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In addition to the above conditions, authors give their consent for the digital copy of their work to be used subject to the conditions specified on the Library Thesis Consent Form and Deposit Licence.
Korean High School English as a Second Language Learners’ L2 Repair in Classroom Contexts: A Longitudinal Study of Sequential Organization and Syntactic Characteristics

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Applied Linguistics, the University of Auckland, 2017
Abstract

This study builds on and extends previous research on conversational interaction and second language learning in formal pedagogical contexts in New Zealand high schools through a longitudinal investigation of repair. Theoretically, the project engages with concepts of repair and language learning within the field of Conversation Analysis (CA) and attempts to re-examine the relationship between learner repair and second language classroom contexts proposed by Seedhouse (2004). Methodologically, the research employs both a micro- and macro-analytic approach to spoken interaction data to explore the complexities of second language repair in terms of its sequential organization and syntactic characteristics, and to trace language change in pedagogic contexts overtime.

The participants were seven Korean international students (intermediate proficiency level, age between 16-18) in high school English as second language classrooms in Auckland. An hour of students’ classroom interaction was recorded once every three weeks using a digital voice recorder over the course of a year. Additionally, the researcher conducted classroom observations and took field notes focusing on the pedagogy of the classroom activities. Lastly, the researcher conducted semi-structured interviews and record participants’ stimulated recall comments. The classroom interaction data and stimulated recall comments were transcribed following the CA conventions.

Findings from the study supported Seedhouse (2004) in that L2 repair is sequenced differently in pedagogic contexts in accordance with the pedagogic goals set by the teacher. More importantly, this thesis also adds to the previous study in that the speakers orientated to different aspects of the L2, especially L2 accuracy, by employing different types of repair sequences regardless of the pedagogic aim initially set by the teacher. It was also found that the speakers utilized the same repair trajectory to achieve different pedagogic and communicative purposes, depending on what they recognized as the trouble source and to whom the trouble source belonged. On the other hand, there was no notable change in the frequency of different repair types employed by the L2 learners over time. Rather, a particular repair sequence was consistently employed by the learners to achieve specific objectives: to maintain common understanding; to resolve one’s own linguistic problems;
to ask for assistance in resolving one’s own linguistic problems; to assist resolving linguistic problems of their interlocutors, and to provide linguistic correction for their interlocutor.

On a syntactic level, L2 repair was initiated and completed in restricted syntactic sites and the speakers employed a set of limited patterns of repair. Furthermore, the repairing segments employed by the speakers in all types of repair organization were not constituents on their own and therefore ‘ungrammatical’ in the strictest sense.

Based on the longitudinal observation of the focal participants’ self-initiated self-repair and the analysis of stimulated recall interview comments, it was argued that repair made during formulation of a syntactic constituent indicated the speakers started their turn before they completed planning the content of their utterance. On the other hand, repair initiated after a complete articulation of a syntactic constituent indicated the L2 learners monitored the grammatical accuracy of that particular syntactic constituent under repair. A close examination of repair before and after formulation of noun and verb phrases indicated that L2 learners in this study initiated self-repair at different points in formulation for different syntactic constituents and the patterns changed over time.

The study is expected to contribute to a better understanding of how Korean international students deploy and develop their L2 resources in order to participate in second language communication through repair in the language they are learning and also make learning the focal concern of their interaction in pedagogic contexts. Theoretical and pedagogical suggestions for future research were also identified.
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Chapter 1. Introduction

The present study aims to investigate L2 repair in English as a Second Language (ESL) classroom contexts in New Zealand high schools among Korean international students. The first section introduces the problem and the purpose of the study. The second section provides an outline of the thesis organization.

1.1. Statement of the problem and purpose of the Study

International students in New Zealand high schools often find themselves under significant pressure to succeed in their study as well as gain membership of the target language community (Johnson, 2008; Skyrme, 2007). For these adolescent learners, speaking in the English language is challenging due to the situation they find themselves in: needing the language to communicate and at the same time needing to communicate in order to learn the language (Norton, 2000). That being said, for L2 learners, their abilities in carrying out conversation serve as powerful resources which enable their participation in new interactional practices and help develop new competencies as well as being the objects of learning.

In the field of L2 studies, conversational interaction has been regarded as not only a medium of language practice but also as a means through which learning takes place (Ellis, 1992). Despite the obvious importance of interaction and the centrality of Second Language Acquisition (SLA) as the field most explicitly concerned with how L2 is learnt, very few studies have focused specifically on L2 learning in conversations from the participants point of view (i.e. taking an emic perspective) (Hauser, 2008). Instead, the focus has been primarily on isolated instances of L2 ‘learning’ from a researcher’s perspective (an etic perspective) where L2 speakers are viewed as deficient communicators who ‘receive’ linguistic input and opportunities to produce output (Firth & Wagner, 1997; Gardner & Wagner, 2004). By contrast, L2 interaction is a delicate social matter. These learners are competent social members who constantly change the way they use linguistic resources in order to generate and sustain mutual understanding (Kasper, 1997).

Recently, several scholars have argued that language learning in conversational interaction should be viewed as participation in maintaining social order and local intersubjectivity (i.e. jointly achieved common understanding) as well as an individual process of acquisition (Kasper, 2004; Sacks, 1972; Schegloff, 2007). The work of Firth and Wagner (1997) within
the Conversation Analysis (CA) approach has been influential in this effort, offering a critical lens through which to reconsider the individual L2 learning process within the practices of conversation as participants understand it. CA, though not a learning theory, constitutes a systematic tool that has been acknowledged by Applied Linguists and L2 researchers. Its analytic methods for investigating how people interact in socially situated activities and what they accomplish using language offer important insights for SLA. (Kasper, 2006).

CA’s analytic work is based on the argument that conversation is orderly and comprises generic infrastructures of talk in that they operate within any conversation, irrespective of the specific activity or language. Participants recurrently and systemically use these infrastructures to achieve, maintain, and restore understanding (Sacks, Schegloff, & Jefferson, 1974; Schegloff, 1991, 2007). With respect to examining L2 learning, Seedhouse (2004, 2005a) builds on this argument. He has proposed that there is a generic machinery for understanding how participants orientate themselves in a context-sensitive way, which can help render ‘learning activities’ visible through examining how participants construct their conversation.

Recent studies sharing this viewpoint have suggested that learners’ repair practice, which is regarded as one aspect of conversational organization (Sacks, Schegloff, & Jefferson, 1974) in CA and part of ‘learners’ interactional competence’ (He & Young, 1998; Markee, 2000; Young & Miller, 2004), is a particularly rich source of information about how language users utilize their linguistic and pragmatic resources in conversation. Repair, by definition, refers to all efforts made by speakers to maintain common understanding (i.e. intersubjectivity) when some source of interactional trouble arises (Heritage, 1984a) (e.g. problems in talking, hearing, and understanding).

The literature on L2 repair in L2 classroom contexts has demonstrated that teachers and learners deploy repair practice as both a conversational resource and an object of teaching/learning (Kasper, 2006; Markee, 2008; Seedhouse, 2004). It has also been suggested by Seedhouse (1999, 2004) that there is a reflexive relationship between the pedagogical focus, classroom context and L2 repair organization, and that the organization of L2 repair depends on the pedagogical contexts in which it occurs. However, there has been little empirical evidence to support Seedhouse’s claim. Currently, there is a lack of
longitudinal investigations of what learners orient to as repairable and how they organize repair sequences accordingly, and how these change in L2 classroom contexts overtime.

This study seeks to build on and extend previous research through a longitudinal investigation of L2 repair in formal pedagogical contexts in high schools in New Zealand. Conceptually, the research engages with theories of conversational interaction and language learning within the field of CA and attempts to re-examine learner repair practice in specific classroom contexts as suggested by Seedhouse (1999, 2004). This highlights the interconnections between the sequential organization of conversation, in particular repair sequences, and learners’ orientation to L2 learning. Empirically, the project utilises a micro-analytic approach to L2 spoken data to explore the complexity of L2 learning experiences during conversation between learners and between teacher and learners in a classroom context. Further, as a departure from the traditional qualitative studies, it also attempts to make use of frequency analysis, stimulated recall interviews and syntactic analysis to assess the relationship between L2 repair types, sequential organization, and L2 learning contexts.

As a theoretical lens and analytic tool accounting for structural and agentive forces, CA is well suited to expand the perspective on repair as a conversational action and also a learning mechanism (Seedhouse, 2004). Through this conceptual and empirical focus, this study will both enhance our knowledge of how interactants make learning the focal concern of their interaction and how they deploy linguistic resources in repair practice in order to perform their conversation in L2 classroom.

1.2. Organization of the thesis

This thesis is organized into five chapters. Chapter 1 introduces the purpose of the present study. Chapter 2 presents a review of the literature review with research questions. The first section provides a theoretical background of Conversation Analysis (CA) including CA view of language and learning, research methodology, analytic procedures and principles, transcripts, and its approach to repair practice. Then, it provides a review of the literature on Seedhouse’s repair in L2 classroom contexts and the previous CA studies in documenting learning overtime. Lastly, it provides a literature review on examining repair as a syntactic resource with research questions. Chapter 3 describes the research method, including participants, instructional setting, data collection and examination of the
reactivity of stimulated recall interview. Chapters 4, 5, 6, and 7 report the analysis and results and discuss central issues, exploring each of the four research questions, and summarize major findings. Chapter 8 concludes the study with pedagogical implications, limitations, and suggestions for future research.
Chapter 2. Literature Review

This chapter reviews the literature pertaining to the present study. The chapter begins with a brief introduction to Conversation Analysis (CA), focusing on its object of inquiry and some of its key concepts. Then repair practice, which is the specific focus of this thesis, is explicated in detail. First, the definition of repair as an interactional competence, what constitutes repair (i.e. the notion of repairable), and the sequential organization of repair, including types of repair, placement of repair initiation, and initiator techniques identified in previous CA studies are presented with examples.

Then the section is followed by an outline of the repair practice in L2 classroom contexts identified by Seedhouse (2004). It presents some key research findings and discusses the theoretical frameworks relevant to the design of the current study. This first half-section explains the concept of context in CA, together with the definition of language learning and CA methodology for analyzing L2 classroom interaction and identifying pedagogic focus provided by Seedhouse (1999, 2004). The second half briefly introduces a multi-level perspective on L2 pedagogic contexts as presented in Seedhouse (2004). This is followed by Seedhouse’s categorization of L2 repair organization in three L2 pedagogic contexts, namely form-and-accuracy, meaning-and-fluency, and task-oriented in terms of typical repair trajectories, types of repair, and the focus of repair (i.e. the repairable).

The remainder of this literature review then concentrates on how L2 development can be examined within the CA framework as an object of learning, and presents some of the recent studies, which implemented CA approaches to investigate change in learner language over time. The first half of the section reviews Markee’s (2008, 2011) Language Behaviour Tracking methodology, which was employed to observe how a learning of a specific language item takes place longitudinally. The next section presents two of Hellermann’s (2009, 2011) longitudinal case studies on the changes in L2 learner repair practice as an interactional skill. The section is summarized focusing on the methodological issues in the previous studies.

In order to address the gap in the previous CA studies in relation to investigating language change and development, the last section introduces syntactic analysis of self-initiated self-repair. It presents Fox and Jasperson’s 1995 analysis on repair as a syntactic resource.
based on their English as a first language (L1) data, offering suggestions for applying the repair types, syntactic patterns and repair patterns in the syntactic constituents in the study of L2 repair. The last section concludes the chapter by summarizing the theoretical and methodological objectives of the present study, and the research questions for the present thesis are presented along with their rationale.

2.1. Introduction to conversation analytic approach to second language interaction

This section introduces the objective of inquiry into CA, including how conversation and language is defined and studied within the CA framework. In addition, CA methodology and research procedures are explained along with its ethno-methodological principles. The final section further explains CA analysis, which is based on the detailed transcriptions of recorded interaction and presents the four types of interactional organization which CA practitioners focus on during the analysis and the general step-by-step analytic procedures they typically employ.

2.1.1. Objective of inquiry in CA.

CA was not originally designed to analyse the nature of language learning and its process. Nonetheless, its value as a systematic analytical tool has not gone unappreciated by Applied Linguists and Second Language (L2) researchers. Its take on how people interact in socially situated activities provides some important insights for L2 studies (Kasper, 2006). The term CA, in the broadest sense, includes any study of people talking together (e.g. oral communication, language use); and in a more restricted sense, which is the only sense used in this thesis, it refers to one particular tradition of analytic work that was started by the late Harvey Sacks and his collaborators, including Emanuel Schegloff and Gail Jefferson. The main object of inquiry in CA concerns understanding the interplay between spoken language, social interaction and the actions that people accomplish using language in their everyday lives. It examines how participants in an interaction make their understandings, orientations, relevancies available to each other in and though their coordinated interactional conduct or “talk-in-interaction” (Schegloff, 1987, p. 207), and jointly achieve common understanding (intersubjectivity) in sequentially organized talk exchanges (Kasper, 2004). As Kasper (2009a) puts it:
CA’s object of study […] is the interactional competencies of social members, specifically their sense-making practices and their methods to establish and maintain social order in their activities (p. 11).

On a more specific level, CA is “an explication of the ways in which interlocutors maintain […] the order of conversation” (ten Have, 2007, p. 3).

2.1.2. Definition of conversation in CA.

The basic assumption of CA is that conversation is essential in people’s lives both at the level of everyday interests and at the level of society at large. Conversation in CA refers to people talking to each other. It could be just for the purpose of talking, as a form of ‘sociability’ (i.e. telephone conversation among friends), or it can be used to indicate some kind of activity of interactive talk, whatever its purpose (e.g. a medical consultation between a doctor and a patient). Therefore, CA is the study of orders of talk-in-interaction independent of its character of setting and the verbal production by the participants is taken as a baseline for understanding interaction (Schegloff, 1987). From a CA perspective, when people talk with one another, conversation emerges as a collectively organized event. Consequently, CA favours naturally occurring data rather than ‘experimental’ or production elicited by the researchers in a laboratory setting, and the analytic purpose is not to explain why people talk as they do, but rather to explicate how they do it (ten Have, 2007).

2.1.3. CA Motivations.

According to Heritage, the CA research today can be seen as having two distinct interests, though they overlap in many ways. The first examines “the institution of interaction as an entity in its own right; the second studies the management of social institutions in interaction” (original italics, 1997, p. 162; 2004, p. 223 cited by ten Have, 2007, p. 8). Heritage proposes that within the latter kind, one could further distinguish two different foci. One the one hand, studies concentrate on finding how the organization of interaction such as turn-taking, the distribution of speaking rights and so on, occur in the institutional arrangement (e.g. doctor-patient consultation) in relation to various aspects of the institutions’ function (i.e. hospital). On the other hand, studies are motivated in examining the specific institutional activities and how the interactants display their orientations to
these situations and institutional requirements (i.e. purposes). It is the latter kind of 
endeavour that this thesis also aims to investigate.

2.1.4. CA view of language.
What makes CA distinct from mainstream linguistics and (second) language studies is its 
view of language. While linguists typically examine the specifications of different aspects 
of language itself, CA practitioners look at how social actions (e.g. repair) are carried out 
by means of language. CA’s main interest is in investigating how people follow the same 
norms in interaction as social action, such as demonstrating and maintaining 
intersubjectivity and cooperation (i.e. repair), rather than in the language itself used (i.e. 
particular linguistic forms). In CA, language is treated as a superficial ‘packaging’ which 
the speakers use to deliver their actions, but the actual linguistic forms have no value in 
isolation (i.e. when they are analysed on their own). A particular linguistic feature of an 
utterance becomes of interest to CA researchers when interactants select that particular 
linguistic item from the alternatives available and these choices have social implications. 
In other words, from a CA perspective, social action is delivered in terms of linguistic 
forms and linguistic forms only have analytic values when the social actors employ them in 
interaction as social actions while such social actions are manifested in the sequential 
organization of talk through the language they use (Schegloff, 2007).

2.1.5. CA methodology and procedures.
CA has its own subset of principles and methodological procedures and “[f]rom one 
perspective, [they are] the result of applying ethnomethodological principles to naturally 
occurring talk” (Seedhouse 2004, p. 12). In his introduction to CA and ethnomethodology, 
Seedhouse (2004) summarizes CA’s relation to ethnomethodology in terms of three broad 
factors (Seedhouse, 2004, p. 2). First there is the fact that Harvey Sacks (CA’s principal 
investigator) and Harold Garfinkle (the key figure in ethnomethodology) were acquainted. 
Second is Sack’s decision to investigate the organization of social interaction by analysing 
naturally occurring everyday talk. Third is the development of audio recording technology, 
which enabled this analysis to take place. It is beyond the scope of this thesis to explicate 
the history of the relationship of ethnomethodology and CA as this can be found elsewhere 
(see Heritage, 1984b). In the briefest sense, Ethnomethodology subsumes CA in the sense 
that the former studies “the principles on which people base their social actions, whereas 
CA focuses more narrowly on the principles which people use to interact with each other 
by means of language” (Seedhouse, 2004, p. 3).
In brief, the most fundamental theoretical concept in CA is that there is order at all points in interaction and all contributions (made by speakers) to interaction are “context-shaped” and “context-renewing”. Therefore, no order of detail can be dismissed a priori as disorderly, accidental or irrelevant (Heritage 1984b, p. 241). Methodologically, CA takes a bottom-up and data driven approach. CA research asserts that researchers should not approach the data with any prior theoretical assumptions or assume that any background or contextual details are relevant. Subsequently, while CA considers background or contextual details such as power, gender, and race, these factors are not relevant in the analysis and they are not invoked until there is evidence that the participants themselves are orienting to such details and they are revealed in the details of the interaction.

