Ian did not repair for fixing what was wrong but narrowed down his focus to certain period of time with this insertion.
From the earlier part of the conversation, the speakers in (24) argued that there were other important things than studying English, to which Neil showed agreement. He inserted *studying* to the previous utterance *English* (line 01) to specify his point that he was not talking about English in general but referring to the action of *studying* English. The trouble-source here was not a linguistic trouble because *English is second priority* did not involve linguistic errors. The insertion here functioned to clarify his talk. Intermediate speakers inserted the additional elements to refer to the specific part in the meaning range. Just as adding *fifth grade* narrowed down the point to the specific time, the insertion of *studying* turned recipients' attention to the specific action. This clarified speaker's point of interest and preempted the possible ambiguity.

Schegloff (2013) argued that addition to what was previously said is different from other types of SISR in that they are "not necessarily addressing a trouble with turn-in-progress - a repairable" (p. 47, *italics in original*). Earlier studies by English as Lingua Franca (ELF) scholars such as Mauranen (2006) and Kaur (2009, 2011) accounted for this difference as follows:
In (25), W self-repaired in order to right the wrongs, as the previous utterance (he play where?) contained a syntactic error which had to be reformulated into the appropriate structure (where does he play?). On the other hand, in (26), although the initial saying a kind of interaction did not involve any grammatical problems, the speaker V halted her on-going speech to add trading in the replaced utterance to clarify a specific type of interaction that she referred to. W was correcting which needed to be fixed, while V was editing the talk to be clearly understood by the recipients. Mauranen (2006) termed the first repair “retroactive (backward-looking) self-repair,” and called the second repair “proactive (forward-looking) self-repairs” (p. 137). Retroactive repair refers to the correction of errors, which is used for a “remedial purpose” (Kaur, 2009, p. 109). Proactive repair, on the other hand, refers to the repair that does not involve correcting what has been said incorrectly, but a speaker still deploys a repair for “preventative purposes” (Kaur 2009, p. 109) to address prospective problems in the interaction. The following quote from Schegloff (2013) clearly demonstrated the 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 (p. 46).

Inserting is different from the other types of SISR in that it can be used as a proactive repair. It was not used to repair what was linguistically problematic but to alter the way a speaker designed her turn so that it could be better understood and accepted for the recipients. The practice of inserting demonstrated that L2 speakers whether they were novice or advanced were able to use inserting for raising clarity for the recipients. The inserting operation deployed by the participants so far showed that the trouble-source was not the obvious linguistic trouble in the prior talk. The speakers inserted an additional word or clause while halting the previously projected turn so that they could emphasize the specific point or avert the possible misunderstanding by offering the additional information for the recipients. Therefore, regardless of oral proficiency of L2 speakers, the inserting repair was used for proactive function. This is an important clue for IC.

However, a few differences of inserting practice were discovered. The novice speakers added adverbs to emphasize the previous points. Although this inserting contributed to intersubjectivity as the speaker could shift the recipients'
attention by adding the adverb, the novice speakers rarely used inserting for narrowing the range of possible interpretation by tuning the level of "granularity."

In practices of formulating place, granularity showed up as an aspect of the range of potential answers to a question like “where are you.”— including such reference forms as “back in the States,” “in California,” “in L.A.,” “in Topanga,” “at home,” “in the study,” “at my desk,” “at the computer,” “on page 2,” etc. The “degree of resolution” or order of place organization invoked by each term “zeroes in” or “pans out” from the target, and this feature is material to the action or other effect achieved by the selection of the term (Schegloff, 2000a, p. 715).

Going back to the previous examples again, it could be found that both Ian and Van used inserting to be specific in the first place. In (23), when approaching the first possible completion point of TCU (in the United States, line 02), Ian did not lower the pitch to finish the TCU, but rushed in to expand the current TCU to add more information on the time that her girlfriend stayed in the US. This insertion was proactive in that Ian specifically pointed to the time 'when she was young.' Ian’s talk further developed to discuss the advantages of early English education. Similarly, in (24), Neil added studying to narrow down the point that he referred to not just anything about English but the activity of 'studying' English. L2 speakers used insertings for this granularity. The data showed that compared to novice speakers, intermediate speaker inserted the additional information
so that they could disambiguate what the speaker was referring to. The advanced speakers also added for fine-tuning the level of granularity, which would be more discussed in the next parenthesizing section.

4.3 Parenthesizing

Just as the intermediate speakers did, the advanced speakers also used inserting to be specific in the first place. This specificity preempted the possible comprehension problems which might have occurred from ambiguity. Contrary to intermediate speakers, however, advanced speakers inserted not just lexical items but a clausal TCU in the middle of projecting turn. This parenthesizing was found only from advanced speakers’ data. This suggested that parenthesizing required more sophisticated linguistic work than the addition of a few lexical words within the same TCU.

(27) Advanced Group B

01→Van:  so what do you want to do this summer >I- I mean< 02→  hh the traveling.=
03 Yun:  =I was thinking about traveling around Korea.

Van in (27) asked Yun whether she had plans for the summer, and right before terminating the turn, he quickly added the clausal TCU to clarify that he was asking for traveling. The question *what do you want to do this summer* could involve all
different kinds of activities such as playing sports or reading. The speaker added another TCU before completing the turn to refer to the specific activity to avoid ambiguity. Similar to (24) in which the speaker repaired from \textit{English} to \textit{studying English} for tuning the level of granularity, this inserting functioned to narrow down recipients' attention to a certain action of \textit{traveling}, thereby preempting the response other than traveling in advance.

Inserting a clausal TCU not only functioned to be specific, but also added the details for the previous talk so that the speakers could be proactive before the co-participants raised the problems with the ambiguity.

(28) Advanced Group A

01 Rig: so: sometimes I studied uh \underline{late} and walked around

02→ her office >w- we call it< 교무실.

\underline{gyo.mu.sil.}

\textit{teachers’ office}

03 Sam: as often as possible?

Rig in (28) told his recipients that he came to like English because he liked his English teacher when young. After uttering that Rig walked around her office, which might have been the place where his TCU finished, he rushed in to extend his turn by adding an L1 equivalent (line 02). He did not just add the word \textit{gyomusil} alone but constructed the clausal TCU with it to overtly explain what the \textit{office} referred to. The speaker codeswitched to L1 before the recipients initiated a repair for the possible
trouble-source *office*. As the co-participants here all shared the same L1, using the L1 preempted the possible misunderstanding from whom could have different interpretation of the word *office*.

(29) Advanced Group B
01 Will: but I found it's quite fascinating that um my
02→ ancestr- I I'll say not only my ancestors hh. uh
03 were pioneers and like evening at the sky and
04 investigating at the uh (1.0) what was that?
05 astrology is it?=
06 Yun: =right.

The speakers in (29) talked about the attractive places to visit in Korea. Will suggested one place, and when referring to the people who lived in the past in Korea, he first called them *my ancestors*. He halted leaving his TCU unfinished, and inserted *I'll say not only my ancestors*, and went back to describe more about the ancestors. As the participants were all Koreans, Will made it clear rather humorously that he was referring to not only *his* ancestors but also *their* ancestors. This parenthesis preempted the further meaning-making process which could have possibly caused from *my* ancestors.