CA principles and procedures are in many ways different from those informing second language studies. In the following sections, I will explain some of the key theoretical and methodological principles in CA and how these are reflected in its examination of the systematic ways in which people organize their interactional conduct (i.e. methodological procedures). It is important to note that CA principles are not viewed as a formula or to be applied in a mechanistic fashion in CA.

2.1.6 The ethnomethodological principles in CA and its implications in the methodology.

The ethnomethodological principles are rarely mentioned explicitly in descriptions of CA methodology (Seedhouse, 2004). According to Seedhouse, there are five main ethnomethodological principles relevant to CA: Indexicality, Documentary Method of Interpretation, Reciprocity of Perspectives, Normative Accountability, Reflexivity. These are briefly considered below, as they are important concepts in understanding CA methodology.

1. Indexicality

Indexicality assumes the nature of interaction is context-bound. That is, interactants do not make every single element of their intended meaning explicit in interaction, but they rely on naturally (or tacitly) understood features of the context or background of their conversation to provide additional information in understanding the ongoing conversation. The principle of indexicality underlies CA’s insistence on invoking contextual features in analysis only
when it is evident in the details of the interaction that such factors are involved (i.e. the participants themselves are orienting to such features and their orientation is evident in the interaction). This indexicality or indexical knowledge is not just something which exists in the environment, but it is also something talked into being by the speakers (i.e. context-bound and context renewing). Speakers display through their utterances which aspects of context they are orienting to at any given time, and there is a reflexive relationship between talk and context.

2. The Documentary Method of Interpretation
The Documentary Method of Interpretation refers to the principle of treating any actual/real world action “as a ‘document’ or an example of a previously known pattern, to show affiliation with the other persons’ perspective” (Seedhouse, 2004, p. 7). This means “any turn at talk becomes a document or display of a cognitive, emotional, and attitudinal state, and analysis of context and of the previous turn(s) in the sequence and a social action which renews context” (Seedhouse, 2004, p. 9). When this principle is applied to sequential interaction, its explanatory power becomes significant. For instance, if someone says Hi we treat this action as a document and relate it to previously known patterns (i.e. greetings) and responses accordingly (e.g. saying Hi or Hello back). If we encounter new forms of greeting, our underlying patterns for forms of greeting are updated and will perhaps be applied in later events.

3. The Reciprocity of Perspectives
The Reciprocity of Perspectives denotes interactants’ willingness to agree or follow the same norms to show affiliation with the other persons’ perspective and achieve intersubjectivity. In CA, the principle of reciprocity is revealed in the preference organization, which is seen as a structural bias speakers ‘talk into being’ towards affiliation. For instance, the preferred action (e.g. agreement) is seen (i.e. recognized as a preferred action) but unnoticed (i.e. there is no visible halt in the conversation) and promotes affiliation, whereas the dispreferred action (e.g. rejection) is noticeable (e.g. as a result of prolonged silence) and accountable, may be sanctionable, and works against affiliation and reciprocity of perspectives (i.e. intersubjectivity is challenged and the conversation is interrupted).

4. Normative Accountability
In ethnography and hence CA, norms are considered to be a point of reference to which interactants interpret one’s own and each other’s behaviours. They are constitutive of action rather than regulative in that they constitute the setting in which the actions may be designed, performed, analysed and evaluated. In other words, interactants can and do deviate from the norms, (mis)interrupt others and fail to provide an appropriate response (e.g. the second part to an adjacency pair). The fellow interactant can evaluate these actions as noticeable and accountable by reference to the norms. For instance, a speaker may decide to return a greeting (i.e. an expected second part of an adjacency pair in reference to the norm), or deviate from the norm by declaring to “continue a quarrel […] by visibly refuse to return a greeting and leaving the other to draw the conclusion” (Heritage, 1984a, p. 118). The principle of normative accountability can therefore be understood as a “moral force which holds all the other principles together by providing a basis for interpretation and social action” (Seedhouse, 2004, p. 11).

5. Reflexivity

The principle of reflexivity in ethnography states that the same set of methods or procedures are responsible for both the production of actions/utterances and their interpretation. Consider the example of greeting: if two acquaintances approach each other along a corridor for the first time one morning and one issues a greeting, then s/he has performed the first part of an adjacency pair. From the perspective of reflexivity, the first greeter has not only performed an action but also created a context for its interpretation. Further, if the other person responds with a greeting, that person not only has performed an action but has also displayed an interpretation of the first action as a greeting.

To further illustrate, the other four ethnomethodological principles considered so far, Indexicality, Documentary Method of Interpretation, Reciprocity of Perspectives, and Normative Accountability, are manifested in this ‘simple’ act of greeting. By returning greetings, both interactants demonstrate that they are using the documentary method of interpretation (i.e. they are both orienting to the same schemata of greeting). They further orient to indexicality in that they display understanding that the context requires a greeting to be performed. Reciprocity of perspectives is achieved in that both interactants have displayed a similar understanding of the context. Finally, by greeting each other in the (normatively) understood manner, the interactants adhere to the norms, which enable social members to carry on everyday interaction in a “seen-but-unnoticed” or normal way (Seedhouse, 2004, p. 11).
To reiterate, these principles are by no means ‘a set of rules’ which speakers rigidly follow. They are sets of references, which interactants may use (consciously or unconsciously) to achieve intersubjectivity in everyday conversation. More importantly, these principles also enable the researcher to investigate talk-in-interaction from the interactants’ perspective using the same set of references as they do (Heritage, 1984b; Seedhouse, 2004). In the analysis, these principles are neither assumed nor invoked unless there is ‘visible’ evidence in the conversation that interactants orient to them.

In the following section, I will further explore CA methodology, which is devoted to demonstrating how speakers orient to the principles of interaction through the detailed analysis of talk as social action. The analytic tools of CA analysis are introduced first, followed by the step-by-step procedures, which are typically employed in single CA case studies.

2.1.7. Analytic tool in CA: Transcripts.

CA analysis is based on the detailed transcriptions of recorded interaction, using some version of a set of conventions originally developed by Gail Jefferson (see Appendix A). As Heritage and Atkinson write:

[…] the transcripts result from and represent an attempt to get as much as possible of the actual sound and sequential position of talk onto the page, while at the same time making this material accessible to readers unfamiliar with systems further removed from standard orthography (1984, p. 12 as cited in ten Have, 2007, p. 94).

Recorded interaction data are transcribed in order to show not only what has been said, but also how it has been said. In this sense, transcripts in CA are not the ‘data’, but “rather a convenient way to capture and present the phenomena of interest in written form - they work as a major ‘noticing device’” (ten Have, 2007, p. 95). Making transcripts can benefit CA analysts by helping them to notice particular phenomena and by providing them with an access to the phenomena discussed in an analysis.
The transcript system used in CA is specifically designed to reveal the *sequential* features of talk or the *interactional organization*, rather than (etically) specifiable units of analysis as understood in linguistics (i.e. pre-determined/categorized linguistic unit of analysis). CA considers social action to be embedded in a sequential environment by means of language, and uses a holistic system of analysis of the interactional organization, because the interactants are using the same holistic system of analysis themselves. As stated by Hutchby and Wooffitt (1998),

[…] it is not part of the conversation analyst’s aim to define […] for example] what a turn construction unit is, as a linguist for instance may want to define what a sentence is. Conversation analysts cannot take a prescriptive stance on this question, because what a turn-construction unit consists of in any situated stretch of talk is a members’ problem. That is, such a unit is essentially anything out of which a legitimate turn has recognizably—for the participants—been built. (p. 48).

CA is clearly an approach to describing and analysing language that is very different from the approaches used in linguistics. As opposed to traditional linguistics, CA practitioners attempt an emic analysis of how social actions are carried out by means of language while the former attempts etic specifications of aspects of language itself. A vital point to note is that the interactional organizations in CA function as action templates or points of reference which speakers may use to orient themselves in the pursuit of intersubjectivity. These interactional organizations are not to be understood as rules, units, or pre-determined coding schemes in the sense in which these would be understood in a descriptivist linguistic paradigm. In the following, I will present a brief overview of four of the major interactional organizations discussed in ten Have (2007): *turn-taking organization*, *sequence organization*, *repair organization* and *organization of turn-design*. These are analytically distinguishable but interlocking organizations.

**2.1.8 Focus of CA transcripts: Four types of interactional organization.**

1. *Turn-taking organization*

Sacks, Schegloff, and Jefferson (1974) made an observation about how turns are organized in conversation. They argue that there is overwhelmingly one and only one person speaking
at a time (i.e. one turn at a time), and when speaker changes occur, they recur with minimal gap and minimal overlap. A next speaker can take a turn in a number of ways. For instance, the previous speaker can select the next speaker (e.g. by asking a question), or a speaker can self-select, or the present speaker can continue speaking. These three ‘options’ are found to be hierarchically organised: other selection being preferred over self-selection, and continuation being the least preferred. This turn-taking system thus is “locally managed”, as well as “interactionally managed” or “party administered” (ten Have, 2007, p. 128).

2. **Sequence organization**

The core idea in the sequence organization lies in the nature of social interaction. In conversational interaction, “any utterance […] is considered to have been produced for the place in the progression of the talk where it occurs […] especially just after the preceding one, while at the same time it creates a context for its own ‘next utterance’” (ten Have 2007, p. 130). According to Schegloff (2007), the concept of *adjacency pair* is the major instrument for the analysis of sequential organization (Schegloff, 2007). Schegloff argues that after a first pair part (e.g. question), the next utterance is at first heard as a fitting second pair-part relevant to the first pair part (e.g. answer). Taking a ‘core sequence’ as a point of reference, additional sequences can be seen as expanding it in various ways. Sequences, then, are “patterns of subsequent actions, […] and the realization of locally constituted projections, rights, and obligations” (ten Have, 2007, p. 132, emphasis original).

3. **Repair organization**

Repair organization, which is the main interest of this thesis, refers to the ways of dealing with various kinds of trouble in the interaction’s progress, such as problems in talking and hearing (i.e. understanding). As an illustration, a repair has to be initiated by a complaint like ‘I can’t hear you’, or when a speaker wants to make adjustments to the previously produced utterance like ‘I can’t-no I don’t want to go’. Once initiated, it creates “an urgency which can lead to a postponement, or even abandonment, of a projected next turn” (ten Have, 2007, p. 133). For the purpose of this section, these remarks should suffice. More detailed accounts about the definition and concept of repair practice and its organization follow in the next section.

4. **Organization of turn-design**
The main argument in the organization of turn-design is that turns can be formulated in ways that show their relative ‘preference’ status. That is, one action may be ‘preferred’ over others in the sense that it is expected and will be chosen if possible (Sacks & Schegloff, 1979). For instance, an invitation projects an acceptance as a preferred response rather than a rejection. The difference between ‘preferred’ (i.e. acceptance) and ‘dispreferred’ (i.e. rejection) alternatives is revealed in “the turn shape chosen for doing one or the other”. An accepting response is found to typically display the preferred state by “being quick and direct”. A rejection, however, will tend to be “delayed, preceded by a ‘formal’ acceptance, more often inferable than directly formulated, and quite often accounted for by giving a reason for it” (ten Have, 2007, p. 137). In short, any conversational action can be performed in various ways, and how a turn is designed by the speakers is a meaningful choice informed by the speakers.

2.1.9 Conversation analytic procedures.

In this section, I will present the analytic processes, which a CA researcher typically goes through in approaching the transcribed data. The first stage of CA has been described as unmotivated looking or being open to discovering patterns or phenomena which are essentially social actions. Once a candidate phenomenon has been identified, the next phase is normally an inductive search through a database to establish a collection of instances of the phenomenon. As Stivers and Sidnell (2013, p. 2) put it:

as an inductive qualitative method, [CA] seeks to describe and explain its focal domain - the structures of social interaction - through a reliance on case-by-case analysis leading to generalizations across cases but without allowing them to congeal into an aggregate.

After an inductive database search has been carried out, the next step is to establish regularities and patterns in relation to occurrences of the phenomenon and to show that these regularities are methodically produced and oriented to by the participants as “normative organizations of action” (Heritage, 1988, p. 131). No generalization or pattern is formulated or established until the end of the research. Finally, a more generalized account is produced of how the phenomenon relates to the broader matrix of interaction. However, these ‘patterns’ are by no means ‘rules’ and what CA practitioners identify as a phenomenon (interactional pattern) is primarily an example of social action. To illustrate,
the following is a summary of a typical single-case CA analysis focusing on a single data extract (based on Hutchby & Wooffitt, 1998, p. 120-130).

1. Firstly, the researcher locates an action sequence or sequences in the transcript.
2. Then s/he characterizes the actions in the sequence or sequences. An action sequence can be as short as an adjacency pair or last for hours.
3. The action sequence(s) are examined in terms of the organization of turn taking, focusing especially on any disturbances in the working of the system.
4. The action sequence(s) are then investigated in terms of sequence organization. Here, the researcher is looking at adjacency pairs and preference organization but more widely at any action undertaken in response to other actions.
5. Then the action sequence(s) is examined in terms of the organization of repair.
6. The researcher could then look at how the speakers package their actions in terms of the actual linguistic forms which they select from the alternatives available and consider the significance of these.
7. Lastly, based on the detailed transcript, the researcher can endeavour to uncover any roles, identities, or relationships which emerge in the details of the interaction.

As emphasized in the previous sections, CA is not interested in a linguistic object as such. The phenomenon may indeed be a “superficially linguistic” item such as the marker oh (Heritage, 1984a) or a syntactical construction such as the “you say X... what about Y” pattern (Hutchby & Wooffitt, 1998, p. 104–109) but what CA is interested in, in essence, is the social actions identifiable in the sequence of interaction which in turn are inevitably manifested in the language that interactants use. In sum, CA is an emic analysis of how social actions are carried out by means of language. From a CA perspective, interactional organizations function as “Action Templates” or “points of reference” and they work together in complementary fashion to create an “architecture of intersubjectivity” (Seedhouse, 2004, p. 33). To reiterate, these interactional organizations are not to be understood as rules, units of analysis or coding schemas in the sense that these would be understood in a descriptivist linguistic paradigm. Rather, they are a set of references which the interactants use to carry out their everyday conversation, and by observing these references researchers are able to analyse and understand the data from the participant’s perspective.
2.2 Conversation analytic approach to repair practice

In this section, repair organization which is the specific focus of this thesis is explained in detail. The definition of repair is provided, followed by a detailed illustration of its sequential organization, and how repair is identified. Then, how repair is studied in L2 classroom contexts is reviewed along with the concept of context, language learning, the properties of L2 classroom, and the institutional goal of L2 classrooms.

In the following section, I review how recent CA studies approached L2 classroom interaction as institutional interaction and how they set about documenting learning. The first half of this section discusses Seedhouse’s (1999, 2004) framework for investigating repair in L2 classroom interaction, which specifically emphasises the relationship between pedagogic context and interaction. The review also includes a brief introduction to his three-way context model and the three types of classroom contexts with examples of the repair practices identified in each of the three pedagogic contexts. The second half of this section reviews a selection of case studies by Markee (2008) and Hellermann (2009, 2011) as an example of recent efforts in CA to document learning and trace change in learner L2 over time, including their limitations.

2.2.1. Understanding repair practice as an interactional competence.

In CA, repair practice is regarded as one aspect of interactional competencies (He & Young, 1998; Markee, 2000; Young & Miller, 2004) that language users utilize to maintain common understanding (i.e. intersubjectivity) when some interactional trouble arises (Heritage, 1984a). Kasper (2006) advocates for the term ‘competencies’ as opposed to ‘competence’, arguing that it has the advantage of emphasizing “the domain and socially distributed nature of the capacities in question, whereas the reduction of ‘competenc(i)es’ to a single ‘competence’ is perhaps less apposite” (p. 86). Modifying He and Young (1998) and Young and Miller (2004), Kasper (2006) proposes that interactional competencies can be seen as comprising participants’ capacities to regulate interactional resources in a specific practice. So defined, the interactional competencies qualitatively expand the traditional notion of grammatical and even pragmatic competence in second language (L2) acquisition studies (Nguyen, 2012; Pekarek-Doehler & Pochon-Berger, 2011).

According to Kasper (2006), these ‘capacities’ are the mechanisms which enable interlocutors to display their pragmatic knowledge through the use of conversational
syntax, paralinguistics (e.g. pauses, intonation, perturbations, laughter, and so on), kinesics, facial expressions, gaze and proxemics for social/institutional purposes. They also include the ability to adopt appropriate interactional roles and jointly manage the turn-taking system with co-participants. Thus, it essentially involves understanding and demonstrating “how turns are designed and responding to turns in a coherent and sequential manner, displaying common understanding”. It also entails “the ability to repair any threat or breakdown in communication as well as accomplishing social actions befitting the interactional context and social/institutional goals” (Kasper, 2006, p. 86). For L2 learners who are already interactionally competent in a wide range of activities, their available interactional competencies serve as powerful resources which enable their participation in new practices and help develop new competencies. In this sense, repair practices for L2 learners are both resources and objects of learning.

2.2.2. Definition of repair.

Within CA, repair refers to all efforts utilized by interlocutors to deal with any problems in speaking, hearing or understanding of the talk. Confirmation checks, clarification requests, restatements, repetitions, understanding checks and the like, including non-verbal features (e.g. gaze, gesture), all fall within the domain of repair in CA work, regardless of linguistic correctness and the participants’ degrees of expertise with the language being used (Hellermann, 2009, 2011). In the construction of repair sequences, participants make available their monitoring, awareness, and orientation to the on-going linguistic and communicative structures in the current sequence of talk. In other words, what constitutes a repair is made relevant in the talk of the participants themselves. A repair sequence is thus recognized as a particularly rich source of information about speakers’ “conscious, hearable and visible orientation to sequences of turns of talk” (Hellermann, 2011, p. 150), and CA methods are well equipped to show how this consciousness is made public as participants in interaction orient to their own as well as other’s talk and publicly display a particular orientation by initiating repair on that talk (Sacks, Schegloff, & Jefferson, 1974; Seedhouse, 2005a).

2.2.3. Repair and the repairable.

As discussed, repair is rather widely defined in CA. It is seen as a general mechanism or interlocutors’ conversational resource to modify the talk (or its implications) after its production for achieving intersubjectivity (Schegloff, Jefferson, & Sacks, 1977). Schegloff,
Jefferson, and Sacks (1977) were the first to describe the repair organization in conversation. According to Schegloff, Jefferson, and Sacks (1977), repair sequences consist, minimally, of the repairable and the repair (or repair proper). The repairable is the linguistic unit which contains the trouble source that is being repaired, and the repair proper is the turn in which the problematic element is replaced with another. Although the source of repair is called trouble source, this trouble source need not necessarily be some deviant language structure, error or mistake. It is a trouble source with respect to the ongoing progression of the local order of some talk-in-interaction (Schegloff, 2007; Schegloff, Jefferson, & Sacks 1977). It is worth noting that a repairable becomes a trouble turn only retrospectively, after the subsequent talk has focused on it. That is, a repair can be said to create a trouble turn in the preceding conversation. At the time it is uttered, the repairable need not be marked as being problematic. In principle, what evokes repair is not necessarily an error, and not all errors prompt repair from other speaker(s). Anything in conversation can thus be (but need not be) repairable.

The authors also distinguish between ‘repair’ and ‘correction’ and suggest that these notions are hierarchically organized: repair being a more general term, whereas correction represents a sub-group of repair. To quote Hutchby and Wooffitt (1998, p. 57 as cited in Seedhouse, 2007, p. 530),

[r]epair... is a generic term which is used in CA to cover a wide range of phenomena, from seeming errors in turn-taking [...] to any of the forms of what we commonly would call 'correction' - that is, substantive faults in the content of what someone has said.

It is worth noting that more recently, Macbeth (2004) drew attention to McHoul’s study in relation to classroom repair and suggests repair in ordinary conversation and in classroom should be treated as distinct. He argues that classroom repair or correction addresses a professional concern of teachers therefore serving a more specific institutional purpose, while correction in Schegloff, Jefferson and Sacks (1997) is a general mechanisms in maintaining intersubjectivity.
In this study, following Schegloff, Jefferson and Sacks (1997)’s definition of repair and correction, correction in classroom contexts is not given special status and is regarded as one practice of repair options available to interactants-both the teachers and the students. Where in interaction a correction serves ‘a specific institutional purpose’ (e.g. providing a replacement of linguistic error or content of the previous turn by their interlocutor) is made relevant only in terms of the sequential organization within the given pedagogic context found in the data.

2.2.4. Organization of repair.
In this section, I will briefly provide the types of repair, sequential organization of repair initiation, and the verbal techniques associated with repair initiation in CA studies along with examples.

2.2.4.1. Types of repair.
Repair in the CA tradition is described as being initiated by the current speaker (self-initiated) or another currently nonspeaking participant (other-initiated) and then accomplished by one of those parties (self-, or other-repair). Schegloff, Jefferson, and Sacks (1977) classifies repair into four categories depending on who initiates and completes repair: self-initiated self-repair (SISR), self-initiated other-repair (SIOR), other-initiated self-repair (OISR), and other-initiated other-repair (OIOR) (Excerpt 1.1-1.4). For instance, in the case of OIOR (Excerpt 1.4) if a current speaker says something that is oriented to as a trouble source (A in line 07) by a recipient of that talk (B in line 08), CA methods state that other (i.e. B) has initiated a repair and the trouble source is repaired by the other (i.e B) (see Appendix A for the transcription conventions).

*Excerpt 1.1 Self-initiated self-repair*

N  She was givin me a:ll the people that
  ➔ were go:ne this yea: r I mean this
  ➔ quarter y'l know
J  Yeah

*Excerpt 1.2 Other-initiated self-repair*

Ken  Is Al here today?
Dan  Yeah.
(2.0)
Roger  ➔ He is? hh eh heh
Excerpt 1.3 Self-initiated other-repair

B  → He had dis uh Mistuh W- whatever k- I can't think of his first name, Watts on, the one that wrote that piece,
A  → Dan Watts.

Excerpt 1.4 Other-initiated other-repair

01B  Where didju play bask/lletbaw.
02A  (The) gy:m.
03B  In the gy:m?
04A  Yeah. Like grou(h)p therapy. Yuh know=
05B  Oh:::
06A  =half the group thet we had las' term wz there en we
07  jus' playing around.
08B  → Uh- fooling around.
09A  Eh-yeah...

(From Schegloff, Jefferson, and Sacks, 1977, p. 364-365)

Repair includes the phenomenon of ‘correction’ in that a correction is made either by the speaker or by some ‘other’. However, these corrections are neither contingent upon error, nor limited to replacement as shown in the following excerpts. For instance, some repair occurs where it does not involve replacement of one item by another as in word search (Excerpt 1.5), or there is no hearable error, mistake or fault (Excerpt 1.6), or the hearable error does not necessarily yield correction (Excerpt 1.7). In view of the point about repair being initiated where there is no apparent error, it appears that nothing is, in principle, excludable from the class of 'repairable' (Schegloff, 1979; Schegloff, Jefferson, & Sacks, 1977).

Excerpt 1.5 Repair may not involve replacement of one item by another (e.g. word search)

1. Clacia  B't, a-another one theh wentuh school with me
   → wa:s  a girl na:med uh, (0.7) W't th'
   [Clacia:17]

2. Olive  → Yihknow Mary uh::: (0.3) oh:: what was it.
   → Uh:: Thompson.

Excerpt 1.6 There may be no hearable error, mistake, or fault
1. Bernice → Dean came up en 'e said 'I'd 
   →like-''Bernice?'
   →he said 'I'd like t' take you over tuh 
   Shakey's en buy you a beer.'
2. Ken → Sure enough ten minutes later
   →the bell r- - the doorbell rang...
3. L → Is his one dollar allright or should he send more
   →than that for the p- tuh cover the postage.

**Excerpt 1.7** Hearable error may not necessarily yield the occurrence of repair/correction

Avon Lady → And for ninety-nine cents uh especially in, Rapture, and
   the Au Coeur which is the newest fragrances,
   →uh that is a very good value.
Customer → Uh huh

(From Schegloff, Jefferson, & Sacks, 1977, p. 363)

Schegloff, Jefferson, and Sacks (1977) also note that not all repair sequences result in
‘succe|ssful’ repair. Therefore, what follows the repair-initiator is referred to as an
outcome. The following examples are ‘failures’ from self- (Excerpt 1.8) and other-repair
initiations (Excerpt 1.9).

**Excerpt 1.8** Failure can issue from self-initiation

Mike → I never heard it eeteh.
   →Awl I her- All I- Awl I ree- all you- all //I ree-
Vic → You knew duh broa//ll: d.

**Excerpt 1.9** Failure can issue from other-initiation

Roger → It's kinduva- // kinduv weird.
Dan → heh
   →(2.0)
Roger → Whadda you think.
   →(2.0)
Ken → Hm?
Roger → Fergit it.

(From Schegloff, Jefferson, & Sacks, 1977, p. 365)

**2.2.4.2. Placements of repair initiation.**

Self- and other-initiations tend to have clearly different placements in a repair sequence
relative to the trouble source whose repair they initiate. According to Scheglof, Jefferson, and Sacks (1977) self-initiated repairs have their initiations in three main types of positions: within the same turn as their trouble source (Excerpt 1.10), in that turn’s transition relevance place (TRP - a point where the turn may be go to another speaker, or the present speaker may continue) (Excerpt 1.11), and finally in the turn subsequent to that following the trouble-source turn (i.e. third turn position) (Excerpt 1.12).

**Excerpt 1.10 Within the same turn as their trouble source**

Deb   Kin you wait til we get home? We'll be home in five minutes.
Anne  Ev//en less th'n that
Naomi ḬBut c'd we c'd I stay u:p ? (0.2)
Naomi once we get // ho:me
Marty For a few minutes
Deb   Once you get yer nightgown o:n

**Excerpt 1.11 At turn's transition relevance space**

1. L   An' 'en bud all of the doors 'n things were taped up=
        ḬI mean y'know they put up y'know that kinda paper stuff,
        Ḭthe brown paper

2. J   He's stage manager.
        (2.0)
        ḬHe's actually first assistant but- he's calling the show.
        ḬThey take turns =
        Ḭhe and the production manager take turns calling the show

**Excerpt 1.12 In third turn to the trouble-source turn**

1. And he's going to make his own paintings.Mm hm ḬAnd- or I mean his own frames. Yeah
2. I read a very interesting story today uhm, what's that Ḭw'll not today, maybe yesterday, aw who knows when, huh, it's called Dragon Stew.

(From Schegloff, Jefferson, & Sacks, 1977, p. 366)

On the other hand, other-initiated repair initiation occupies one main position which is the turn just subsequent to the trouble-source turn. For instance, G’s turn in the
Excerpt 1.13 is a typical example of other-initiated repair.

**Excerpt 1.13 Other initiated repair initiations**

C  C'n you tell me- (l.0) D'you have any records of whether you- who you sent Oh(hh) shit.
G  \(\Rightarrow\) What'd you say?
C  I'm having the worst trouble talking.

(From Schegloff, Jefferson, & Sacks, 1977, p. 364)

2.2.4.3. Initiator techniques.

Self- and other-initiations are done with clearly different initiator techniques. Self-initiations within the same turn (which contains the trouble source) use a variety of non-lexical speech perturbations (e.g. cut-offs, sound stretches, ‘uh’ s etc.) to signal the possibility of repair-initiation immediately following (Excerpt 1.14); while other-initiations use a group of turn-constructional devices to initiate repair. A typical example of this is ‘Huh?’, ‘What?’ (Excerpt 1.15), a partial repeat of the trouble-source turn plus a question word (Excerpt 1.16), a partial repeat of the trouble-source turn (Excerpt 1.17), and finally ‘You mean’ plus a possible understanding of the prior turn (Excerpt 1.18). Analysis based on ordinary conversation suggests that self-repair is preferred to other-repair (From Schegloff, Jefferson, & Sacks, 1977).

**Excerpt 1.14 Self-initiations within the same turn with non-lexical speech perturbations**

A  \(\Rightarrow\) W- when's yer uh, weh- you have one day y'only have one course uh ?

**Excerpt 1.15 Other-initiations with a turn-constructional devices to initiate repair**

1. D  Wul did'e ever get married ’r anything?
   C  \(\Rightarrow\) Hu:h?
   D  Did jee ever get married?
   C  have // no idea.

2. A  Were you uh you were in therapy with a private doctor?
   B  yah
   A  Have you ever tried a clinic?
   B  \(\Rightarrow\) What?
   A  Have you ever tried a clinic?
   B  ((sigh)) No, I don't want to go to a
Excerpt 1.16 A partial repeat of the trouble-source turn, plus a question word

Sue  Yeah we used to live, on the highway, too.
     And when we first moved up there, it was terrible sleeping because all these semis were going by at night.
     ((short silence))
Bob  ➔ All the what?
Sue  Semis
Bob  Oh

Excerpt 1.17 A partial repeat of the trouble-source turn

A    Well Monday, lemme think. Monday, Wednesday, an' Fridays I'm home by one ten.
B    ➔ One ten?
A    Two o'clock. My class ends one ten.

Excerpt 1.18 You mean plus a possible understanding of prior turn

A    Why did I turn out this way.
B    ➔ You mean homosexual?
A    Yes

(From Schegloff, Jefferson, & Sacks, 1977, p. 368)

2.2.5. Repair practices in L2 classroom contexts.

Researchers focusing on the issue of intercultural communication and the construct of L2 repair have found that the organization of repair sequences identified in ordinary L1 conversation is also found in the repair practices between native speakers and non-native speakers (Hosoda, 2001; 2006; Kurhila, 2001), and teacher and L2 students (Hall, 2007; Kasper, 1985; Macbeth, 2004; McHoul, 1990; Seedhouse, 1999, 2004; Van Lier, 1988). The role of repair in language teaching/learning tends to assume greater prominence for the L2 classroom context than in other institutional settings because of the theoretical importance attached to the negotiation of meaning in work on the interaction hypothesis (Long, 1996; Seedhouse, 2004). As Markee (2000) observes, “conversational repair is viewed by SLA [second language acquisition] researchers as the sociopsychological engine that enables learners to get comprehended input” (p. 31). It therefore follows that a clear understanding of how repair is organized in interaction in the L2 classroom is vital to
understanding how learners orient to L2 and learning opportunities are created.

The types and organization of repair, in L1 as well as in L2, are argued to be in a tight relationship with the context in which it occurs. Van Lier (1988) points out that repair is a generic term, with correction or error replacement being one kind of repair, and “that certain types of activity naturally lead to certain types of repair, and […] the issue of how to repair is closely related to the context of what is being done” (p. 211). Similarly, Kasper (1986) contrasted the organization of repair in language-centered and content-centered phases of L2 lessons and concluded that

[t]alking about repair in [foreign language] teaching as such is inconclusive: rather, preferences and dispreferences for specific repair patterns depend on the configuration of relevant factors in the classroom context […] the teaching goal of the two phases turned out to be the decisive factor for the selection of repair patterns. (p. 39, emphasis added).

Seedhouse (1999, 2004) extended van Lier’s and Kasper’s variable approach, which suggests that the organization of repair varies depending on the contexts in which it occurs and the pedagogical focus intended by the teacher. Seedhouse, (2004) argued that with respect to turn taking sequences, there is no single organization of repair in the L2 classroom, but “a reflexive relationship between the pedagogical focus and the organization of repair” (p. 179). Seedhouse claimed that “as the pedagogical focus varies, so does the organisation of repair […] and what constitutes trouble also varies with the pedagogical focus, which means that what is repairable is different in each context” (2004, p. 179). The concept of ‘context’ used in Seedhouse is related specifically to “the pedagogical purposes which the teacher introduces […]which in turn are[…] inevitably linked to the linguistic forms and patterns of interaction which the learners produce” (Seedhouse, 1999, p. 62). In this definition, the pedagogical focus projected by the teacher constitutes the pedagogical context and is considered to have a decisive impact on the sequential organization of repair. In Seedhouse (1999, 2004, 2007) repair practice is thus expected to be organized differently in different L2 contexts. In order to better comprehend Seedhouse’s claim that there is a complex interplay between different pedagogic focus and different organization of L2 repair, it is important to first delineate the concept of context, language learning, pedagogical focus, L2 classroom, and L2 interaction.
The next section considers the concept of context and learning in CA, and the properties of L2 classrooms, the pedagogical focus, and what constitutes L2 interaction. This is followed by an introduction to Seedhouse’s (2004) model of a ‘three-way view of context’ which explicates the L2 classroom context as a subvariety of institutional contexts.

2.2.6. Concept of context in CA.

The notion of context in L2 studies has been argued to have a fundamental impact on the ways in which L2 learning is conceptualized (Ellis, 1994; Siegal, 2003). Traditionally, CA has always been reluctant to go beyond the structures and strategies of talk itself. If at all, contexts in CA are dealt with only if they are procedurally relevant. That is, only if those contextual features are demonstrably oriented to by the participants themselves in their sequential construction of turns (Kasper, 2009b; Schegloff, 1991). From a CA perspective, if social categories such as those of class, gender or power among many others are relevant at all, such relevance should not be assumed a priori, but actually revealed in the way they become locally enacted in the talk-in-interaction. In CA, contextual factors are seen as relevant when they “are actually expressed, signalled, enacted or in general ‘indexed’ in talk” (Seedhouse, 2005a, p. 261). This implies that L2 interactions cannot be deemed to be institutional (i.e. pedagogically focused) simply because they take place in a particular location (i.e. classroom) or between people with particular social identities such as a teacher and a student. Their orientation to institutional goals and identities needs to be demonstrated in sequential turns by showing that it is procedurally consequential (Schegloff, 1992), i.e. that it shapes interaction in recognizable ways. In addition, one single contextual feature is not assumed to remain relevant throughout a whole interactional sequence; rather, different contextual elements may be talked in and out of being and made relevant or irrelevant by the participants themselves at any time as the sequence progresses (Markee, 2005). This is one of the ways in which CA and ethnomethodology have explicitly distinguished themselves from classical macrosociology (ten Have, 2007).