(30) Advanced Group B
01 Yun: and watching the same movie over and over again
02→ >it was like< I wouldn’t say I could understand
03→ it fully but it was like uh at some point I feel
04 like I’m getting there?
05 Will: you could hear more.
From the preceding conversation, Yun in (30) described her techniques of enhancing English listening skills. She (lines 01-04) inserted *I wouldn’t say I could understand fully* when her projected TCU still needed further increments (*it was like what?*, line 02), and went back to the prior TCU by repeating *it was like* (line 03) to pick up her prior TCU from where she left off. By inserting the clausal TCU, Yun made an additional comment to make sure that *watching the same movie over and over again* was not fully effective. Similar to the previous examples of inserting, this addition functioned to avert potential comprehension problems for the recipients in advance.

This form of insertion is unique in that she repeated the part of previous TCU (*it was like*) after self-interrupting TCU so that she could evidently tell the recipients that she was doing parenthesizing. Wong (2000) labeled this kind of parenthesis with repetition "first and second saying," in which the speaker added a new TCU before completing the original projected TCU and returned to it with repetition. This repetition made repair completed "without loss of the extended turn and with the recipient so oriented and mutually aligned" (p. 416). After thoroughly analyzing 150 pages of transcript, Wong (2000) found the interesting result that the first and second sayings were not found at all in nonnative English speakers. She argued that this insertion requires complicated syntactic and interactive control which might be difficult for the nonnative speakers, as they not
only have to plan and monitor syntactic trajectories but take risks that the inserted element may change upcoming talk and action.

This section displayed the addition of clausal TCU. Similar to inserting, parenthesizing was also used for preemptive reasons and this was an important clue for IC in that L2 speakers could be proactive in the first place. What’s more, the fact that parenthesizing could only be found from advanced speakers' data also suggested that "the level of development of their grammar and lexis will affect the production of their turns" (Gardner, 2007, p. 62). The speakers could have repaired their turn just by replacing a few words rather than inserting an additional TCU. For example, Will could have said *my uh our ancestors were pioneers* in (29). However, the advanced speakers clearly showed what they were doing and what they were repairing, rather than simply adding a word or two in the process of SISR. They constructed complete clausal TCUs in unfolding interaction, which was not deviant but congruent with the progressivity of turns.

The previous part of the study (section 2.2.3) introduced a number of critical comments on microgenetic CA, arguing whether one can talk about the absence of certain linguistic feature to discuss the developmental issue within CA framework. Although this part would not further discuss this issue again, but would like to emphasize the point that its absence or rarity is worth enough to analyze, especially in the field of SLA.
4.4 Replacing

Replacing was used in a way of searching the content words. As mentioned in the section 3.2, following Schegloff (2013), this study differentiated replacing from searching in that while a speaker in searching activity adhered to the target item, the speaker gave up the first choice (target item) and resorted to a different one in replacing.

When novice speakers failed to fully produce the target item, they replaced the item with another within the TCU to complete SISR.

(31) 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.

In (31), while talking about the ways to improve English speaking skills, Den (line 05) cut off the first trial commu- and practiced a successive repair communi- for the word search, but failed to move forward to a resolution. Den (line 06) abandoned the initial item communi- (possibly communicate as Ceil uttered in line 02), but opted for a new element speak to complete a
projected turn. A similar case was found in (32), in which the
speaker abandoned the production of the target item and
replaced it with the alternative that was syntactically congruent
with the ongoing TCU.

(32) 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 (32) talked about ways to enhance English
speaking ability, and Fan shared her experience of having an
English study group. Fan performed two successive self-repairs,
apl- and appli- (line 04), but failed to load the full phonetic
information on the target item. She then searched for a new
verb go to convey the meaning of ‘joining a group,’ and the
reply from Gail (line 05) demonstrated that the recipient
understood the meaning of go in this context.

The two examples were similar in that replacing was
caused by speaker’s failure to find the phonetic information of
the target word. Although the second repair added to the prior
item (commu → commun, apl → appli) showed the progression
of the word search, the second trial did not move forward to the
completion of the repair. The speakers Den and Fan no longer
attempted to search for the target item, but used a new element
to progress the on-going TCU instead (Schegloff, 1979). The speakers successfully found the alternative word for the progressivity of interaction, and this could be an important clue for novice speakers' IC.

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

The advanced speakers also used replacing on their way of searching. When talking about ways to improve English proficiency in (33), Sam replaced *some English books* with *some English novels*, even though no recipients made an issue with the first choice. Sam also raised the pitch after providing an alternative to elicit a recognitional response from the next speaker (line 07)

(34) 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 um (0.6) rela- relatively a high score?

9) Try-marking (Sacks & Schegloff, 1979; Schegloff et al., 1974) is a sequence initiated when a speaker is unsure about recipients’ understanding. The speaker uses a rising pitch contour to elicit recipients' response to confirm if the term is recognizable for them.
04 Sam: yeah?
05 → Rig: I got money uh s- scholarship from Jungsoo?
06 Uli: Ju- uh is it famous?
07 Rig: yeah uh is such a kind of great uh great=
08 Sam: =honor?
09 Rig: honor. they encouraged me to study abroad

Talking about how he had missed an opportunity to study abroad, Rig in (34) changed *university days* into *undergraduate days* and also replaced *money* with *scholarship* to refer to the specific type of the financial support he was offered.

Replacing, similar to the practice of inserting, was also a type of SISR in which the participants could display their orientation to granularity. Both novice and advanced L2 speakers in the data used replacing for content words. The data from the advanced speakers showed that the first choice was replaced by the words whose meanings were more specific. This clarification of content words narrowed the meaning range as *undergraduate days* is a part of the *university days*, and *scholarship* is the specific type of *money* in (34). Whereas the advanced speakers selected items that were narrower, the novice speakers resorted to words that were simpler or broader in terms of the semantic range. The words replaced by the novice speakers were sufficiently generalizable to cover the meaning of the target word. They replaced *communicate* with *speak* in (31) which was not only phonetically simpler but still included the meaning of the initial target item. In (32), Fan resorted to the verb *go*, which
was generalizable enough to include the meaning of *joining the group*. Whereas the novice speakers expanded to the broader domain, the advanced speakers honed in on the point.

(35) 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 politi- 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
09→ kind o- hh how that kind of people
10 Fan: [politicians
11 12 Han: yeah. uh how politicians make our society uh
13 14 better

After Han introduced her major in (35), he told the recipient that he liked to read political sections in newspapers. Han’s first trials *conger-* and *con* did not proceed to a successful resolution, and a further repair to the same trouble-source *politi-* did not lead to the completion of the repair. Han abandoned the target lexical word and resorted to the formulaic expression *that kind of people*. The fact that Fan provided the possible target word *politicians* in the next turn (line 10) which Han accepted in the next turn (line 11) indicated that the participants understood whom *that kind of people* referred to.
However, 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. This contrasted with replacing used by the advanced speakers.

(36) Advanced Group B
01 Zoe: he enjoyed very much but I worried about that at first because uh he learned English from slangs?
03 → >from bad [words<?]
04 Yun: [o:h. okay.

When talking about how her little brother learned English in (36), Zoe changed *slangs* into *bad words*. Zoe’s replacement here narrowed her point to a few aspects of slang, possibly vulgar or nonstandard words, which made her worried about her brother (line 01). Zoe focused her point on *bad words* of slangs and raised her pitch to confirm Yun’s comprehension.