Subsequently, CA considers what participants contribute to interaction (i.e. their turns in the sequential production of conversation) as “context-shaped” and “context-renewing” (Heritage 1984a, p. 280), meaning that every action is sensitive to some
contextual features, but at the same time they also contribute in defining and orientating what context is relevant for participants” in that particular moment.

2.2.7. Understanding language learning in CA.

As discussed, CA considers a major part of context to be created by participants in the details of their talk-in-interaction. In this sense, CA’s approach to context reflects an “interactional view […] which treats the social context as a complex and constantly changing arena for learning that is constructed and reconstructed by all participants, including the learner” (Ellis, 1994, p. 282). Within such a view on context in CA, there is no clear distinction between language use and learning.

As Markee and Kapser (2004) state, in CA, learning is considered as a behaviour or ‘doing learning’, which can be understood as “a conversational process that observably occurs in the intersubjective space between participants, not just in the mind/brain of individuals” (p. 496). CA’s approach to ‘learning’ concerns the ‘learning’ process as participants understand it and it is examined through the ways in which learners and their co-participants construct learning activities locally and how they continuously demonstrate to each other that they are engaged in ‘a learning’ activity’. Thus, learning is conceptualized as a sequential process that is directly observable, evolving on a local moment-by-moment basis.

While CA does not deny that learning involves individual or biologically determined dimensions, it puts more emphasis on how interactants’ capacities function and are shaped within the micro-details of communicative practice in the context in which learning takes place. To quote Doheler (2010),

[...] learning is seen as rooted in the moment-by-moment deployment of socioculturally elaborated, locally accomplished and-most typically-interactionally organized courses of practical activities […]. [F]actors such as […] cognitive processing are seen as being configured in response to social practices - and as analysable in terms of how they are observably enacted within these practices […] as a result[,] learning behaviours are not interpreted as the pure result of
previous knowledge, […] rather, learners behave in situated ways, depending how they interpret the situation at hand through the course of its accomplishment. (p. 107)

Language in CA is understood in terms of pragmatic speech acts (e.g. questions and answers, greeting, repairs, assessments) that are constructed and governed by contextually defined rules (of grammar) (Schegloff, 1996). Therefore, learning a language is learning the contextualized and indexical (Ochs, 1996) “encoding of language as a socio-cultural practice” (Hellermann & Cole, 2008, p. 191). Thus, investigating ‘learning’ in terms of language users involves understanding the ways in which the (social) enactment of ‘learning’ the language itself plays an integral part in understanding what is being ‘learned’. Within this line of thought, understanding language learning cannot be detached from its use in social activities, and it involves conceptualizing learning as participants understand it and examining how participants in interaction are engaged in language ‘learning’ activities.

CA sees L2 interaction as context sensitive and context specific in the sense that it is constructed dynamically by the participants on a moment-by-moment basis. At the same time, the L2 classroom is considered to share some general characteristics. Seedhouse (2004) proposes “three properties […which are] universal in L2 classrooms” (p.187). According to Seedhouse, they apply to all L2 classroom interaction, and “they are inescapable in that they are a rational consequence of the core institutional goal and the nature of the activities in L2 classrooms” (Seedhouse, 2004, p.187). The three properties are as follows: firstly, “language is both the vehicle and object of instruction [in the L2 classroom]” (Long, 1983, p. 9, as cited in Seedhouse, 2004, p. 184). Secondly, there is “a reflexive relationship between pedagogy and interaction in the L2 classroom. This means that as the pedagogic focus varies, so the organization of the interaction varies” (Seedhouse, 2004, p. 184). Lastly, “the linguistic forms and patterns of interaction which the learners in an L2 classroom produce in the L2 are potentially subject to evaluation by the teacher in some way”. As van Lier (1988) puts it, “everyone involved in language teaching and learning will readily agree that evaluation and feedback are central to the process and progress of language learning” (p. 32, as cited in Seedhouse, 2004, p. 186). These three properties derive from one another and “are normatively linked in some way to the pedagogical focus which is introduced” (Seedhouse, 2004, p. 186). They are “inherent in the
interaction, and therefore there is a degree of institutional sameness” in L2 classroom interaction (Seedhouse, 2004, p. 209).

2.2.8. Institutional goal and L2 classroom interaction.

Seedhouse (2004) identifies the basic institutional goal of L2 classrooms as “the teacher will teach the learners the L2” (p. 183), and provides an operational definition of L2 classroom interaction as “interaction which is produced in the L2 by teachers and/or learners in normative orientation to a pedagogical focus” (Seedhouse, 2004, p. 203-204, emphasis original). According to Seedhouse, in the L2 classroom, the institutional focus is a pedagogical focus which requires the production of the L2. He argues that “[b]y introducing a pedagogical focus in orientation to which turns in the L2 are produced, the institutional context of the L2 classroom is talked into being, and the interaction produced is L2 classroom interaction” (Seedhouse, 2004, p. 200, emphasis original). The pedagogic focus can be realized in many different ways, leading to a variety of “classroom contexts […], modes of interactional organization through which institutional business is accomplished” (Seedhouse, 2004, p. 206). Seedhouse suggests that while the overarching goal may remain constant for the whole lesson (i.e. teacher will teach the learners L2), the specific contexts in which it is realized may shift rapidly and interaction in a language classroom may also change into activities that are not related to the basic institutional goal of teaching the language. In addition, participants may orient to identities other than those of language teacher and student. In such cases, the institutional goal is said to be “talked out of being” (Seedhouse, 2004, p. 109). Seedhouse recognizes that there are many other varieties of interaction, including those have nothing to do with any pedagogical focus, which occur in the physical setting of an L2 classroom. Such were not considered as L2 classroom interaction in his analysis. Seedhouse asserts that whether an extract can be considered L2 classroom interaction or not is based on “whether the participants in a particular extract orient to their institutional identities and produce L2 in relation to a pedagogical focus and hence in relation to the institutional goal” (Seedhouse, 2004, p. 200).

2.3 Analysis of L2 classroom interaction and identifying pedagogic focus: Seedhouse (1999, 2004)

The fundamental premise of CA is that in the organization of ordinary conversation, the subsequent turns after the first turn emerge from the structure of conversation and they
work as an analytical tool and proof procedure (Sacks, Schegloff, & Jefferson, 1974). The same procedure and methodology is used in institutional settings. In an institutional interaction, the interactants display analyses not only of their partners’ turns as in ordinary conversation, but also of the evolving relationship between the institutional focus and the interaction. Second language classroom interaction is regarded as a variety of institutional interaction where there is an evolving relationship between the interaction and the institutional focus, which is a pedagogic one (Seedhouse, 2004). Thus, the methodology used for the analysis of L2 classroom interaction is the next-turn proof procedure in relation to the pedagogical focus. In this section, I will briefly explain how pedagogic focus in L2 interaction can be understood and analyzed in CA concentrating on the work of Seedhouse (1999, 2004).

2.3.1. Pedagogic focus and interaction.

According to Seedhouse (2004), the principle idea in L2 classroom interaction is that the participants display in their turns the analyses of the evolving relationship between pedagogy and interaction. That is, how the pedagogical focus is related to the turns produced in the L2. Therefore, the analytical task is to explicate how L2 classroom interactants analyse each other’s turns and make responsive moves in relation to the pedagogical focus.

Seedhouse (1999, 2004) points out that the classroom teacher compares the linguistic forms and patterns of interaction which the learner produces with the pedagogical focus which s/he originally introduced, and performs an analysis and evaluation on that basis. The analyst can do exactly the same thing: comparing the teacher’s intended pedagogical focus with the linguistic forms and patterns of interaction which the learner produces, and then analysing the interaction on the basis of the match or mismatch. Seedhouse (2004) states the methodology for analysing classroom interaction below:

the analyst follows exactly the same procedure as the participants and traces the evolving relationship between pedagogy and interaction, using as evidence the analyses of this relationship which the participants display to each other in their own turns (p. 195).
2.3.2. Identifying pedagogical focus.

The first step in explicating the evolving relationship between the pedagogical aim and interaction is to specify what the pedagogical focus is (Seedhouse, 2004, p. 196). Seedhouse introduces three means of determining a pedagogic focus (Seedhouse, 2004, p. 195-197). He based his analysis of collected excerpts from other studies using the first and the last methods, though he argues for the third method to be the main one (Seedhouse, 1999, 2004).

1. A text-internal statement by the teacher of the intended pedagogical focus (text-internal; task as work plan): in many lessons the teacher explicitly states what the focus of the interaction is. A typical example would be “Today’s class is going to be about describing objects and we’re going to look at three different types of description”.

2. A statement made by the teacher in a video or an audio interview after the lesson depicted in the extract (external to the text-task as work plan): the researcher can draw on the interviews made by the teacher after the recording for deciding what the intended pedagogical focus was. This type of evidence of intended pedagogical focus does provide text-external, independent confirmation, which is more convincing for applied linguists. CA practitioners do inevitably make use of some ethnographic knowledge in their analyses of institutional interaction. Consequently, the study reported in this thesis does make some use of ethnographic evidence where appropriate.

3. The text itself (internal to the text; task-in-process): this analysis is endogenous to the details of the talk. The analyst looks at how the participants are displaying their analyses of and orientation to the pedagogical focus in their turns at talk in the details of the interaction, and inductively explicates the pedagogical focus.

While useful, the first and second methods have been criticised for being mere statements of ‘intended’ pedagogical focus or task-as-work plan. Recent studies using the third method demonstrate that the actual pedagogical focus or task-in-process can turn out rather differently from the way it was originally anticipated (Markee & Kasper, 2004; Mondada & Pekarek Doehler, 2004, Seedhouse, 2005b). What the teacher says or said s/he intended as a pedagogical focus of the lesson and the final task performed by the learners may turn out
to be very different. In addition, the pedagogical focus can switch from one turn to another by learners as well as teachers. Consequently, the reflexive relationship between pedagogy and interaction essentially means investigating how the evolving patterns of interactions affect the pedagogical focus. That being said, the third method may be criticized for circularity by applied linguists, as the evidence for the identification of the pedagogical aim comes from the interaction itself (Seedhouse, 2004). However, Seedhouse (2004) argues that this type of evidence is “most convincing to CA practitioners precisely because it is endogenous to the talk and derives from an emic perspective - the evidence relating to the participants’ concerns inhabits the details of the talk” (p. 197-198). He further advocates that the task of the (CA) analysts is to “match the evolving pedagogical focus with the evolving patterns of interaction in the same ways as the participants do and using the same evidence that they do: each other’s turns at talk” (Seedhouse, 2004, p. 198). Therefore, this text-internal form of evidence of pedagogical focus has been considered the most appropriate in CA analysis. To my knowledge, there has been no study which attempted to employ all three methods in identifying the pedagogical focus, despite the fact they complement each other. In the present thesis, efforts are made to employ all three methods.

2.4 Types of classroom contexts and pedagogic focus

Thus far, it has been argued that by introducing a pedagogical focus in orientation to which the turns in the L2 are produced, the institutional contexts of the L2 classroom are talked into being and the interaction produced becomes L2 classroom interaction. The pedagogical focus is not a static and invariant one but the business of teaching the learners an L2 can be realized as a number of “modes of interactional organization” or context (Seedhouse, 2004, p. 206). Seedhouse emphasizes that L2 classroom context is “not an undifferentiated whole but can be divided into a number of subvarieties or L2 classroom contexts, in which a particular pedagogical aim enters into a reflexive relationship with a particular organization of the interaction” (Seedhouse, 2004, p. 204). Seedhouse contends that L2 classroom context should be understood “not only as institutional subvarieties, but also as the interfaces between pedagogy and interaction, and thus as the environments through which institutional business is accomplished” (italic original, Seedhouse, 2004, p. 205). The different L2 classroom contexts or subvarieties need to be understood as “different actualizations of the reflexive relationship between pedagogical focus and interactional organization” (Seedhouse, 2004, p. 205). In principle, there is no limitation on the kinds of interaction which may occur in L2 teaching settings.
Seedhouse further advocates that *contexts* can shift with great fluidity turn by turn “during an L2 lesson and can be generated by learners as well as by the teacher” (Seedhouse, 2004, p. 207). The L2 classroom context is regarded as “only one part of the overall interactional architecture of the L2 classroom and one manifestation of the complex, reflexive relationship between pedagogy and interaction” (Seedhouse, 2004, p. 207-208). An instance of L2 classroom interaction therefore can be viewed, according to Seedhouse, as having “complex personality”, in the sense that it displays both homogeneity (institutional sameness; having the three inherent properties of L2 classrooms) and heterogeneity (unique nature), and as “functioning on a number of different levels at the same time […] this property is called *complementarity*” (Seedhouse, 2004, p. 208).

### 2.4.1. L2 Classroom contexts as a subvariety of institutional context: three-way context model.

In order to better describe a L2 classroom context as a subvariety of institutional contexts, Seedhouse proposes a “three-way context” model (Seedhouse, 2004, p. 208). The model is called a three-way view of context, since it involves three perspectives on context represented in decreasing circles “with each level feeding the other reflexively” (Seedhouse, 2004, p. 214) (*Figure 1.*).

![Figure 1 A Three-Way View of Context](From Seedhouse, 2004, p. 510)

1. **Micro context**
An analysis always starts at the micro context level. At this level, the context is unique, and the focus is on the sequential environment on a turn-by-turn basis. Context is treated “as both the project and product of the participants’ own actions and therefore as inherently locally produced and transformable at any moment” (Drew & Heritage, 1992, p. 19, as cited in Seedhouse, 2004, p. 210). The interaction is viewed as a singular occurrence and the emphasis is on heterogeneity.

2. L2 classroom context

At this level, the perspective on context starts to broaden, and the particular combination of pedagogical focus and organization of the interaction (L2 classroom context) which is currently in operation is examined in detail. In addition, whether a particular L2 classroom instance has something in common with other instances which are organized in a similar way is examined. For instance, if the pedagogical focus is on the form and accuracy, the ways in which this instance is similar or dissimilar to other such instances is observed.

3. Institutional context

At the level of institutional context, the perspective on context is broadened even further to that of the L2 classroom. The interaction is viewed as an example of L2 classroom discourse and the emphasis is on homogeneity. Instances of interaction are seen as manifesting the three universal properties of L2 classrooms (as described in section 2.2.8), and therefore there is a degree of institutional sameness.

Seedhouse asserts that the three-way model works simultaneously on the particular instance by turn-by-turn analysis (micro level) and the organization of the institutional variety of talk (macro level). It therefore links “micro and macro levels by treating modes of interactional organization as contexts themselves” (Seedhouse, 2004, p. 214). In sum, context is not seen as something external to the interaction in CA. So in the three-way perspective on context, there’s always a tension among (a) a description of an extract of L2 classroom interaction as a unique occurrence, locally produced by the participants, (b) a description of it as an example of interaction within a particular L2 classroom context, and (c) a description of it as an example of institutional L2 classroom discourse (Seedhouse, 2004, p. 211).
2.4.2 Types of L2 classroom context, pedagogic focus and repair organization.

As Seedhouse (2004) argues, the L2 classroom context is “one instance of the reflexive relationship between pedagogy and interaction [...] an instantiation of a particular pedagogical focus and a particular organization of the interaction” (p. 207). Using his three-way view of context, Seedhouse (2004) provides a comprehensive overview of the reflexive relationship between the pedagogical focus and the repair organization in three L2 pedagogic contexts: form-and-accuracy, meaning-and-fluency, and task-oriented. The relationship is explicated in terms of typical participants’ repair, repair trajectories, types of repair, and focus of repair (what is repairable). The following is a summary of the repair practices identified in each of three pedagogic contexts defined by Seedhouse (1999, 2004).

2.4.2.1. Form-and-accuracy context.

Firstly, in form-and-accuracy contexts, the pedagogical focus is considered to be on the linguistic form and accuracy so that “personal or real world meanings do not enter into picture to a great extent” (Seedhouse, 2004, p. 144). In this context, repair is overwhelmingly initiated by the teacher (other-initiation) and there are more instances of OISR (Excerpt 1.19) than other-repair (Excerpt 1.20). This is also the phenomenon identified in L1 classroom contexts (McHoul, 1990, as cited in Seedhouse, 2004).

**Excerpt 1.19 OISR in Form-and-Accuracy context**

L1 they are watch televi-televisio
T okay now. yesterday at eight o’clock (. ) they (. )
L1 they ar[e they watche[s watched [ they were=
T [they- [they:: [they ( )
L1 = (. ) watching
(van Lier, 1988, p. 197)

**Excerpt 1.20 OIOR in Form- and-accuracy context**

L it bug me to have=
T =it bugs me. it (bugzz) me
L it bugs me when my brother takes my bicycle.
(Lightbown & Spada, 1993, p. 76)

(From Seedhouse, 2004, p. 146)

In both OISR and OIOR trajectories in a form-and-accuracy context, the teacher initiates
repair in order to obtain the learner production of a precise string that includes the targeted linguistic forms. Similarly, SIOR is also common in this context (Excerpt 1.21). The learner will initiate other-repair if s/he reaches a point at which s/he is no longer able to proceed to verify that the form produced is in fact the one targeted. In the following excerpt, L1 starts off in the L2 and then initiates other-repair using the L2.