The advanced speakers also used replaceings for clarifying the pronouns. They replaced pronouns with the exact referent so that the receivers could clearly understand whom the pronoun referred to.

(37) Advanced Group A
01 Tim: and after two years of working we became uh real friends? a::nd one uh one vacation during a
03→ vacation he invited me to their house to his
04→ parents’ house which is located in the south of
05 France?
When Tim talked about his trip to France in (37), he replaced *to their house* with *to his parents’ house* to clearly indicate that *their* referred to *his parents*. Schegloff (1987b) argued that one source of the misunderstandings is the problematic reference. His data demonstrated that using pronouns (such as *one* in (38)) had potential problem of ambiguity, which can be labelled as “interpretive error” (p. 205).

(38) Schegloff, 1987b, p. 205

01→ A: which one::s are closed, an’ which ones are open.
02 Z: ((pointing to map)) most of ‘em. This, this,
03 [this, this,
04 A: [I don’t mean on shelters, I mean on the roads,
05 Z: oh

The trouble-source here was *one* (line 01) because the speaker Z misunderstood its referent, and the repair was completed when the speaker A clarified to what *one* referred (line 04). Therefore replacing a pronoun with the right antecedent was a significant proactive repair to avert the problem of ambiguity in advance.

(39) Advanced speakers A

01 Sam: even even though I got the permission from KATUSA

02→ but hh he uh my uncle lib- he canceled and put me

03 to [the]

04 Rig: [oh ] my God.

10) KATUSA is a short term for Korean Augmentation To the United States Army.
Sam in (39) specified whom he referred to by replacing it with *my uncle*. From the preceding part of Sam’s storytelling, there were a few candidates for the pronoun *he* - i.e., his brother, his uncle, and his teacher - and this replacement prevented the possible ambiguity by pointing directly to his *uncle*.

(40) Advanced Group B

01  Van:  yeah es- especially when it is cheap and students
02                        and other workers prefer the economical places?
03→                 there would be the reason why it was so. why it
04→                        was crowded.

In the previous course of conversation, one of the participants talked about how he had to give up going to one of the famous restaurants in Paris because it was so crowded. Van in (40) launched a new turn to tell the other recipients that there might have been a reason why it had been so popular. He replaced pro-adjective *so* with the original adjective *crowded*. Van first uttered pro-adjective *so* but soon shifted it into *crowded* so that the other speakers could comprehend what *so* was referring to. As Auer (1984) stressed, “referring parties are required to tailor their referential expressions to the perceived individual needs of their recipients” (p.628). Replacing the pronoun with the correct referent before the listener displays the problems of ambiguity thus preempts the possible problem of misunderstanding.

The data showed that replacings were both used for
reactive and proactive purposes. The novice speakers mostly deployed replacings to deal with the obvious language problems of word searching, because the talk-in-interaction would not progress without producing the items due next. When the target item was only partially available, they successfully replaced it with the new one so that they could progress the turn-in-progress and maintain intersubjectivity. On the other hand, the advanced speakers used replacings mostly for proactive purposes: to narrow down the meaning and to point to the right referent to avert the problems of ambiguity.

Interactionally competent speakers design their talk according to listener’s stance so that they do not have to provide 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 repair outcome 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 for the listeners, which may cause the problems of uncertainty. Refining the granularity of the content word to be specific in 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). Orientation to granularity,
therefore, is the important evidence of IC development.

While replacing was mostly used as a searching activity, it was also used on their way of grammatical searching. While only found once in the data, novice speakers used replacing for correcting a tense problem.

(41) Novice Group B
01→Han: [so we] so we (1.0) we just we feel we just felt
02 very (1.0) tired hh and after that we we walked
03 back to the uh (1.0) accommodation?
04 Eve: yeah.
05 Han: and we fall uh asleep.

In (41), which was the continuing interaction from (20), Han was talking about his recent trip experience, and replaced *we just feel* with *we just felt* to fix the grammatical morpheme (line 01). Although he was not consistent with using past tense, as he did not replace the grammatical error in line 05 (*fall* → *fell*), this example demonstrated that novice speakers started to be aware of the grammatical errors and to use replacing for fixing this problem.

Substantial number of replacings for grammatical corrections were found in intermediate speakers’ talk-in-interaction, mostly in successive repairs. Compared to the novice speakers who only replaced for correcting a tense problem, the intermediate speakers abandoned the former trouble-source and replaced it with the acceptable element in their successive trials.
to do self-repair, which displayed speakers' step-by-step progressivity to repair completion.

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

Jun in (42) first uttered should do but halted ongoing talk and replaced do with done (line 02). He then made the second attempt to replace should done with should have done (line 03). A series of repair procedure displayed how the speaker was tracing the rule and applied it to his unfolding talk. When he finally reached to the repair completion after a few trials, he stressed the subjective I (line 02) to signal his restarting in the clear. The procedure of changing do from bare form (do) to the past perfect (done), and finally to the past perfect with the auxiliary-have (have done) showed how the speaker was heading forward to complete his successive repairs.

(43) Intermediate Group A
01 Ian: she uh she of course she speaks English very well
02 and it is totally uh different than uh my English
03→ cause she uh she has comforting comfortable uh
04→ comfortability.
05 Jun: mm
Talking about the ways to learn English, Ian in (43) gave an example of his girlfriend who was born and raised in an English-speaking country. He successively repaired from *comforting* to *comfortable*, and finally to *comfortability*. This indicated that the speaker knew that the noun form should be followed after the verb *have* and that he could change the derivational morphemes for grammaticality.

Example (43) also displayed that, as discussed in 4.1, the intermediate speakers were able to use syntactic resources for turn management. Ian constructed multi-unit turns by combining units with connectives. After completing the first TCU, Ian expanded his turn using *and* (line 02) and he also uttered the following TCU by connecting it with *cause* (line 03) at the places where his unit syntactically completed. When Ian approached *she has*, since the primary choices needed further increments (*comforting what?*, *comfortable what?*) he successively repaired derivational morphemes to come up with a noun form *comfortability*, an object which no longer projected more element. Ian also deleted by the (line 08) in the process of self-repair to signal the termination of his turn as *naturally made* did not project further elements.

(44) Intermediate Group A

01 Ken: but uh uh it is really hard for me at this
02→ situation so: (1.0) uh I want to exposed to uh
03→ I want uh more exposure?
Similar to previous excerpt (43), this example (44) also displayed that the intermediate speaker was able to construct syntactically completed TCUs by replacing the former structure with the new one. Talking about the problems he faced when studying English, Ken repaired *I want to exposed to* into *I want more exposure* (line 05) since he was aware that the former projected more element (*exposed to what?*) while the latter completed the unit. This indicated their high self-monitoring skills (Griggs, 1997; Kormos, 2014), which resulted from more knowledge about lexical entities and the rules of grammar.

Replacings used by the intermediate speakers demonstrated that they were very much sensitive to grammatical forms of the words they chose. This observation was also found in the study of Kurhila (2001) that L2 speakers heavily self-initiated grammatical repairs. Intermediate speakers even used a repair for replacing minor grammatical problems in their talk.