**Excerpt 1.21 SIOR in Form- and-accuracy context**

L1 (where is the way) is dat goed? ((tr.: is that correct?))
L2 ja: where is the way to the cinema
(van Lier 1988, p. 201)

(From Seedhouse, 2004, p. 147)

On the other hand, SISR is relatively rare in this context because it is the teacher who evaluates the accuracy of the learners’ form and who therefore predominantly initiates the repair. Another notable, though rare, repair practice noted by Seedhouse in this context is when the teacher initiates peer-repair. When one learner has failed to produce the string of linguistic forms which the teacher is targeting, the teacher invites other students to repair (Excerpt 1.22a). Seedhouse (2004) proposes that this type of repair appears to be context-specific in a sense that “there is no evidence that this trajectory ever occurs in ordinary conversation; it is not reported in any of the CA works on repair in conversation [...] and appears to occur in the database only in form-and-accuracy contexts” (p. 148)

**Excerpt 1.22a OIOR conducted by a third party/teacher initiated peer-repair in form- and-accuracy context**

L1 Erm! sie sind im Schirmgeschäft, weil, erm(.)
sie(.) möchten eine[sic] Schirm kaufen. ((tr.: er,
you're in the umbrella shop because, er, they want an umbrella to buy))
T Was meinen die anderen? Ist das richtig, was Mary
sagt? (.), Roger, Sie Schütteln den Kopf. Verstehen Sie?
Sie schütteln den Kopt.((tr.: what do the others think? is what Mary says correct? Roger you're shaking your head. do you understand? you're shaking your head.))
Wie sagen Sie es? Warum sind sie im Schirmgeschäft?((tr.: how do you say it? why are they in the umbrella shop?))
L2 Erm, weil sie einen Schirm kaufen möchten.((tr: er,
because they want to buy an umbrella))
Specific to form-and-accuracy contexts is that any learner contribution which does not correspond exactly to the precise string of linguistic forms required by the teacher may be treated as a trouble source by the teacher. Thus, even learner utterances which are entirely correct in linguistic terms may still be subject to repair by the teacher (Excerpt 1.22b).

**Excerpt 1.22b**

T Wohin ist Susan gefahren? ({tr.: where has Susan gone to?})Michelle.
L Sie ist mit den Zug nach Edinburg gefahren. ({tr.: she's gone to Edinburgh by train})
L Sie ist nach Edinburg gefahren.({tr: she's gone to Edinburgh})
T Gut.((tr: good))

(Westgate, Batey, Brownlee, & Butler, 1985, p. 278)

(From Seedhouse, 2004, p. 145)

**2.4.2.2 Meaning-and-Fluency context.**

Seedhouse (2004) claims that in meaning-and-fluency contexts, the pedagogic aim is to maximize the opportunities for interaction presented by the classroom environment and the classroom speech community itself. The focus is on the expression of personal meaning (i.e. message) rather than on linguistic forms, on fluency rather than on accuracy [...thus] the focus of repair in this context is on establishing mutual understanding and negotiating meaning; in contrast to form-and-accuracy contexts, repair of correct and appropriate linguistic forms never occurs (p. 149)

Seedhouse claims that in this context, incorrect linguistic forms and interlanguage forms are frequently ignored, unless they lead to a breakdown in communication. For example, in Excerpt 1.23, the teacher does not attempt to repair linguistic errors at all but instead
attempts to clarify the message or meaning (indicated by an arrow). At times, overt correction occurs but only when the trouble source hinders the interaction from continuing. Repair in a meaning-and-fluency context is “conducted in a way that is more similar to ordinary conversation, and in a completely different way from the form-and-accuracy context” (p. 149-150).

Excerpt 1.23

T could you tell me something about marriage in Algeria? who is married here?
L1 Azo, only Azo.
T alright, your opinion about that.
L2 he will marry.
T oh, he is engaged, engaged. tell me something about the institution of marriage in Algeria. tell me something about it.
L3 there are several institutions.
T you don't have marriage in Algeria. what do you have then?
L4 only women and men.
T yes, that's what marriage is.
L1 the marriage in Algeria isn't like the marriage in England.
T \(\Rightarrow\) what do you mean?
L2 for get marriage you must pay two thousand,
L5 yes more expensive than here,
T \(\Rightarrow\) why do you have to pay money?
L6 no. it's our religion.
L7 not religion but our tradition.
L8 no religion, religion, in religion we must pay women, but not high price, but tradition.
L5 between women, women does not like to married to a low money because it is not, it is(,)
T oh, dowry, oh dear.
(Hassan, 1988, p. 258-259)

(From Seedhouse, 2004, p. 150)

2.4.2.3. Task-oriented contexts.

A typical characteristic of task-oriented contexts described in Seedhouse (2004) is that the teacher introduces a pedagogical focus by allocating tasks to the learners and then generally withdraws, allowing learners to manage the interaction themselves [...] the teacher does not play any part in the interaction, although learners do sometimes resort to the teacher for help when having difficulty with the task (p. 153).
In contrast to the two previous contexts, “there is no focus on personal meanings or on linguistic form” and the learners are required to “communicate with each other in order to complete a task, and the focus is on accomplishment of the task rather than on the language used”(Seedhouse, 2004, p. 153). Therefore, trouble is defined in this context “as anything that prevents the learners from completing the task, and repair is focused on removing such hindrances” (Seedhouse, 2004, p. 153) The learners in Excerpt 1.24 for example, aim to establish understanding and to reach consensus on how to group the words. In line 09, L2 uses an open type of repair initiator to elicit L1’s understanding of the meaning of the word “Darwin”. In Line 10, L1 displays an understanding of the words as referring to a man. In Line 11, L2 conducts OIOR and displays an alternative understanding of “Darwin” as referring to a place. In Line 12, L1 insists on “Darwin” being a man and adds a membership categorization device (i.e. a discoverer). Finally in Line 13, L2 confirms that agreement has been achieved.

**Excerpt 1.24**

01 L1 statistic and diagram(.)they go together, you
02 know diagram?
03 L2 yeah.
04 L1 diagram and statistic: are family(.)but maybe,
05 I think, statistic and diagram(.)you think we can
06 put in science? or maybe (.)
07 L2 science, astronomy,(yeah)and er can be agriculture
08 L1 agriculture’s not a science
07 L2 yes, it’s simi ar(.)
08 L1 no(.)er may be Darwin and science(.)
09 L2 what’s the Darwin?
10 L1 Darwin is a man
11 L2 no, it’s one of place in Australia
12 L1 yes, but it’s a man who discover something,yes, I’m sure
13 L2 OK.
(Nunan, 1993, p. 60)

(From Seedhouse, 2004, p.154)

Seedhouse found that the learners in task-oriented contexts occasionally called on the teacher as a resource to assist in repairing trouble (SIOR), using the teacher as the ‘other’ but there was no attempt by learners to correct another learner’s linguistic forms. In this context, self-initiation of teacher repair (SIOR) is more common (and more appropriate to the pedagogical focus) than teacher-initiation of repair (OISR).
2.4.2.4 Summary of Seedhouse’s approach to L2 repair in classroom contexts.

In Seedhouse (2004, 2007), the mechanisms of turn-taking, sequencing, and repair are proposed to be “all reorganized and adapted in relation to the institutional goal” (Drew & Heritage, 1992, as cited in Seedhouse, 2007, p. 530). That is, in institutional talk, the institutional goal determines what constitutes trouble and what the focus and conduct of repair is. Subsequently, Seedhouse argues that what we need to do as CA analysts is to understand “how the teacher adapts and normatively employs” the mechanism of repair (Seedhouse, 2007, p. 531). For example, Seedhouse notes the pedagogical focus of the interaction in Excerpt 1.25 as occurring in a form-and-accuracy context. In this context, the focus is on getting the students to produce a chain of specific linguistic items. Consequently, the major feature of the organization of repair in this context is the very tight connection between the linguistic forms and patterns of interaction that learners produce in the L2.

According to Seedhouse’s analysis, the teacher’s pedagogical focus in Excerpt 1.25 is to have the learner (via L2 prompts) produce the cup is in the box. In other words, repair could be initiated by the teacher if the linguistic forms and patterns of interaction produced are not exactly identical to those intended by the teacher's pedagogical focus. For instance, in line 03, L displays an understanding of the relationship between the pedagogy and interaction as providing an answer about location, which L does in line 03. Although this answer would be acceptable in a meaning-and-fluency context, T displays (line 04) that this relationship is not the one required between the current pedagogy and interaction by initiating repair of understanding. This repair is designed to help L form a complete sentence. However, it is misunderstood by L, who displays in line 05 the same (mis)understanding as before. T therefore initiates repair again in line 06, and this time L displays (in line 07) an understanding of the relationship between pedagogy and interaction as making a complete sentence. Subsequently, in line 08, T displays an understanding that this relationship has been achieved. It is precisely by T's initiation of repair of a ‘correct’ response that “the pedagogic focus on a form-and-accuracy is talked into being” (Seedhouse, 2007, p. 532). In this analysis, the entire mechanism of repair is considered to have been adapted by the teacher for a specific pedagogical focus.

Excerpt 1.25

01 T right, the cup is on the top of the box, ((T moves cup))
now, where is the cup?
in the box
the cup is (.)?
in the box
the cup is in (.)?
in the box
right, very good, the cup is in the box.

(From Seedhouse, 2004, p. 144)

Specifically, Seedhouse (2004) proposes that in L2 classrooms, the definition of what is trouble and repairable, and also the entire mechanism of repair become inevitably adapted to the institutional goal of language learning and to the particular pedagogical focus employed. Participants in L2 classroom interaction are thus always displaying to one another their understanding of the current state of the evolving relationship between pedagogy and interaction, and they act on the basis of these analyses, and this “reflexive relationship between pedagogy and interaction […] is] the omnipresent unique feature of the L2 classroom” (Seedhouse, 2004, p. 531).

Thus far, I have concentrated on the description of types and organization of repair, and repair organization in different L2 classroom contexts. The next section examines how learning is conceptualized and investigated in CA, followed by a review of previous studies which focused on tracing change in learners’ interaction competence over time and their limitations.

2.5 Recent CA investigations of L2 learning

With regard to investigating L2 learning, CA research falls roughly into two groups. One group of CA practitioners argue that CA is not a learning theory and cannot address or account for L2 learning (He, 2004). On the other hand, those who argue that CA research can investigate learning assert that when researchers investigate learners’ use of conversational organization they are in fact also investigating learning (Brouwer & Wagner, 2004; Hellerman, 2009, 2011; Markee, 2000; Seedhouse & Walsh, 2010). To reiterate, the present study is concerned only with the latter group. In this section, I will briefly describe the theoretical and methodological approach for investigating of L2 learning in CA.
2.5.1. Theoretical approach: Learning is publically displayed.
CA researchers who argue that learning can be accounted for in the talk-in-interaction have theoretical assumption that cognition is socially shared and grounded in interaction (Kasper, 2009a). From a CA perspective, interaction is the primordial site of sociality (Schegloff, 1996). It furnishes “the infrastructure for social institutions, the natural ecological niche for language, the arena in which culture is enacted” (Schegloff, 2006, p. 70). In addition, it is also the site where cognition is constituted as a socially shared phenomenon (Schegloff, 1991). The most fundamental and critical point in CA is that through the sequential placement and format of their turns, participants display to each other how they understand the preceding turn, or turns (Schegloff, 2006). Participants track constantly what others know and plan the next turn based on their evaluation of the previous utterance. For example, in his study of the particle Oh in English, Heritage (2005, p. 188) notes that “cognitive process is not something which speakers simply report, it is also something which they embody in talk-in-interaction”. In other words, as speakers use interactional organization and linguistic resources to generate and sustain intersubjectivity, their socially shared cognition is evidenced in the ‘layers’ of interactional organization.

The classroom, like any other site of social interaction, is a place in which understandings are routinely displayed from one turn to the next. “[T]aking a turn in an ongoing conversation is itself an analytic task and achievement of understanding […] To take a turn is to evidence understanding” (MacBeth, 2011, p. 440, emphasis in original). In CA, speakers’ orientation and understanding are considered to be demonstrated in their turns in sequential organization of conversation, and through CA’s analytic tools it is possible to track states of cognition such as knowledge and understanding.

2.5.2. Tracing change in CA.
Moving beyond providing descriptions of the types and sequential organization, recent CA publications have begun to address the relationship between CA and language learning. (Markee & Kasper, 2004). Within the CA literature today, however, views on the relationship between CA and language learning differ considerably (for a review see Larsen-Freeman, 2004; Lee & Hellermann, 2014). Some researchers argue that while CA can help us understand the discourse processes that promote language learning, it is not in itself a learning theory and cannot address learning issues (He, 2004). On the other hand, some socially-oriented CA advocates (Kasper, 2009a; Markee, 2008) assert that when researchers investigate the structure of conversational practices such as repair, they are in
fact also investigating language learning. Language learning in this framework is seen as participating in “a set of socially distributed practices that are stated in the interactional spaces between conversational partners” (Markee, 2004, p. 593). There has also been an attempt to incorporate exogenous theory (e.g., situated learning theory, legitimate periphery participation, scaffolding in learning) to address learning (Marco, 2015; Young & Miller, 2004). However, within the socially oriented CA researches, the views on what constitutes change differ. Kasper (2004) for instance takes the view that L2 conversation offers an opportunity for learners to increase fluency in what has already been acquired, as well as making specific linguistic gains (e.g. lexis, morphosyntax, pragmatics, discourse ability). This view contrasts with that of Young and Miller (2004) who do not mention linguistic units, but regard ‘participation’ in a community of practice as signalling change, where learning is evidence of the participant’s movement from peripheral to fuller participation.

Recent CA studies that have applied the properties of the contingent organization of talk to the study of L2 learning and change can be broadly classified in two ways. The first emphasizes the description of the learning process as a conversational process (Kasper, 2004; Markee & Kasper, 2004). These studies treat learning as a common-sense category to describe the actions the speakers are engaged in and are largely reluctant to go beyond descriptive findings concerning the instances of local opportunities for learning in interaction. Borrowing Markee’s (2000) term, these studies regard changes as occurring in the short-term, for example changes occurring within a single interaction or within subsequent interactions that occur shortly afterwards (e.g. within the same lesson). Consequently, such studies have received some criticism from SLA researchers on the grounds that their research does not tackle the issue of learning and acquisition (Gass & Selinker, 2008; Hall, 2004; Hall, 2007; Larsen-Freeman, 2004). In response to such criticism, the second form of classification, which is the approach adopted in this study, attempts to overcome the limitations of a purely descriptive focus by adopting a developmental perspective to CA studies. According to Markee’s definition, change is regarded as occurring over successive activities over a period of time (Brouwer & Wagner, 2004; Ishida, 2009; Markee, 2008; Pekarek-Doehler, 2010). Researchers focus on both how learning opportunities are created and how changes take place at different points over an extended period (i.e. change in the long term).
In the following section, I will provide examples of case studies from this second approach. The first half of the section presents Markee’s (2008) longitudinal study, which investigated how learning took place over time by documenting when and how a selected object of learning was employed in extended conversational sequences. The second half deals with two of Hellermann’s (2009, 2011) case studies, which examined what changes occurred in learners’ SISR and OISR practices, as an aspect of how interactional competence develops over time.

2.5.3. Documenting learning over time as socially displayed cognition in CA: methodology.

What CA purports originally is the investigation of local sequentialities in interaction. Many previous CA studies in L2 learning, naturally, also concerned themselves with documenting learning in local interaction (i.e. one-off instance, short-term) (see Markee, 2003 for a review). These studies have been criticized for not addressing one of the central analytic issues in L2 studies: developmental change in learner language. According to Ellis (2010), “[a]ny theory of L2 acquisition […] must necessarily account for change in the learners’ use of the L2 over time. It is simply not possible to talk about acquisition (however defined) without acknowledging that it involves change” (p. 44). Tracing changes in learners’ use of L2 is possible only when there are recognizable and measurable linguistic objects for comparative analysis. Subsequently, L2 acquisition researchers have identified the presence or absence of particular L2 forms as measurable objects.

CA researchers, however, argue that, given the nature of face-to-face interaction, measuring linguistic change as a sign of language development does not necessarily illuminate the process through which such changes arise. L2 use essentially involves a complex array of functional and situated meaning-making practices and assembling the L2 linguistic forms in contingent language use. Speakers involved in the learning must come to terms with the moment-by-moment contingencies that turns at talk present (i.e. engage in the task of achieving intersubjectivity). For this reason, CA studies emphasize that it is crucial to examine the details of language production and interaction between participants in terms of the contingent uses of language by focusing on speakers’ orientations (noticing in SLA parlance, see Schmidt, 1990) and relevancies that interlocutors display to each other in their talk in interaction (Kasper, 2006; Seedhouse, 2004).
To work within the CA framework and also to account for ‘change’, recent CA publications have begun to address the relationship between CA and language learning and the need to move beyond providing descriptions of the types and sequential organization by adopting a developmental perspective (Markee & Kasper, 2004). In Markee’s (2000) definition, these studies regard change as being observed in different moments or over successive activities over a longer period of time.

Studies within CA that investigate learning from a developmental perspective can be broadly divided into two. These two strands differ in terms of what they view as ‘development’ or change. Researchers like Kasper (2009a) and Markee (2011) focus on investigating when and how a particular linguistic item is employed by a learner, while CA practitioners like Hellermann argue that the focus of research should expand from formal linguistic items to interactional skills (Brouwer & Wagner, 2004; Hellermann, 2009, 2011) or interactional competencies (Kasper, 2006). The former typically identifies any changes in the target linguistic forms of investigation, while the latter approach aims to demonstrate any structural regularity in conversation as the objects of change. Though these two approaches differ in their analytic focus, longitudinal studies within the CA framework essentially involve documenting and tracing changes in how language learners perform over longer stretches of time. That is, a speaker’s performance at occasion A is contrasted with his or her performance at some later occasion B in order to ascertain what has been learned. Such studies do not describe learning ‘as it happens’ in interaction but rather illuminate how the talk has changed.

In the following section, I will present several case studies based on each of these CA approaches introduced above. In the first half, Markee’s 2008 case study demonstrates his effort to trace how a particular linguistic item is used in the participant’s production over time as the object of development. The latter half of the section discusses two of Hellermann’s (2008, 2011) longitudinal case studies as an example of a CA study which examines a specific conversational resource in the sequential organization of talk as the object of development. Then, a summary is presented of methodological issues in previous developmental CA studies and implications for the present thesis are discussed.

2.5.3.1. A case study-Markee (2008): Tracing linguistic items as an object of learning.

In order to observe how learning of a specific item takes place over time, Markee (2008) developed the Language Behaviour Tracking (LBT) methodology. LBT is employed to
investigate how participants demonstrably orient to the details of talk that occur in a speech event that is currently being enacted (Speech Episode 2) compared to a course of action that first occurred in a prior speech event (Speech Episode 1) that happened days, weeks, or even months earlier. The LBT methodology involves two forms of analysis: learning object tracking (LOT) and learning process tracking (LPT). LOT involves documenting when the learning object occurs during a specified period (e.g. a semester); and LPT involves conversation analyses of how and when participants orient towards, and potentially incorporate, the particular learning objects occurring in different speech events in their interactional repertoires.

Markee (2008) proposes that interaction competence in a L2 “includes but goes beyond learning language as a formal system…[it] involves learners orienting to different semiotic systems… [such as the turn taking, repair, and sequence organization of eye gaze] and deploying these intersubjective responses to co-construct with their interlocutors locally enacted, progressively more accurate, fluent, and complex interactional repertoires in the L2” (p. 406). That is, as participants achieve interactional repertoires, which by definition consist of extended sequences of actions (Schegloff, 2007), they may also focus on discrete learning objects such as verb morphology, pronunciation, or vocabulary items that are embedded in these sequences (e.g. most noticeably, in definition sequences). Accordingly, LPT involves “carrying out conversation analyses of participants’ emerging grammar to understand how they orient to learning objects as resources for doing language learning behaviours that occur both in the moment and over time” (Markee, 2008, p. 404).

In his study, Markee (2011) uses the LBT methodology to illustrate how a Chinese adult L2 learner of English and the instructor actively oriented to the word prerequisites as they managed the learner’s oral avoidance of the word during an episode of classroom talk (Speech episode 1), and then in office hour talk (Speech episode 2) that occurred 11 days later. Markee observed the participants’ verbal (e.g. change in intonation) and visual semiotic (e.g. gestures, use of PowerPoint slides) practices to show how the definition of prerequisites changed over time. Excerpt 1.26 is the participant’s classroom talk (Speech episode 1). In this excerpt, the participant does not produce the word prerequisites orally although the word appears in written form on the Power Point slides (line 9). While she orally reads the other information on the slide as it appears (e.g. the sub-titles of Textbooks and Grading), she goes into an extensive description when it comes to orally producing the word prerequisites. Markee suggests that the perturbations in line7-16 are consistent with
the participant “doing oral avoidance of the word prerequisites and simultaneously initiating a word search to compensate for the locally contingent oral unavailability of this word” (p. 607). Then, in line 17 the participant eventually settles on the word ‘background/e:/’ as an alternative. Markee argues that this observation illustrates how “CA-for-SLA researchers may, within strictly specified methodological constraints, justifiably use exogenous documents [such as the participant’s use of] Power Point slide as a resource for analysing language learning behaviour” (Markee, 2011, p. 607). In this study, the participant never orally produced the word prerequisites in later production. In the office talk with the teacher (Speech episode 2, see Excerpt 1.27), the participant justified her previous avoidances of the word because she could not pronounce the word correctly³.

Excerpt 1.26

<table>
<thead>
<tr>
<th>Fragment 1: Power Point Presentation, 2/2/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 HL: last uh:: at the end of the::</td>
</tr>
<tr>
<td>2 semester:: we will introduce some</td>
</tr>
<tr>
<td>3 principle of the: (h)u-</td>
</tr>
<tr>
<td>4 ?: (sneeze)</td>
</tr>
<tr>
<td>5 HL: user</td>
</tr>
<tr>
<td>6 ?: (sneeze)</td>
</tr>
<tr>
<td>7 HL: (interface) design (. ) this uh-</td>
</tr>
<tr>
<td>8 [(0.6)]</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10 all information about the</td>
</tr>
<tr>
<td>11 courses uh (1.0) and uh:: (. )</td>
</tr>
<tr>
<td>12 the rest uh is uh:: (. )some</td>
</tr>
<tr>
<td>13 knowledge uh you’ve (. ) you’ll will (. )</td>
</tr>
<tr>
<td>14 (prepare) attention to:</td>
</tr>
<tr>
<td>15 (. ) about uh: (. ) before this</td>
</tr>
<tr>
<td>16 class/e/ you’ll have some uhm</td>
</tr>
<tr>
<td>17 (. ) background/e:/and uh::</td>
</tr>
<tr>
<td>18 textbooks and uh grading and- (. )</td>
</tr>
<tr>
<td>19 ?: that’s all (. ) thank you.</td>
</tr>
<tr>
<td>20 huh huh</td>
</tr>
<tr>
<td>((Clapping from the audience.))</td>
</tr>
</tbody>
</table>

(From Markee, 2008, p. 607)

Excerpt 1.27
2.5.3.2. Summary and limitations.

With the LBT methodology, it is possible to trace when and how learners orient to the target linguistic feature across speech events. However, as Markee (2008, 2011) acknowledges, there are some limitations to the methodology. To begin with, successful language learning behaviours are most convincing when the participants deploy multiple examples of these behaviours. However, only some of these behaviours may be observable in particular instances of talk-in-interaction. Thus, it may be that only a small proportion of L2 change becomes directly observable in and through talk. Further, it is impossible “to guarantee that this methodology can reliably capture all instances of a specific learning object during a particular time period” (Markee, 2011, p. 421). Moreover, the demonstration of successful language learning behaviour becomes impossible when “there is no evidence of independent, productive use of a new learning object.” (Markee, 2008, p. 408). It is worth noting that acquisition is equalled with production. In this study, although the researcher was able to document when the learning object occurred (LOP), and how the learner recognized and employed various interactional repertoires in avoiding the item (LPT) at a different point in time, there was no evidence of ‘learning’ of the target L2 word in the sense that it was never found in learner’s independent production.

Another point to note is that Markee does not explain how and why the particular lexical item prerequisites and the ways in which the participant avoided using it were chosen as the object of change for investigation. It is unclear whether Markee chose to examine the word prerequisites prior to data collection or as a result of the analysis. It can be assumed from the activities involved in the lessons observed (e.g. explaining what was required in
taking a course), that Markee may have chosen this linguistic item because the learners had to use this particular word to achieve the task goal, therefore it was more likely to appear consistently in lessons at different point in time than other lexical items. Validity in selecting a particular linguistic item as an analytic focus prior to the data collection needs further consideration as it goes against the CA principle of unmotivated looking.

2.5.3.3. A case study-Hellermann (2009, 2011): documenting change in interactional skill as an object of learning.

While Markee (2008) focused on investigating when and how a particular linguistic item was employed by a learner, Hellermann based his analyses on the situated learning framework (Lave & Wenger, 1991) in which language learning is perceived as “participation or mutual engagement in a joint enterprise” within a community of practice (Hellermann, 2009, p. 119). In the context of L2 learning, the term ‘community of practice’ refers to communication or participation in English (L2) by language users when they engage in it as a social activity (Hellermann, 2009). In this section, I will present two of Hellermann’s (2009, 2011) case studies which explored changes in an adult L2 learner’s use of repair as an interactional skill in an L2 classroom community of practice over time. Then, a summary of methodological issues in the previous developmental CA studies and implications for the present thesis are discussed.

In his case study of a female adult ESL speaker, Hellermann (2009) examined how the self-initiated repair practice in talk-in-interaction was accomplished at different points in time during the L2 classroom interactions over the course of 18 months (five-terms). The repair sequences were analysed for the placement of repair initiations, the production practices used for initiation and repair, the activity contexts within which the repairs took place, and how the production of repair might provide evidence for the emerging syntactic organization of language learners. The author divided the instances of talk-in-interaction into two broad activity contexts: ‘task- directed’ and ‘conversational’. He defined the former as the talk which was clearly designed in service of a teacher-assigned language learning task while all other talk-in-interaction was characterized as conversational. Approximately four hours of talk-in-interaction that included the participant was transcribed with an average of 45 minutes of talk per term. A total of 205 instances of self-initiated self-repairs (SISR) were collected.

Along with a detailed analysis of the repair sequences, Hellermann also measured
frequency of the learner’s SISR overtime. The author notes that this frequency in and of itself cannot be attributed to a change in competence in language production or knowledge of language. However, “looking longitudinally, the steady rise in frequency of SISR would suggest an increase in the opportunity for the participant to critically assess her own talk” (Hellermann, 2009). Hellermann (2009) suggests that the learner gradually increased use of repair over time as an interactional resource, and developed a more (accurate) orientation to different aspects of the L2. He then argues that the change in frequency, in materials that were oriented to as repairable, and how they were repaired at different points in time, suggest change in the speaker’s repertoires for doing SISR, and this emergence of repair behaviours needs to be considered as part of her overall language development. However, while Hellermann investigated sequential structures of SISR formatting as an object of focus for examining language development, this study does not report on whether there was observable change in particular linguistic items or grammatical objects which were the source of trouble over time.

In the follow up study, Hellermann (2011) examined repair instances in which the focal participant (the one orienting to the trouble source) either repaired their own talk or initiated repair on their interlocutor’s talk in order to investigate what the learners oriented to as repairable at different points in time, and how this orientation was displayed in their conversation through the way they accomplished repair. Working with a video recording of non-elicited data of classroom interaction of adult learners of English, Hellermann collected instances of two learners’ engagement in dyadic interactions in the language learning classroom, one of them being Inez, the same learner as in the previous study mentioned above (Hellermann, 2009). Approximately 400 minutes of talk-in-interaction was collected over the course of five terms (five 10-weeks terms). The data for analysis consisted of an average of about 40 minutes of talk per term for each participant and over 300 examples of repair sequences were collected. The author first identified a recurring repair sequence type used by each learner in the first term of study. Then he traced changes in the repair practices by examining similar contexts for repair and the practices used by the participants at different points in time (data samples from Terms 1, 2, 3 and 5 were analysed). The analysis focused on the sequential organization and mechanisms for doing the repair (e.g. relaying the trouble source to initiate repair, intonation, and what the speakers oriented as repairable.

2.5.3.4 Summary and limitations.
In summary, Hellermann’s case studies were an attempt to track changes in learner’s interaction competence through a longitudinal focus on repair. Based on the findings, the author argues that there is evidence of learners orienting to different trouble sources for repair and using different methods to initiate and repair at different points in time. These changes at a structural and pragmatic level in repair practice are evidence of their changing abilities to participate using English. At the same time, these changes are necessitated, in part, by the different interactional configurations that arose in different classrooms and contexts (i.e. moving to an advanced level). Thus, they are not simply changes in an individual’s language competence; rather, interactional competence develops as part of language development in a classroom community of practice. Therefore, such evidence for change in practice over time must be considered together with the contexts in which the practice takes place. The fact that learners’ use a wider repertoire of methods for doing repair at later points in time is also likely to reflect the changes in pedagogical contexts that occurred. In saying that, there is inevitable difficulty in separating the changes seen in the learner’s language use at different points in time from the contextual changes which occurred concurrently.

On a theoretical level, as CA does not provide a rationale for learning, Hellermann’s study drew on situated learning theory to provide explanatory adequacy for the changes he noted. Subsequently, Hellermann viewed language learning as “learning to participate in communication with other speakers” (Brouwer & Wagner, 2004, p. 33) and what happened in the discourse-in-interaction was characterized within the broader context of the learners’ community of practice. In other words, within this framework, the changes in the structural regularities of repair organization are considered as evidence of changes in the conventions that the cultural members of the target communities have built and shared (Lave & Wenger, 1991). He argued that, although there are no linguistic changes, these changes reflect the speaker's improvement in establishing social relations and gaining knowledge of each other (Brouwer & Wagner, 2004; Hellermann, 2009, 2011; Markee, 2008). These are theoretical arguments that need stronger empirical evidence.

2.5.4. Summary of methodological issues in previous developmental CA studies.
A major issue in tracing a particular linguistic item as an analytic focus, as in the case of Markee (2008)’s study, is that while the analytic approach is CA, the issue of ‘measuring’ and ‘tracing learning’ seems to be inspired by language acquisition research (i.e. tracing changes in the use of a particular linguistic change). Moreover, as Markee (2008, 2011)
notes, independent and productive use of the learning object needs to be further demonstrated in learners’ later production. It is usually the case that only a small proportion of L2 changes are directly observable. The arguments about whether and if so, to what extent CA should apply the developmental perspective to the analysis of conversation data and still remain true to CA principles need further empirical support. It is beyond the scope of this study to develop an approach which can successfully capture the essence of CA and at the same time provide compelling evidence of developmental changes in learner language. Instead, by addressing some of the major difficulties and issues in CA and learning, I hope to provide critical perspectives in the investigation of L2 language development as a whole.

One fundamental issue in developmental CA studies which regard interactional competence as the object of change as in Hellermann (2009, 2011), concerns the very nature of describing change in terms of change in an individual’s interactional competence over time on the basis of descriptions of interactional practices. When the study investigates the development of L2 learner’s interactional competence as change, it needs to make the case that the participant’s ‘tracked interactional method’ is the same method over time, even though the L2 learner’s performance has changed. In the same vein, describing changing participation in relation to a sequential position in the interaction needs to take into consideration that the ‘participation’ may change either by the learner performing different actions over time, or by the learner performing the same action but in different ways. These are very complicated and intricate matters (Lee & Hellermann, 2014).

In addition, as mentioned in the criticism of Hellermann’s (2009, 2011) study, accounting for language change of an individual using CA, which sees interaction as shaped by all participants who take part in them, may be a contradiction in itself. Some previous studies may solve this problem, following Lave and Wenger (1991) and Brouwer and Wagner (2007), who conceptualize learning or development as changes in participation. However, incorporating an exogenous learning theory moves the enterprise further away from the established CA practice (ten Have, 2007; Hutchby & Wooffitt, 2008). Searching for displays of understanding and changing knowledge states in the classroom may be a key to understanding aspects of learning, though it still remains to be seen how far CA can take us in unravelling the links between understanding and learning.
2.5.5. Repair as a syntactic resource.

To address the gap in the previous studies, the present study proposes to trace changes in terms of the learners’ syntactic development through a longitudinal focus on their repair practice. To my knowledge, very little attention has been paid to using CA to trace changes over time with regard to L2 learners’ linguistic knowledge in pedagogic settings.

As well as being an essential conversational resource in interaction, repair in L1 studies is considered a useful candidate for examining the grammatical resources available to a speaker at a given moment in interaction (Fox & Jasperson, 1995; Fox, Hayashi, & Jasperson, 1996). As Schegloff (1979) points out, “repair is relevant to the study of syntax because it is relevant to the organization of syntax” (as cited in Fox & Jasperson, 1995, p. 123).

The previous L1 studies strongly evidence the independent relationship between syntax and repair: repair is shaped by the syntactic practices of the speaker of a language and repair also shapes these practices (Schegloff, 1979; Fox 1993; Goodwin, 1984; Ochs, 1988; Ochs & Schieffelin, 1989). These studies, which also include languages other than English, suggest that cross-linguistically, when interactive achievements do not seem possible within the limits of their syntax at a given time in interaction, “speakers make use of syntax as a resource for repair, and repair is a resource for syntax” (Fox & Jasperson, 1995, p. 115).