(45) 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°

When Neil asked Oli if he drank last night in (45), his first trial *you drank* was not a bad choice, given that one can form a question simply by raising the intonation in the statement. Neil still used three successive repairs (*you drank → did you drank →*
did you drink) to replace the minor grammatical trouble-source in the prior talk, marking stress at the final drink (line 02).

The data demonstrated that the intermediate speakers replaced mostly for grammatical deviations. Such problems rarely created difficulty in terms of intersubjectivity, and the recipients in a conversation were rarely oriented toward syntactic errors and mistakes (Gardner and Wagner, 2004). Nevertheless, the intermediate speakers deployed successive repairs even for the minor trouble-sources (Egbert et al., 2004). This indicated their high self-monitoring skills (Griggs, 1997; Kormos, 2014), which resulted from more knowledge about lexical entities and the rules of grammar. As Pekarek Doehler and Pochon-Berger (2015) stated, “language is a central resource for social interaction, and interactional development is tightly and complexly interrelated with linguistic development” (p. 263).

Such linguistic development led to successful self-repairs. Schegloff (1979) argued that repair solution does not always lead to repair completion, as the replaced item is not always discarded by the participants. Although novice speakers replaced the item, their failure to track the original target words could continue to be another trouble-source.

(35) Novice Group B

08→Han: and how conger- con uh politi- uh that that
09→ kind o- hh how that kind of peo[ple
10 Fan: [politicians
Going back to (35) when Han could not find the target word that he had to replace it with the phrase *that kind of people*, the next speaker Fan did not take it as repair solution and took the next turn to provide the target word (*politicians*), which resulted in self-initiated other-repair (SIOR), not SISR. Using approximation to complete a repair may keep the speakers in an even longer process of meaning-making which delays their returning to the main sequence of talk. The successful outcomes of SISR by intermediate speakers indicate their linguistic competence, which is essentially interrelated with IC development (see Eskildsen 2011).

The intermediate speakers were also able to display using replacing for calibrating the level of granularity, though not frequent, as shown in (46).

(46) Intermediate Group B
01→Mila: yes since I go to I went to there (1.0) I
02→traveled there with my uh old friends and >I
03think that< I uh I cannot go there with the-
04with them. u::h in near future.

Mila in (46) replaced her first attempt *go to* with *went to* in order to be consistent with the use of the past tense. After repairing the tense problem, she replaced the verb *went* with *traveled* as the preposition *to* should not be followed by the adverb *there*. The speakers constantly addressed syntactic errors
in talk, and each repair progressed toward a solution for the trouble-source until it became error-free. What’s more, changing go into travel narrowed the meaning range, since travel is a special type of going some place. This replacement not only corrected the grammar but also functioned to be specific by tuning the level of granularity. The intermediate speakers used for both reactive and proactive, although the data displayed more frequent reactive repairs, especially for grammatical reasons. They corrected the previous grammatical errors in a series of SISR to start their talk in the clear. They were also able to reformat the previous structure in a way to be clearly understood by the recipients, which would be further discussed in the next section.

4.5 Reformatting

Reformatting is not only done for corrective reason but also for "perspectival" (Schegloff, 2013, p. 64). The previous section (2.3.2) explained that if a speaker halted while saying I would- and repaired it with That would be great in response to a question Do you want me to make a list for it?, this changes the perspectives from the speaker (I) to other speaker’s suggestion (that) (Schegloff, 2013, pp. 63-64). Such replacing of grammatical structure was mostly found in intermediate speakers’ interaction.
(47) Intermediate Group A

01 Jun: I started speaking or writing studying
02 → after- after I enter the university? I started to
03 → uh studying how to speak English and how to write
04 → English uh I’m not long uh: (2.0) it hasn’t been
05 → a long time after I start uh (1.0) after I
06 → started to study Eng- uh uh I think uh (1.0)
07 → although I studied- uh: (1.0) it has not been
08 → long uh since I start started to study English?

Jun in (47) told his recipients that he had just started studying English speaking and writing. He deployed a long series of SISR until he finally reached to the satisfactory utterance. Schegloff (2013) wrote that taking this repair merely grammatical "would miss the perspectival reformatting that is being implemented by it" (p. 64). Jun first replaced the previous *speaking or writing studying* with studying *how to speak and how to write* (lines 01-03). In the next extended turn, he changed the perspective from *I’m not long* into *it hasn’t been long* structure (lines 04-05). He also attempted to reformat the previous talk in compound TCU\(^{11}\) with the preliminary *although I studied* (Lerner, 1991) but soon abandoned it (line 06). Jun finally finished his long series of repair *It has not been long since I started to study English* (lines 07-08). Such a series of repairs were not only limited to applying grammatical rules into his actual speech, but also involved changing perspectives to design turns to be more

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\(^{11}\) According to Lerner (1991: 1996), some TCUs are compound in nature, including a preliminary component (e.g., *when...*) and a final component (*then...*).
acceptable and understandable for his listeners (Murata, 1995). Receivers as well did not attempt to cut in during his work, but waited until the current speaker completed SISR.

The procedure of reformatting by the intermediate speakers demonstrated excessive repairs to restart in the clear. The study by Egbert et al. (2004) advocated for L2 speakers’ successive self-repairs as follows:

The reason for the final success of this repair endeavor is the co-participants’ willingness and endurance to use their limited resources in a multitude of ways towards this end. Their limited proficiency requires motivation, goodwill and patience from all co-participants. These results do not imply that breakdowns do not occur, rather we wish to stress that interactants are willing to exert extraordinary efforts, and that the repair mechanism is a suitable resort to restore mutual understanding even when linguistic resources are limited due to non-native language proficiency. (p. 199)

Intermediate speakers willingly 'exerted extraordinary efforts' to repair what little linguistic troubles in the previous talk and came up with what was more satisfactory in their way of progressing towards turn-completion.

(48) Intermediate Group B
01 Mila: u:m I think to improve English skill? ss- u:h
02 continuous studying? is very important. so we
03→ don’t need to do a lot of things all time? but we
04→ do u:m (1.0) even though we uh even though the
05→ study time (1.0) even though the amount of
06 studying is not that much? we should do um we
07 should study English everyday.
In (48), Mila argued that consistency was important in studying English. While extending her turn, she first attempted to construct TCU starting with *but we do* (lines 03-04), but she reformatted this structure into preliminary component *even though* (Lerner, 1991; 1996). Mila added *the amount of* to the initially produced *the study time* to complete the repair. She constantly changed the structure of her talk to make her turn more satisfactory for maintaining mutual understanding, which is an important clue for IC development.

Reformatting used by intermediate speakers was not necessarily correcting what was wrong in the previous talk. This repair displayed that the intermediate speakers repaired not just for correcting the errors but for constructing her TCU in other ways by changing the perspectives, possibly for easing the comprehension for the favor of the recipients.

4.6 Searching

Most of SISR deployed by novice speakers were searching. As the study by Schegloff *et al.* (1977) argued, even novice speakers were able to find the target word in the long run.

(49) Novice Group B
01 Fan: and also ((coughing)) we just read or write
02 (1.0) in English?
The speakers in (49) were talking about different ways of learning English. Fan initiated repair for word search using *uh* and she successfully found the word *helpful* (line 04), to which Han received with the continuer *yeah?* (line 05). Fan expanded her turn and she still deployed a pause and *u:h* before producing the word *fluorently*, which was a target word (line 08). Although it appeared that Fan was not fully aware of the phonetic information of the target word (possibly *fluently*), that Eve accepted it in the next turn (line 09) demonstrated that Eve understood what *fluorently* meant at least under this context. This example suggested that what was important in the interaction was not the accurate linguistic form but the context that the co-participants formed together in the progress of interaction. Novice speakers demonstrated their IC in the procedure of this searching activity.

(50) Novice group B

01 Eve: so (2.0) uh I am not good speaking English so I
02 want to (1.0) study uh (2.0) 뭐지? 뭐라고 해야 하지?
muo.ji.? muo.ra.go. hae.ya ha.ji.?
what is it? what should I say?
03 (3.0)
Eve: re-reading or listening English is uh (2.0) more common? but speaking English is very hard to uh
Gail: yes. we need more uh more 기회. chance?

gui.hoe
chance

Searching did not only mean finding the target lexical item but involved finding the appropriate way to construct their turn. While expanding her turn, Eve in (50) paused and overtly searched for the next items due asking herself what she should say next (line 02). After taking a pause she started her turn anew in an appropriate structure (line 04), which suggested that she was looking for a way to construct her turn during a pause (line 03). Gail also repaired for searching the target item and while she first depended on L1 equivalent when it was unavailable, soon she successfully found it and moved on to progress further with her co-participants. This excerpt suggested that novice speakers could use repair initiators and other linguistic resources such as L1 for completing a repair for searching.

(51) Intermediate Group A
Ken: I try to question the uh professor in English
because it is the uh obli- obli- 의무
obligation
Ian: oh.
L2 intermediate participants, similar to the novice speakers, also used repair initiators or L1 equivalent in the process of searching. In (51), the participants were talking about the mandatory lectures taught only in English and Ken complained that he did not want to ask questions in English in the class. While producing his turn, he did not have sufficient lexical knowledge about the target word obligation and he switched to Korean right after the cut-off (line 02), so that the recipients could receive and provide the candidate L2 items (line 05). Ian took L1 as a clue to suggest the target word and Ken finished the side repair sequence and went back to progress from where he left off (line 06). Word searching demonstrated by the intermediate speakers was not much different from that by the novice speakers.

Then what was the trouble-source for this searching activity? While word search does not necessarily mean language deficiency of speakers, as native speakers as well do searching for the target words (e.g., slips of tongues) in their conversation. However, the data analysis suggested that substantial word search by the novice speakers resulted from insufficient lexical knowledge on the target item.
From the preceding conversation of (52), Beth attempted to introduce a good English studying method told by her cousin. She extended the current turn but even after a series of repair initiators (line 02), she could not progress the current turn because she was unable to find the target word. That she asked for a direct help in Korean (line 02) indicated that Beth knew what was due in Korean but she could not find the English equivalent. Ceil, after a pause (line 03), provided the possible next word *ask* based on the context (line 04), which Beth received (line 05). She initiated another repair with *uh* while producing an incomplete word (*memo*) and still repeated *I* and deployed *uh* (line 08), which demonstrated the speaker was still
searching for the target word. Ceil offered to help (line 09) in a latched next turn and after a long pause (line 10), and Beth used Korean to ask for a direct help (line 11). Ave helped to complete the repair and Beth took the item *memorize* to complete her turn in progress (line 13). This example demonstrated that Beth initiated a repair because she did not have enough L2 lexical entry to progress the turn projected so far. The example also indicated that the speakers in the novice group mostly deployed self-initiated repairs for the content word search, and the interaction only progressed after the speaker completed the repair. Word searching is a critical repair to be completed since failure in searching can interrupt the progressivity of interaction.

(53) Intermediate Group B

01 Neil: it is really super power to become u:h hh
02 bilingual.
03 Oli: oh it's like uh abso- uh 절대음감?
       *jul dae. um. gam*
       *absolute pitch sense*
04 Neil: yes maybe.

The trouble-source in searching for the intermediate speakers was, similar to the novice speakers, the lack of L2 entry as well. Neil was talking about being bilingual in (53) and Oli asked whether it was comparable to having a perfect pitch. As Oli did not know the L2 equivalent for the trouble-source, he cut-off his first attempt *abso-* and switched to L1 word instead
for the recipients understand (line 03). The recipient did not take it further as a repairable but accepted L1 as the resolution for searching (line 04).

The novice and intermediate speakers faced the problems with word search, and they were capable of solving the troubles on their own. Although the direct use of L1 might indicate their inability to find the appropriate L2 equivalent, it contributed to the progressivity of talk by immediately providing the target concept to the recipients. They also invited the other co-participants to join to collaborate in word searching. They frequently used L1 to ask for finding the appropriate L2 equivalent, which suggested that the trouble-source in searching was closely related with their insufficient lexical entry of L2. However, even if they were not highly proficient in English, the evidence of IC can be found from novice and intermediate speakers' searching. They used interactional resources for sense-making, such as using repair initiators, code-switching to L1, or asking help to the other participant, which were relevant and meaningful in the progress of word searching. This resulted from "actively pursuing intersubjectivity in spite of trouble in language understanding and production" (Kasper and Wagner, 2011, p. 129).

Nevertheless, the novice speakers did not always use an active strategy to solve the problem in searching. There were a few cases in which they had to give up the projected turn
because they failed to complete searching practice, which demonstrated their limited development of IC as in the following (54).

(54) Novice group B

01  Eve:  uh uh wh- when we: study words?
02  Fan:  mm:
03  Eve:  we're just (2.0) we're just uh uh uh
04  (5.0)
05  Eve:  u:h u::h
06  (all):  hhh hh
07  (2.0)
08→ Fan:  group study is also good.

Eve talked about how she had studied English. Eve first produced a preliminary component (line 01) to which Fan minimally received (line 02) to take the turn back for Eve to complete the compound TCU. However Eve failed to find the produce the next elements due and kept repeating repair initiators \textit{uh} (line 03). After a long pause of about five seconds (line 04), she repeated \textit{uh} with elongated vowels but again failed to progress her turn projected so far (line 06), and all the participants bursted out a laughter (line 06). Eve could not complete her final component of TCU even after another pause (line 07). She neither asked for help to other speakers nor used a Korean equivalent word for repair completion. Eve had to abandon what was being said by Fan who started a new TCU by taking a floor.
Similarly in (54), in the process of searching, Beth in (55) faced difficulty progressing her turn to the completion. Beth produced preliminary (if English study, line 01) but could not complete the final component (I think..., line 02). After a pause (line 03), Ave collaborated to co-construct the turn by providing the possible target word (line 04) to which Beth received (line 05). When Beth still failed to progress (line 06), Ave joined again (line 07) to help her project the next possible element. Beth asked for help in searching by providing a partial phonetic information for the target item (line 08) and Ave again collaborated (line 09). Beth did not lower the pitch to finish the TCU and was still
engaged in searching for the target item (line 10) but could not progress more to the turn completion (line 11). Ave provided a possible next word again (line 12), but Beth did not receive it but only repeated the keyword (sentence). When Beth still could not progress her turn even after a few more gaps (lines 14-17), Ave (line 18) took the next turn to start a new sequence. Beth had to abandon so far projected turn as she neither asked for help nor clearly displayed what she was doing. The co-participants failed to maintain progressivity and intersubjectivity in this instance.