2.5.5.1. Syntax and repair in conversation.

To understand the relationship between syntax and repair, the notion of sequentiality is important. According to Schegloff (1979), “syntax and repair operate in the same sequential environment; they need to be investigated together” (p. 277). Syntax, in his definition, is “sequential organization that organises the turn constructional unit and by reference to which the progress of that unit is exhibited by speakers and analyzed-recognized by recipients” (p. 277). Thus, “syntax is the knowledge speakers use to understand the relationships among elements in a temporally sequential string in a spoken language” (Fox & Jasperson, 1995, p. 124).

At any point in the course of a conversation, it is always possible that the speaker, for various reasons (i.e. not knowing what to say, need to negotiate with the interlocutor thereby changing the previous statements, competing for the conversation floor, rush of
thoughts, memory failure, just to mention a few) will fail to continue the utterance and must access the mechanisms by which they can mend the utterance under construction. At the same time, the recipients hear what the speaker says, not all at once, but sequentially, as it progresses in a temporal order. The recipients must be able to revise what they hear as they hear the next word from the speaker.

Due to its sequentiality, there is always the possibility that the speaker as well as the recipient fail to construct syntax in their talk and they must be able to repair the failure. Repair, however, does not simply appear in sentences, but it changes the shape and composition of syntax-in-progress (Schegloff, 1979, p. 266) by regularly interrupting that progress.

As syntax exists temporally and it is organized sequentially, and “there cannot be temporal sequentiality without the possibility of failure and repair[…] there cannot be syntax without the possibility of failure, and hence of repair. Failure, and repair, must thus be integral to the organization of syntax” (Fox and Jasperson 1995, p. 126).

2.5.5.2 A case study - Fox and Jasperson (1995): L1 repair and syntax.

In their seminal study of L1 (English) repair and syntax, Fox and Jasperson (1995) examined instances of SISR from transcripts of naturally occurring American-English conversation and face-to-face tutoring sessions. Assuming a typical SV(O) pattern in English, Fox and Jasperson (1995, p. 90-105) tentatively suggested patterns of SISR repair (Figure 2) and correlated them with the syntactic constituents at which the repair was initiated. Not all repair patterns were found in all syntactic constituents in their data. To provide an overview, I have selected one type of repair pattern for each of the syntactic constituents identified in Fox and Jasperson (1995) (Figure 3). An asterisk indicates where self-repair begins; the repaired segment (the part of the utterance which is repaired), and the repairing segment (the part of the utterance which accomplishes the repair) is shown in boldface (p. 79).

Figure 2 General possibilities of repair types and syntactic patterns

Type A: repair could be initiated at a word, and that word could be recycled by itself
Type B: repair could be initiated at a word, and word could be replaced with a single item
Type C: repair could be initiated at a word, and some part of the turn leading up to that word could be recycled, including the word at which the repair was initiated
Type D: repair could be initiated at a word, and some part of the turn leading up to that word could be repeated, with a replacement word for the repairable
Type E: a phrase could be recycled with the addition of new elements
Type F: repair could be initiated at a word, and that word is repeated but placed within a modified syntactic frame.
Type G: repair could be initiated at a word, and the turn constructional unit including that word is aborted, and a new Turn Constructional Unit (TCU) is begun.

Figure 3 Examples of repair patterns in different syntactic constituents

1. Repair initiated during the subject noun phrase
e.g. Type A (91)
I don’t know. The [school-] school uh, (1.0) bookstore doesn’t carry anything anymore.

2. Repair initiated after the subject noun phrase
e.g. Type B (93)
No I thought you said [you-] he’d be married, (.) with six kids

3. Repair initiated during construction of the verb
e.g. Type C (95)
hhhh And then we had- they had trouble. [They ha-*] they have no place for our class

4. Repair initiated after the verb
e.g. Type D(97)
she said they’re usually harder markers ’n I said wo::wuh huhh! .hhh [I said there go*], I said there’s three courses already that hu(h)hh/ff

5. Repair initiated after the copula
e.g. Type E (99)
[What is,] in SA units, what is the unit of energy.

6. Repair initiated during a direct object NP
e.g. Type G (101)
You have to figure out the [uh-](1.0) I don’t know what was

7. Repair initiated during prepositional phrases
e.g. Type F(103)
Now this terminal (1.2) is smart enough to show you (0.4) that you are in (1.6) [ins-*] what they call insert mode of append mode

8. Repair initiated during a predicate nominal/adjective
e.g. Type A(103)
He’s a [good-] good student
9. Other: repair involving changes from one syntactic type to another
e.g (asterisks omitted) (105)
So what is th-(1.1) so what is the uh, there are-That es-that
equation’s still wrong.

It is beyond the purpose of the current thesis to provide the details of the syntactic
behaviour of L1 repair initiation identified at each syntactic constituent in Fox and
Jasperson’s (1995) study. Most importantly, the findings suggested that the speakers’ SISR
does not get initiated at random syntactic places. They “operate within normal syntax”
(Fox & Jasperson, 1995, p. 108). The repairing segment that follows the site of repair
initiation was always syntactically coherent (i.e. same category) in the data. For instance,
there were no utterances like the following (Fox & Jasperson, 1995, p. 108)

I saw the cat that went-*dog into the woods.

However, while being coherent, the repairing segment was not always a constituent (Figure
3 No.8).

He’s a [good-*] good student.

Here, one can see that only the adjective in the predicate nominal phrase is recycled in the
repairing segment, rather than recycling back to the beginning of the constituent. Even in
the case of the same constituent, how far back the speakers recycled depended on whether
the repair was initiated in turn beginning or elsewhere. The speakers’ syntax, according to
Fox and Jasperson (1995) was “created during the course of a grammatical/interpretable
utterances out of apparently ‘ungrammatical’ segments” (p. 127). Whether these
possibilities of repair patterns in syntactic constituents identified in Fox and Jasperson
(1995) are also offered in L2 SISR data and other organizations of repair need to be
investigated.

2.6 Objectives and research questions of the present study

This section outlines the theoretical and methodological objectives of the present thesis.
The research questions for this study are also provided.
2.6.1. Theoretical objectives of the present study.

The literature demonstrates that repair in L2 classroom interaction can be regarded as both a resource and an object of learning (Kasper, 2006; Markee, 2008; Seedhouse, 2004), and CA methodologies can be used to trace short-term and long-term L2 development by investigating repair as an interaction competence in pedagogic contexts (Markee, 2008, 2011; Hellermann, 2009, 2011). Seedhouse (1999, 2004) assigned an important role for institutional goals in the organization of L2 repair by showing that there is a reflexive relationship between pedagogical focus, classroom context and repair organization. Seedhouse (2004) also proposed a multiple level perspective on the concept of context in which a pedagogical context is viewed as a subvariety of institutional context having both idiosyncratic and universal qualities.

To date, there has been little research to support Seedhouse’s claim from both a micro (within an activity) and macro (over a period of time) perspective. Seedhouse (1999, 2004) was able to show how L2 repair was organized differently with regard to different pedagogical focus introduced by the teacher. However, he did not investigate whether such interplay between the different types of pedagogical context and the organization of repair was found consistently over a longer period of time or how it changed.

Further, there has been no attempt, to the best of my knowledge, to implement a frequency analysis to assess the relationship between repair types, repair organisation and L2 classroom contexts over time or to investigate changes in what learners’ orient to as a trouble source and the organization of repair practice in L2 classroom interaction overtime. Nor has there been an attempt to trace learners’ L2 syntactic development though a longitudinal focus on repair. Therefore, this research aims to investigate to what extent the organization of repair sequences in different pedagogic contexts as identified in Seedhouse (2004) are found in L2 classroom contexts in New Zealand high schools over a stretch of time and whether there is any change. In addition, it examines any change in what the learners orient to as repairable, and whether there are any changes in the frequency and organization of repair over time. Finally, it attempts to trace learner L2 syntax over time in terms of syntactic changes found in their L2 repair.

2.6.2. Methodological objectives of the present study.

The present study builds on and extends previous research with two methodological objectives. The first is to address learning in terms of both what learners orient to as
repairable and accomplish linguistically over time in L2 classroom contexts. The second is to offer critical lenses for re-examining the methods used in developmental CA studies for examining L2 interaction and learning.

In order to achieve these two objectives, while the present study adheres to the CA principle of ‘unmotivated looking’, the researcher starts the investigation by drawing on the previous frameworks introduced in this literature review (Fox & Jasperson, 1995; Schegloff, Jefferson, & Sacks, 1977; Seedhouse, 2004). However, any categories established in the frameworks from the previous studies are not used as pre-formulated units of analysis. The analytic focus is not pre-determined but emerges from a careful examination of the data. Any categories used for establishing patterns in order to account for change or explain evidence of language development over a stretch of time in this study derive from an analysis of the interaction that occurred. As the analysis progresses, the original frameworks of analysis are likely to require adjustments as they were originally designed to account for L1 conversations. The amendments made to the original analytical framework to account for the wider range of data found in this study are explained and discussed in detail in Chapter 4, Chapter 5, Chapter 6, and Chapter 7 along with the results. In Chapter 3, I will describe the participants involved in the study, the instructional setting and the instruments and procedures used to collect the data.

2.6.3. Research Question One: Repair organization in pedagogic contexts.

The first research question concerns the organization of SISR, OISR, SIOR, and OIOR in different pedagogic contexts. It examines Seedhouse’s (2004) account of the relationship between L2 repair practice and pedagogic contexts and his claim that there are distinct repair practices associated with different pedagogic contexts.

Research Question 1

Are there differences in repair practices involving L2 learners according to the pedagogic context?

a. What are the characteristics of SISR, SIOR, OISR, and OIOR sequences in form-and-accuracy contexts?

b. What are the characteristics of SISR, SIOR, OISR, and OIOR sequences in meaning-and-fluency contexts?
c. What are the characteristics of SISR, SIOR, OISR, and OIOR sequences in task-oriented contexts?

2.6.4 Research Question Two: The repairable.
The second research question attempts to determine whether there are changes in what participants orient to as repairable in each of the repair type over time.

Research Question 2
What changes occur in the topic of the repair work (i.e. the ‘repairable’) in SISR, SIOR, OISR, and OIOR sequences involving L2 classroom learners over time?

2.6.5. Research Question Three: Changes in the frequency and sequential organization of repair.
The third research question attempts to explain the quantitative and qualitative changes in the types and organization of repair sequence over time.

Research Question 3
What changes occur in the SISR, SIOR, OISR, and OIOR sequences involving L2 classroom learners over time?
  a. Are there changes in the frequency of the different types of repair sequences over time?
  b. Do changes occur in the sequential organization of SISR, SIOR, OISR, and OIOR sequences overtime?

2.6.6 Research Question Four: Syntax of L2 repair.
The fourth research question focuses on examining the syntax learners deploy in repair sequences over time as a means of tracing their L2 development. The syntactic properties are investigated in terms of the types of syntactic constituents of repair and the types of repair pattern.

Research Question 4
What are the syntactic properties of L2 classroom learners’ SISR, SIOR, OISR and OIOR?
What changes occur in the syntactic properties of SISR over time?
Chapter 3. Methodology

3.1 Participants

The participants are seven Korean learners of English as a L2 (age between 16 and 18) in two different high schools (School A and School B) in Auckland, New Zealand (for student participation information and consent forms, see Appendix B). There were originally 10 participants; three of the participants discontinued after the third session. Therefore their data were excluded from the analysis. The participants’ general English proficiency level can be described as intermediate based on the Cambridge English: Preliminary Test Level B1\textsuperscript{xii}. One of the participants was from School A and the rest were from School B. The participant from School A was the only female participant involved in this study.

In School A, the same teacher (Teacher 1) taught all of the English for Second Language (ESL) classes. On the other hand, there were three different ESL classes in School B, each taught by a different teacher (Teacher 2, Teacher 3, Teacher 4). All six participants took these classes and it was up to them to choose which lesson was to be recorded. The total number of students in the class varied from 6-14 depending on the class and at times the focal participants engaged in interaction with one another. Descriptions of the participants are as follows. Pseudonyms were used in the transcripts to protect the privacy of the participants.

3.1.1. Focal participants.

*Participant 1 (P1)*

Participant 1 was a female student in a girls’ high school in Auckland. She turned 18 at the time of study and it was her second year in New Zealand. She took ESL three times a week with the same teacher and with same classmates. Besides ESL, Y took Biology, English, Mathematics, and Textiles technology. She had been living at a Korean home stay.

*Participant 2 (P2)*

Participant 2 was a 16 year old boy who had been in New Zealand for two years at the beginning of the study. He was home staying with an English speaking New Zealand family. He was taking Food technology, Mathematics, Music and Physical education.

*Participant 3 (P3)*
When Participant 3 started to participate in the study, he was into his third month of studying in New Zealand. He was 16 at the time, and studying in a New Zealand high school was his first long-term study abroad experience. He had previously spent two months in the Philippines studying English through a private institution. He was taking Food science, Mathematics and Science.

**Participant 4 (P4)**
Participant 4 had been living in New Zealand the longest among the participants. His family moved to Auckland three years ago and he had been going to the same high school ever since. He was taking Chinese, English, Mathematics, Physics, and Wood technology. He was 16 at the time of study.

**Participant 5 (P5)**
Participant 5 had been in New Zealand for two years at the time of study and he was living with his Korean family. The participant was 18 years old and was taking Biology, Chemistry, English, Mathematics, and Physics.

**Participant 6 (P6)**
Participant 6 had been in New Zealand for one year and six months and was living with his family. He was 16 at the time of study. He was taking Food technology, Mathematics, Music, and Science.

**Participant 7 (P7)**
Participant 7 was 17 years old and he had been in New Zealand for one year and six months when the study started. He was living with his Korean family and he was taking Biology, Chemistry, Mathematics, and Social studies.

3.1.2. ESL teachers.

**Teacher 1 (T1)**
Teacher 1 in School A was a female teacher with three years of experience in teaching ESL in New Zealand. She had been assigned to the school since the beginning of the term when the data collection started.

**Teacher 2 (T2)**
Teacher 2 was a male teacher who was in charge of the international students in School B. He had eight years of experience in teaching ESL in various parts of the world.

**Teacher 3 (T3)**
Teacher 3 in School B was a junior male teacher who had four years of experience in teaching ESL in New Zealand. In the first two years he taught at a private institution in China and it was his second year at School B.

**Teacher 4 (T4)**
Teacher 4 was a female ESL teacher in School B. She had five years of experience in teaching ESL in New Zealand and her native language was Korean.

Participation in the study was voluntary and the participants (i.e. students) were compensated NZ$10 for each classroom recording and stimulated recall interviews. Ethics permission was obtained from the school principal, the ESL teachers, the focal participants, and the students who were in the classroom but not participating as the focal participants (see Appendix B for Ethics forms).

### 3.2 Instructional setting
All ESL classes in both schools were mixed grade (form 5-7 or year 11-13). Each classroom consisted of one teacher and 6 to 14 students (depending on the class) including the focal participants. The overarching institutional goal of these classes was to improve student’s general ability in English language for everyday use and assist students to achieve their academic goals through a specific focus on improving four-language skills (i.e. listening, writing, reading, speaking). The teacher used parts from a prescribed text book and extra prints-outs of his/her choice for each lesson. In a typical lesson, the teacher introduced the topic of the lesson at the start of the class, followed by different types of classroom activities. The part of the lesson during which the recordings took place can be described as consisting primarily of two types of activities: one of which was task-based, and the other of which was accuracy-based (Ellis, 2003).

### 3.3 Data Collection
#### 3.3.1. Classroom audio recording.
Each recording session lasted for about 50 minutes. Each recording was collected three school weeks (including the semester breaks) apart over a period of 48 weeks. When the
participants had to commit to other curricular requirements such as exams or school activities such as sports day or field trip, the recording took place in the earliest following week as appropriate. Therefore, while most of the recordings were collected three weeks apart, some of them were collected with a longer time gap between them, five weeks being the longest time gap between recordings. Some students, due to their personal circumstances and school schedule, were not able to participate in all eight recording sessions. There was approximately a total of 1,850 minutes of classroom recording collected for this study. The table below provides an overview of each participant’s collected recordings.

<table>
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<th>Participants/Recording sessions</th>
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<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
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<tr>
<td>P5</td>
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<td>0</td>
<td>X</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>P6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>P7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Key: 0: collected/ X: omitted

The ESL classes in School A had a ‘U-Shaped’ seating arrangement while those in School B had a traditional desk alignment where the students were sitting in rows facing the whiteboard throughout the data collection period. Figures 3 and figure 4 display the seating arrangement and how the recorders were placed. The focal participants had a recorder on their desk, and there was an extra recorder on the teacher’s desk. Despite limited access to some semiotic resources such as gaze or body movements to which the participants might orient, audio-recording was used over video-recording for practical reasons. Compared to video-cameras, audio-recorders were much less likely to disturb or distract the participants and other students in the classroom. All of the (other) students in the classroom had consented to the recording of their conversations and the use of the recording for research purposes. Pseudonyms were used for everyone in the transcripts for the purpose of privacy protection. Computer software, Transana, was used for all audio files and transcripts. The interactional data were transcribed following the transcription
conventions developed and elaborated by Jefferson (Ochs, Schegloff, & Thompson, 1996. See Appendix A for the transcription convention and see Appendix E for sample transcripts of classroom interaction).