It appeared that the novice participants sometimes did not know how to manage and design turns for helping. This finding was similar to Farina et al. (2012) who conducted a longitudinal study to trace how L2 French learner Julie initiated word searching. In the initial stage, Julie heavily depended on repair-initiators and did not know how to solicit other’s assistance when encountering lexical problems.

The intermediate speakers used searching as the novice speakers did when the next target item was not available. They used repair-initiators such as repetition to gain additional time. They were able to find the target item successfully after taking some time for search. As the novice speakers sometimes depended on L1 in word searching, the intermediate speakers also switched to L1 to complete SISR. This suggested that the speakers did know what to say, but were not able to, possibly temporarily, construct their talk in L2 in unfolding interaction.
However, investigating the process of self-initiated searching showed the evidence of IC development especially when searching became relevant next action for the other speakers. The difference was that, while the novice speakers heavily depended on repair initiators, producing a series of non-lexical perturbations, the intermediate speakers initiated repair usually with cut-off, which indicated that they knew a part of the target word, and this became the clue for the other co-participants to join to help. They sometimes added L1 equivalent in the process of searching, which became even direct clues for the recipients.

(56) Intermediate Group A
01 Jun: I just (1.0) uh I just hear the word crazy or uh
dor "do:r"?
03 (2.0)
04 Liz: dor?
05 Jun: 열간이
er.gan.ee.
    dope
06 Liz: a:h. dope?
07 Jun: dope. it’s funny.

Jun in (56) told his recipients he did not study much English much when young and only knew some bad words in English. He initiated searching by repeating dor (line 02). The previous section showed an example in which the novice speaker had to give up the projected turn for failing to identify the trouble-source in searching. However, the speaker here repeated
dor which made other speakers locate the trouble-source and concentrate on the forms of the target word. Brouwer (2004) called such practice of repeating “doing pronunciation” (p. 98). By repeating the item, the speaker made it as a repairable that needed to be confirmed or corrected by the recipients. When this was not an enough clue for the recipient (line 04), Jun used L1 to ask for a direct help (line 05). Although Jun’s searching resulted from his insufficient phonetic information, he gradually changed and diversified his way of soliciting help in order to progress towards the turn completion. This aligned with Pekarek Doehler and Pochon-Berger (2015) argument that while less proficient L2 speakers deploy a limited set of techniques, more proficient L2 speakers can use diversified techniques that are "more locally adapted and interactionally accepted" (p. 262).

Diversification of techniques can be more found from advanced speakers’ data. Although searching was one of the most common SISR practices for the novice and intermediate speakers, there were only a few cases of searching in advanced speakers’ conversation. This might suggest that the advanced speakers had more lexical entry in L2 to construct the so far projected TCU without self-interruption. When they faced a problem of searching, as the following demonstrated, they used metalinguistic devices which not only located the trouble source but also asked for a direct help.
Going back to (29) again, Will initiated a repair with a filled pause (uh) and overtly invited the co-participants for searching (what was that?, line 04) which demonstrated that he was engaged in searching activity. After finding the target word immediately, he checked if his choice was appropriate (astrology is it?, line 05). Will explicitly displayed the recipients that he was searching the target word (what was that?) and that he was checking whether the target word he found was appropriate or not (astrology is it?). Will’s usage of these metalinguistic questions helped him to manage his linguistic troubles and to maintain the intersubjectivity by explicitly displaying to the recipients his undergoing actions (e.g., searching, checking) in unfolding turn.

Schegloff (2013) distinguished "precise" searching from "delicate" searching from native speakers’ data. 'Precise' searching refers to finding the proper nouns: the right names of the person, place, or business. If the previous production is thought to be not recognizable enough, a speaker may turn to a 'delicate' word. While the examples of precise and delicate
searching were not found in novice and intermediate speakers' data, the advanced speakers used SISR when searching for the next item due which were 'precise' or 'delicate.'

(57) Advanced Group A
01 Rig: we waited for a long time but we couldn't eat
02→ at uh what's uh (1.0) Comptoir?
03 Tim: Le Comptoir?
04 Rig: because there were many restaurants?

Rig in (57) explained why he could not go to a famous restaurant in Paris. He halted his talk as he could not proceed to utter the name of the restaurant (line 02). He used repair-initiators and directly signaled that he was engaged in searching (*what's*). He found the target item which Tim accepted (line 03) so that Rig kept expanding his turn. This episode is an example of 'precise' searching. Rig initiated repair not because he did not know the target word in L2. The trouble-source here was the name of the restaurant which had nothing to do with L2 lexical knowledge.

(58) Advanced Group A
01 Uli: so uh I think the strong desire is very important
02 to study English or whatever subjects. I think
03 like that.
04→ Tim: yeah. you got real u:h >I’ll say< passion=*
05 Rig: =right. in some respect. passion.
In the preceding conversation of (58), Uli described how hard she studied English and she concluded a strong desire to learn English was important. Tim appraised her efforts and initiated self-repair for finding the appropriate next word. This repair is an example of 'delicate' searching, as Tim himself demonstrated (*I'll say*), he was looking for more appropriate word that could describe Uli’s hard work on studying English (line 04). Likewise, this had nothing to do with L2 knowledge but had to do with the content itself.

The evidence of IC development can be found here. The novice and intermediate speakers, though not always but mostly, searched for the word that was available in L1 but not in L2, which suggested that the trouble-source for searching was based on insufficient linguistic information on the target word. L2 participants used searching, not necessarily but mostly, when they could not find the L2 equivalent, possibly due to their lack of lexical entry. Rather than remaining silent or repeating *uh*, the intermediate speakers provided enough clues for the recipients to provide the repair resolution. The advanced speakers explicitly displayed their actions to the recipients to "subtly elicit the recipient’s assistance in a way that fosters the progressivity of talk" (Pekarek Doehler & Pochon-Berger, 2015, p. 254), which suggested that the more advanced L2 speakers were able to maintain the progressivity of talk while securing intersubjectivity in searching activities. The advanced speakers
searched for the precise information or delicate lexical choice which was not also available in L1. Even when the trouble-source was L2 trouble, the advanced speakers used metalinguistic remarks to explicitly display that searching was still under way. Such remarks overtly invited the other participants to collaborate in searching. This made a contrast with the cases in which the novice speaker who could not manage the linguistic trouble efficiently but only repeated repair-initiators (uh uh). This made her action ambiguous, such as whether the speaker finished repair sequence or was still doing searching, so that her projected turn was aborted by another participant.
Chapter 6. Conclusion

Thus far, the current study demonstrated the cases in which speakers addressed either evident linguistic flaws or prospective problems that may arise in talk. Regardless of their L2 proficiency, the participants in the study were able to deploy SISR in order to maintain progressivity and re-establish intersubjectivity. The L2 participants recycled to resolve overlapping problems which might have caused recipients’ mishearing. They inserted additional linguistic items or additional clausal TCUs which contributed to enhancing clarity. The L2 participants replaced to remedy what was linguistically problematic, or to preempt the future repairable in advance. They also reformatted the previous grammatical structure to be clear in the first place. The L2 speakers successfully searched the target items due next by themselves or by asking for a help.

The practices of SISR found in the study demonstrated how L2 speakers despite their differences in L2 proficiency were able to initiate and resolve the problems of interaction. They kept modifying the previous talk not just to make grammatical correction but to make it more suitable for the complicated interactional needs. This indicated that “L2 speakers are normal speakers” (Gardner and Wagner, 2004, p. 3). Even though SISR initially might appear to show disfluency in L2 talk, the careful
examination on repair practices have proven that every instance of SISR was deployed for important interactional purposes.

However, it did not signify their levels of IC development were the same. Being able to initiate and complete self-repair can be, of course, the important evidence of IC, because the participants carry out the interaction regardless of their limited L2. However, it does not mean their "methods" of practicing self-repair were all the same. IC is not just about the result of interaction, but the detailed process of interaction. Just as the other types of competence, it develops through the practice. Similar to the other L2 IC cross-sectional studies, the current study suggested that IC is closely interrelated with participants' growing linguistic repertoires. The methods of doing SISR by the more L2 proficient speakers displayed that they used diversified techniques, especially in more recipient-designed and context-sensitive ways.

Firstly, when recycling a part of initial TCU which was overlapped with the prior speaker, the study found frequent cases in which the novice speaker launched a turn in a place where turn transition was not relevant. Although she was able to use recycling for the recipient who might have misheard the initial part due to overlapping, the novice speaker started a new turn where turn transition was not relevant, thus ended up interrupting the prior speaker.

Secondly, the data displayed that the novice speakers
could insert an adverb to stress the focal point for the recipients just as the other intermediate and advanced speakers did. This inserting was not used for correcting a language problem but for raising clarity for the recipients, which is a good evidence for IC. However, inserting used by the intermediate and advanced L2 speakers was different in that they oriented to granularity. They fine-tuned the level of granularity so that they could be more specific into detail, decreasing other possible ambiguous interpretation. The advanced speakers used parenthesizing to add specific details to enhance clarity to design their talk to be more acceptable and comprehensible for the recipients.

Thirdly, the novice and advanced L2 participants used replacing, though not necessarily but mostly, for different purposes. The novice speakers used replacing in their process of searching. When the target item due next was unavailable, they resorted to another possible alternative to complete a repair. Although this indicated that the novice speakers were able to maintain the progressivity of talk using the linguistic resources they had at hand, the items they chose were broad in the meaning range. This contrasts with the replacing used by the advanced speakers. The advanced speakers found the target word, but they switched it into another which had more specific meaning in the semantic range to avert the possible problems of ambiguity. In other words, just as inserting was a way to recalibrate the level of granularity, the advanced speakers used
replacing for fine-tuning the level, so that they could be clear and specific in the first place.

Fourthly, searching by each L2 speaker group displayed that the more proficient the speakers were, the more diversified techniques they were able to deploy, which "implies both the sequential organization of actions and the linguistic resources put to use" (Pekarek Doehler & Pochon-Berger, 2015, p. 262). The novice speakers when temporarily unable to produce the next item due, they depended on repair-initiators or stopped talking, which not only interrupted the progressivity of talk but also made their actions ambiguous. The intermediate speakers provided enough clues for the recipients such as L1 equivalent or try-marking so that they could recognize what the missing target word was about, even though self-initiated repair remained incomplete. The advanced speakers explicitly displayed their actions by embedding searching in the course of interaction so that their repair did not suspend the unfolding course of action.

The different methods used by the L2 speakers of different proficiency suggested a few important features of IC development. IC development, above all things, cannot be independent from language development. The advanced language proficiency does not necessarily indicate the advanced IC, but the advanced IC does indicate the advanced target language proficiency, because language is the central resource to organize social actions. Speakers mainly use language as a resource for
coordinating actions. The study demonstrated how syntactic resources could be used for managing turn-taking. The study also displayed that the only advanced speakers used parenthesizing for raising clarity, which required the ability to "think ahead and monitor one’s own speech in the course of its production" (Wong, 2000, p. 417). The diversified techniques in searching by the advanced speakers were possible because they had more L2 resources. IC is not just about whether there is an interaction or not. IC is about how interaction is made by L2 speakers in locally-adapted and recipient-designed ways so that their talk-in-interaction can be more acceptable and understandable for the recipients, on which L2 proficiency was fundamentally based.

Another important feature of IC in repair practices was trouble-source. The speakers with more developed IC used repair for not correcting L2-related problems in talk, but for preempting the possible troubles in the first place. This could be found when the L2 participants oriented to the calibration of granularity to avert the possible problems of ambiguity. Waring (2018) stated, “key to the deployment of the various interactional practices is still the most general principle of recipient design” (p. 61). Moreover, Auer (1984) argued “the principle of recipient design involves uncertainties” (p. 629). 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 the important evidence for IC development. The intermediate and advanced speakers shifted granularity to a more detailed level to make the referent as unambiguous as possible by using inserting, parenthesizing, and replacing. Proactive self-repair is therefore the significant evidence for the recipient design and IC development, in that L2 speakers deploy context-sensitive and collaborative efforts to fulfill local communicational needs.

The present study, however, involved a few research challenges which might lead to the future research. Firstly, considering the importance of interactional resources other than language itself, the future study could include the roles of gaze, body gesture, or other multimodal resources to discuss L2 participants' IC development. Secondly, while the study only investigated a few types of SISR, the future study could examine under-explored types of SISR such as deleting or abandoning, or the cases in which the other speaker initiated repair to discuss the L2 IC development.

The result of the study hopefully contributed to understanding how SISR can be used to maintain the progressivity of talk and enhance the intercomprehension by preempting the possible misunderstandings in advance. Repair is not just fixing the previous problems but "implementing other actions, and in particular, desirable ones" (Schegloff, 1997, p. 527).
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Appendix

Transcription conventions (adapted from Wong and Waring 2010: xv)

. falling intonation
? rising intonation
- abrupt cut-off
: prolonging of sound
word stress
word quiet speech
>word< quicker speech
<word> slowed speech
hh aspiration or laughter
[word] beginning and ending of overlapping speech
= continuing speech with no break in between
(0.0) length of a silence in tenths of a second
(word) transcriptionist doubt
국문 초록

제 2 언어 사용자들이 상호 간에 언어적 및 상호작용적 도구를 이용하여 의사소통을 수행해내는 능력은 제 2언어 습득 및 학습 분야에서 큰 관심을 받고 있다. 특히 Firth & Wagner (1997)의 제 2언어 학습에 대한 재개념화 (reconceptualization) 이후, 외국어 교육 전문가들은 제 2언어 사용자들이 실제 생활에서 원래 의도한 사회적 행위 (social actions)를 달성하기 위하여 어떻게 청자의 입장에서 언어적 도구를 활용하며, 계속적으로 변화하는 맥락에 맞추어 자신의 언어를 변화시키고, 다음에 올 행위를 예측하는지를 관찰하였다 (Young, 2008, 2011; Pekarek Doehler & Pochon-Berger, 2015). 이러한 상호작용 능력 (interactional competence)은 대화분석 (conversation analysis) 연구 방법을 적용하여 제 2언어 사용자들이 어떻게 대화를 주고 받고 (turn-taking), 순서에 따라 대화를 발전해 나가며 (sequence organization), 이해의 문제가 있을 때 교정하는지 (repair organization)의 분석을 통하여 연구가 되어 왔다. 그러나 이 분야는 아직도 충분히 연구가 되지 않았으며, 어떻게 상호작용 능력이 발전하고 있는 것을 확인할 수 있는지 더 많은 실질적인 근거가 필요한 실정이다.

본 연구는 이러한 흐름에 맞추어 제 2언어 사용자들이 자기 교정 (self-repair)을 하는 과정 속에서 어떻게 상호작용 능력을 드러내는지 알 아보고자 하였다. 기존의 연구가 자기 교정 능력을 명백한 언어적 오류가 있는 경우에 한하여 분석한 것에 반하여, 이번 연구는 발화자가 이미 발화한 내용에 언어적 규칙 위반 사항이 없음에도 불구하고 스스로 발화를 멈추고 자기 교정을 하는 경우를 살펴보았다. 제 2언어 연구 참여자들은
TOEFL 말하기 시험 결과와 영어를 사용하는 국가에 체류한 기간을 기준으로 세 집단으로 나뉘었고, ‘영어 학습’과 ‘여행’을 주제로 대화하였다. 녹음된 대화 내용은 대화 본석 기호에 맞추어 전사하였다.

전사한 내용을 분석한 결과, 본 연구 참여자들은 자기 교정 중에서도 다시 말하기 (recycling), 추가하기 (inserting), 삽입구 넣기 (parenthesizing), 치환하기 (replacing), 재형식화 하기 (reformatting), 그리고 찾기를 (searching) 주로 사용하는 것으로 나타났다. 그리고 이러한 유형의 분석을 통하여 자기 교정은 기존의 연어적 문제점을 수정하기 위한 것이 아니라 앞으로 나타날 수 있는 문제에 미리 대비하기 위하여 사용될 수 있다는 것을 보여주었다.

다시 말하기의 경우 (recycling) 참여자가 새로운 발화를 시작하고자 할 때 기존의 화자와 중복이 되어 (overlapping) 다른 화자들이 제대로 듣지 못하는 것에 미리 대비하기 위한 전략이었다. 이것은 참여자들이 기존의 발화에 언어적 오류가 없음에도 다른 대화 참여자들에 대해 자기 교정을 미리 할 수 있다는 것을 암시하였다. 연구 참여자들은 또한 기존 발화에 대하여 새로운 단어를 추가하거나 (inserting) 삽입구를 넣음으로 써 (parenthesizing) 자신들이 말하고자 하는 바를 명확하게 하였고 이것은 대화 참여자들이 겪을 수 있는 이해의 문제를 사전에 예방하는 역할을 하였다. 연구 참여자들은 기존의 발화된 단어를 다른 단어로 치환하거나 (replacing) 발화된 문법적 형태를 변환하였는데 (reformatting) 이것은 역시 말하고자 하는 내용을 사전에 분명하게 제시하여 추후에 나올 수 있는 애매모호함 (ambiguity)의 문제를 미리 해결하고 타자가 시작하는 교정의 가능성을 (other-initiated repair) 줄여서 본 대화의 시퀀스가 중단되지 않고 이어지도록 하였다 (progressivity). 찾기 (searching) 과정에서는 연구 참여자들이 모국어나 참여자들에게 도움 얻기 등의 방법을 적절하게
사용하여 상호작용이 계속 이루어지도록 하였다. 이렇게 연구 참여자들은 자기 교정의 과정에서 여러 방법을 사용하여 서로를 이해시키고 대화를 통한 상호작용이 이루어지도록 하였다.

그러나 이 자기 교정의 과정 속에서 연구 참여자들은 L2 능력에 따라서 다른 방법을 사용하고 있었는데, 이로써 L2 능력과 상호능력이 매우 밀접하게 연관되어 있다는 점을 확인하였다. Pekarek Doehler & Pochon-Berger(2015)는 상호능력의 중요한 증거 중 하나로써 상호작용 실행 (interactional practice) 방법의 다양화 (diversification)를 들고 있는데, 상황과 문맥에 맞추어 다양화를 위해 뒷받침 되어야 하는 것이 바로 L2의 능력이었다. 예를 들어 찾기 (searching)의 과정에 있어서 교정 시작 장치 (repair initiators)에만 의지하거나 단순히 대화의 흐름을 멈추어 버린 초기 L2 사용자들에 비해 L2 능력이 높은 참여자들은 목표 단어가 맞는지 확인하기 (try-marking), 상위인지 언어 사용 (metalanguage) 등의 다양한 방법을 사용하고 있었으며, 상호작용이 중단되지 않고 계속 이루어지도록 하였다. 이것은 상호작용을 조절하는데 필요한 기본적인 L2 자원이 충분히 뒷받침되었기 때문이 가능하였다. 또한 초기 L2 사용자들은 다시 말하기를 (recycling) 기존 화자의 발화가 계속 이루어지고 있는 상황에서 사용하였는데, 이것은 대화 주로발기가 이루어져야 하는 맥락을 파악하는데 있어 언어적 능력을 활용하지 못하기 때문인 것으로 나타났다. 삽입구 넣기는 (parenthesizing) 오직 L2 능력이 높은 참여자 집단에서만 나타났는데, 끊임없이 뒷받침하는 상호작용 순간에 절 (clause) 형식을 갖춘 발화를 구성하고 이것을 대화 참여자들의 이해를 높이기 위하여 삽입한다는 것이 높은 L2 능력을 요구하기 때문이었다.

또한 치환 (replacing) 과정은 참여자들의 상호작용 능력의 차이를 조금 더 분명하게 보여주었다. L2 능력이 낮은 참여자들은 목표 단어
를 찾지 못하였을 경우 다른 접근 가능한, 의미범주가 넓고 음성학적 정보가 간단한 단어로 변환하였고, L2 능력이 중간인 참여자들은 문법적인 오류가 있을 때 그것을 수정하기 위한 방법으로 변환을 사용하였다. 이 두 가지의 경우는 발화를 하는 과정에서 분명한 문제점이 있는 경우였다. 그러나 L2 능력이 높은 참여자들은 언어적 문제가 없음에도 불구하고 기존에 발화하였던 단어 대신 의미 범주에 있어서 더욱 구체적인 단어로 변환하였다. 이것은 화자가 어떻게 미리 세부 사항을 조절함으로써 청자들이 예매모호한 해석을 피하고 쉽게 이해하도록 도와주는지를 보여주었다. 추 가 (inserting) 및 삽입구 넣기 (parenthesizing) 과정에서도 앞의 치환과 같이 L2 수준이 높은 참여자들은 기존 발화한 내용의 범주를 좁히는 세부 제어성을 (granularity) 보여주었다. 이것은 청자들로 하여금 발화를 해석하는데 있어 가능한 의미범주를 미리 줄여주고 더 명확한 이해가 가능하도록 하는 역할을 하였다. 상호작용 능력의 핵심이 청자에 맞추어 자신의 발화를 맞추는 작업이라고 (recipient-design) 한다면 (Waring, 2016), 자기 교정을 통하여 미리 세부 사항을 조절하는 능력은 상호작용의 발전을 보여주는 핵심적인 근거로 볼 수 있을 것이다.

주요어 : 상호작용능력 (interactional competence), 자기주도 자기교정 (self-initiated self-repair), 제 2언어 대화 (second language conversation), 대화분석 (conversation analysis), 청자중심설계 (recipient-design), 세부제어성 (granularity)

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