**Figure 4** A sample seating arrangement in School A

![Seating arrangement in School A](image)

**Figure 5** A sample seating arrangement in School B

![Seating arrangement in School B](image)
3.3.2. Researcher’s field notes.
In addition to the audio recording, the researcher observed the classroom, sitting close by the participants (example Figure 3, Figure 4). During the observation the researcher took notes with a laptop computer, which were used for reference in the data analysis. Special attention was paid to the pedagogic focus of each classroom activity introduced by the teacher and how the participants oriented to them as well as their level of participation. The features which could not be recorded in the digital recorder (e.g. gesture, participant’s facial expression) but would have implications in the transcriptions (e.g. nodding, shrugging of shoulders) were written down with the time it took place as appeared on the researcher’s digital recorder. The materials used in the lesson were photocopied and referred back to as needed.

3.3.3. Stimulated recall.
In this section, I will briefly introduce the theoretical background of Stimulated Recall methodology, followed by a description of how it was employed in this study. Stimulated recall data were used in the research in order to supplement classroom recordings and observation notes. In addition, the stimulated recall comments were used to resolve any ambiguities arising in the data that could not be resolved through examining transcriptions and classroom observation (e.g. why and for which linguistic item the repair was initiated).

3.3.3.1. Theoretical background.
As one of introspective methods, stimulated recall has been employed by L2 researchers “as a means of eliciting data about thought processes” involved in a task or activity (Gass & Mackey, 2000, p. 133). The underlying theoretical assumption is that it can be used to uncover the cognitive processes involved in information processing as well as how L2 is learned and taught:

it is possible to observe internal processes in much the same way as one can observe external real-world events…. [and that] humans have access to their internal thought processes at some level and can verbalize those processes (Gass & Mackey, 2000, p. 1)

It is also assumed that

a subject may be enabled to relive an original situation with great vividness and accuracy if he is presented with a large
number of cues or stimuli which occurred during the original situation
(Bloom, 1954, p. 25, as cited in Gass & Mackey 2000, p. 17)

Previous studies have employed stimulated recall with some kind of support (i.e. stimuli) for the participants, for example, an audio-recording of themselves speaking. While hearing these stimuli, learners are asked to recall their motivations and thought processes during the original event. (Cohen & Hosenfeld, 1981; Færch & Kasper, 1987; Kasper & Blum-Kulka, 1993 for interlanguage pragmatics literature; Hawkins, 1985; Mackey, Gass, & McDonough, 2000, for the L2 writing literature, the L2 reading literature, and the oral interaction literature, as cited in Gass and Mackey, 2000, p. 25). In short, stimulated recall methodology is employed to prompt participants to recall thoughts they had while performing a task or participating in an event with the assistance of some visual or aural reminder of an event.

3.3.3.2. Stimulated recall in the present study.

In this section, I will explain the type and procedural structure (including timing, stimulus, instruction procedure, language of recall) of the stimulated recall method employed in the present study. In this study, I used the delayed stimulated recall method (Gass & Mackey, 2000, p. 51) which takes place within the 48 hours of the recorded event (Bloom, 1954). Based on Faerch and Kasper’s (1987) model, the procedural structure used in this study can be described as a combination of a high and a low structure recall. It was high structured in the sense that when learners were to verbalize was selected by the researcher (i.e. instances of repair sequences identified in the transcript are selected and played back to the learner by the researcher); it was also a low structured procedure in that it allowed learners to specify what they verbalized and how much they verbalized.

Each recall was conducted in a quiet room organized by the researcher and the school within two days of the classroom recording. Stimulated recall comments were recorded using another voice-recorder. Participants were given an instruction sheet designed by the researcher based on Gass and Mackey (2000, p. 59), and the researcher read it aloud to the participants, answering any questions. The participants were minimally trained using examples so that they were able to carry out the procedure but without revealing the experimental goals (see Appendix C for the instructions given to the participants). The participants were required to explain what s/he was orienting to during the repair sequence
and to identify the trouble source of repair initiation (i.e. why they initiated repair). For the stimulus, the researcher marked all instances of repair (excluding SISR by other speakers) in the transcript with the exact time it took place. The selected repaired segments were categorized according to the nature of trouble source, speaker of the trouble source, repair type, and pedagogical focus (claimed by the teacher) as analysed by the researcher (see the coding scheme in Appendix D). Then, the selected repair sequences were played back to the participant using a laptop device which was used to make it easier for the researcher to play back and pause the relevant parts of the recording. The researcher played the selected repair sequence to the participant, paused and asked questions as in Figure 6, and repeated the same procedure for the entire audio stimulii. The length of each recall varied depending on each participant and the number of repair sequences identified in each classroom interaction. The time taken for all procedures (i.e. for setting up, giving instruction, actual time taken for the recall comments) was recorded. Backchanelling or non-responses such as oh, hmm, I see, uh-huh, ok were employed to prompt a response from the participants without trying to ‘fish’ for recall comments (Gass & Mackey, 2000, p. 55). (see Appendix E for sample transcript of stimulated recall interview).

**Figure 6 Examples of general questions used by the researcher to elicit stimulated recall comments**

**For pedagogic focus**

“What did you think the teacher wanted you to focus here/at this point/ during this activity?”

“What did you think the educational aim of this task/activity was?”

**For trouble sources**

“What were you thinking here/at this point/ right then?”

“Can you tell me what you wanted to change at that point?”

“Can you remember what you were thinking when your partner said that/those words?”

Previous L2 studies have raised a concern with regard to using L2 in the recall process. Learners have limited L2 ability, so when both the classroom event and the recall are carried out in L2, learners are likely to experience problems or even lose interest in expressing themselves in the target language (for example see Mackey, Gass, & McDonough, 2000). Consequently, the validity of learners’ comments as truly reflective of their thought processes is put to the test, and there is a risk of having to interpret and make assumptions about what the learner actually meant and whether s/he understood what was
being asked. Therefore, the recall comments were conducted in the researcher’s and learners’ L1 (Korean) but they were free to code-switch and use the L2 as they wished.

In addition, stimulated recall may have a reactive impact on the participants’ subsequent repair work during class time. Reactivity refers to those instances in which the participant’s primary cognitive processes are affected or altered as a result of verbalizing (Gass & Mackey, 2000). There is a suggested risk that the participants’ subsequent classroom interaction may be affected by having their attention drawn to their repair behaviour in the stimulated recall interviews. To date, results regarding the reactivity of stimulated recall are inconclusive (e.g. Anderson, 1985; Boritz, 1986; Ericton & Simon, 1980, as cited in Gass & Mackey, 2000). However, to guard against this possibility, in the present study, only half the participants (four participants; 57% of the total participants) participated in the stimulated recall interviews. In this way it was possible to compare their performance of repairs with that of the other half who did not participate in the stimulated recall interviews. The following Table 2 shows which focal participant participated in the stimulated recall interviews and the number of stimulated recall interviews conducted. Scheduling the interview depended largely on which day of the week the classroom interaction recording was done on and the availability of the participants within two days of the recording. The participants sometimes refused to do the interview for some sessions for various reasons (i.e. busy schedule; lack of confidence in their ability to speak L2 in the lesson recorded). The participants who were involved in the stimulated recall interviews were P1, P2, P6, and P7.

**Table 2 Classroom interaction recording and stimulated recall interview**

<table>
<thead>
<tr>
<th>Participants/Recording sessions</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
<th>Session 7</th>
<th>Session 8</th>
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<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>P1 SRI</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>P2</td>
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<td>X</td>
<td>0</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>P2 SRI</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
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<td>0</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>P6 SRI</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>0</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>P7</td>
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<tr>
<td>P7 SRI</td>
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<td>X</td>
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</tr>
</tbody>
</table>

Key:
0: collected/ X: omitted/ SRI: Stimulated Recall Interview
Chapter 4. Research Question 1: Results and Discussion

This chapter presents an analysis of data, draws the conclusion of the present study by summarizing the major findings, and discusses them and explores the issues posed by the research questions. The limitations of the current study and the suggestions for future research are provided in the next chapter.

Research Question 1

This section deals with an analysis and discussion of the data for Research Question 1. Research Question 1 investigated whether there were differences in the characteristics of SISR, SIOR, OISR, and OIOR sequences involving L2 learners in form-and-accuracy context, meaning-and-fluency context, and task-focused context (Seedhouse, 2004).

4.1 Research Question 1

Are there differences in repair practices involving L2 learners according to the pedagogic context?
a. What are the characteristics of SISR, SIOR, OISR, and OIOR sequences in form-and-accuracy contexts?
b. What are the characteristics of SISR, SIOR, OISR, and OIOR sequences in meaning-and-fluency contexts?
c. What are the characteristics of SISR, SIOR, OISR, and OIOR sequences in task-oriented contexts?

4.2 Analysis of the data

4.2.1. Classroom interaction data.

The interaction data recorded was transcribed following the transcription conventions developed and elaborated by Jefferson (2004) (see Appendix A for the transcription conventions and Appendix D for sample transcripts). Computer software, Transana was used for all audio files and transcripts. In order to answer Research Questions 1, I drew on Seedhouse’s (1999, 2004) definition of the three L2 pedagogic contexts, namely, Form-and-accuracy (FA), Meaning-and-fluency (MF), and Task-oriented (TO) as introduced in the previous chapter. The four repair trajectories, which are SISR, SIOR, OISR and OIOR, and the sequential position of repair, were identified based on the framework proposed by Schegloff, Jefferson, and Sacks (1977).
In order to describe the nature of interaction in each pedagogic context and the relationship between the characteristics of different repair sequences and the L2 classroom contexts, the participatory structure of interaction in which the repair occurred was examined first. The participatory structure was analysed at two levels. Firstly, it was studied in relation to the classroom activity and coded as *teacher-fronted classroom interaction, pair-work, group-work, and individual task* (Nassaji, 2013). *Teacher-fronted classroom interaction* refers to teacher led whole-class interactions where the teacher interacted with the whole class with no group work activities. During teacher-fronted interaction, the teacher sometimes engaged in one-on-one interaction with a student as when responding to a student question. A classroom activity was coded *pair-work* when two learners were assigned to work together as a pair on a task or activity. *Group-work* is when a group of students (usually three to four) worked together on a classroom task or activity at a single table. In pair-work and group-work, the teacher usually walked around between groups to observe and listen to their conversation, and the students asked for teacher assistance as they needed. In *individual task*, students worked individually. During this period the teacher often walked around the class, observing and assisting individual students. Then, the participatory structure was further described in terms of the speakers involved in the interaction and coded: *Teacher-Focal participant, Focal participant-Learner, Focal participant-Learners, and Focal Participant- The class.* In *Teacher-Focal participant* interaction the focal participant is engaged in one-to-one interaction with the teacher. In *Focal participant-Learner*, the focal participant is engaged in conversation with a fellow learner, while *Focal participant-Learners* refers to interaction between the focal participant and a number of fellow learners. Lastly, in *Focal Participant- The class*, the focal participant addresses the whole class. For example, such occasions typically involved providing an answer required by the teacher during a *teacher-fronted classroom interaction* or giving a presentation in front of the class.

After the procedures described above, each repair instance was closely examined with special attention to the ways in which its pedagogic focus was made relevant. The relevant pedagogic context was determined by using the three methods introduced by Seedhouse (2004) in Chapter 2 (section 2.3.2). In addition to examining the text-internal statement made by the teacher of the intended pedagogic focus (i.e. first method), I consulted the teacher about the overall purpose intended for the lesson and each of the classroom activities, along with any questions arising during the classroom observation after the
classroom recording. The teacher’s comments were voice-recorded and noted separately as a part of the researcher’s field notes (second method). The questions that I asked and the answers provided by the teacher were later transcribed and referred to as needed. Most attention was given to observing how the participants were displaying their analysis of and orientation to the pedagogical focus in their turns at talk in the details of the interaction (third method). The field notes made during the classroom observation were also referred to as necessary.

4.2.2 Stimulated recall interviews.

4.2.2.1. Effects of having stimulated recall interview on the quantity of repair practice.

As discussed in the previous chapter, to strengthen the emic analysis of the transcript and gain a better insight into learner repair, four of the seven participants participated in the stimulated recall interviews (See Appendix C for Instructions for research participants and Appendix E for sample transcript of stimulated recall interview). The reactivity of having stimulated recall interview was tested at two levels: within stimulated recall group and between stimulated recall group and no recall group. Firstly, within the stimulated recall group, whether or not there were any significant effects of having simulated recall interviews on the subsequent classroom interaction was examined by calculating the Z-scores of the number of repair sequences found in each recording session for each participant. For all participants, the data had Z-scores between -2 and +2, which means that the data were normally distributed. Thus, it was concluded that the stimulated recall interviews did not have a significant impact on the quantity of the repair sequences produced by the focal participants in the subsequent classroom interaction.

Secondly, whether there was a significant difference between stimulated recall group and no recall group in terms of the quantity of the repair practice was examined. Paired sample t-test was employed, and in order to have the same number of students in each group (i.e. three participants in each group), one randomly chosen participant from the stimulated recall group was excluded. The analysis revealed no significant difference in the scores for stimulated recall group (M=126.33.4, SD=17.24) and no recall group (M=115.33, SD=24.99); t(2)=0.8412, p = 0.4888. These results suggest that stimulated recall interviews did not significantly affect the quantity of repairs conducted in the subsequent classroom interaction.
4.2.2.2. Effects of having stimulated recall interview on the subsequent recall comments.

Then, within the stimulated recall group, whether having the stimulated recall interviews had any affect on the recall comments in the subsequent interviews was tested. The differences in the recall comments were measured in terms of changes in the ratio of unsuccessful recall comments in each interview session. These were instances in which the participants could not provide any explanation for the question asked by the researcher. Typical indicators of unsuccessful stimulated recall comments were: “I don’t know”, “I don’t remember”, “I am not sure”, “I can’t explain”, and “Just so”.

The ratio of unsuccessful recall comments to the total number of questions asked was calculated for each stimulated recall session. Then, Z-scores were computed for raw scores in the ratio of unsuccessful comments data set. For all participants, approximately, 98% of the data had Z-score between -2 and +2, which means that the data were normally distributed. This suggests that having stimulated recall interviews had no important impact on the individual learner’s performance in the subsequent stimulated recall interviews.

4.2.2.3. Inter-rater reliability.

Following the analytical procedures, 10 percent of the transcription of the interaction, stimulated recalls comments, and the data coded and analysed by the researcher were randomly selected for review by another rater. To ensure inter-rater reliability of repair classification, inter reliability was measured using Cohen's Kappa statistics with 95% confidence interval. The Cohen’s Kappa value was 0.8354, which indicates that the strength of agreement is very good.

4.3 Results

4.3.1. Repair in form–and-accuracy contexts.

In form-and-accuracy contexts, the pedagogic focus is on the accurate production of a specific string of linguistic items/words (Seedhouse, 2004). The organization of repair-SISR, SIOR, OISR, and OIOR is reflexively related to the pedagogic focus of the context in that their sequential organization purports to serve accomplishment of the pedagogic aim.

4.3.1.1. Speaker orientation to form-and-accuracy and repair organization.

Typically, the teacher expects that the learners will produce precise strings of linguistic form and precise patterns of interaction, which will correspond to the pedagogical focus,
which s/he introduces. Example 1.1 is an example of a text-internal statement by the teacher of the intended pedagogical focus. The teacher clearly states (05-06) what the students need to have achieved by the end of the lesson (i.e. able to recognize word classes).

Example 1.1

01 T what I like you to do first is-
((gets distracted by the students in the front row handing out print-outs))
02 Okay so the first things is basically is to go through
03 I am gonna give you five minutes.
04 You need to do the matching exercise.
05 Okay? In certain time, what you need to be able to do is to put
06 words classes in a noun, or is it a verb.
07 Okay? So, step one, going through and then we'll go through
08 together. Okay and then go on to the readings.
09 So you've got the focus on the vocabulary first okay and then you
10 need to work from there. Okay? So five minutes please. You can
11 use dictionaries. Electronic is fine.

With focus on form-and-accuracy, the teacher normally has a tight control of the turn-taking system, and repair sequences are likely to expand until the pedagogical aim is achieved (i.e. the L2 learner accurately produces the target structure intended by the teacher/task). Consequently, repair is often initiated by the teacher when the linguistic forms and patterns of interaction produced are not exactly identical to those intended by the his/her pedagogical focus. In such cases, the trouble source belongs to the focal participant and repair is initiated by the teacher and completed by the focal participant (OISR). The features of this type of OISR typically involved Designedly Incomplete Unit (DIU: a type of turn, which is designed by the teacher who already knows what the next turn should be. The turn is intentionally incomplete so that it can be completed by the student) (Koshik, 2002) and presentation and practice as the next excerpt shows.

In Example 1.2, the teacher focuses on getting learners to use a plural noun after the phrase ‘one of the’. Firstly, the teacher provides options from which the students can choose (03). When the answer provided by the learner (S) is not the targeted form (04), the teacher initiates repair (05) in the form of a DIU. In form-and-accuracy contexts, the teacher is determined to get the learner to produce the target form until it is correct, resulting in multiple repair initiations.

Example 1.2
Let's go through the plural ones first. Choose the ones with plurals. Go through have a look. So if we are looking at live-stock farming is one of the one of the problem? or problems okay so is it one problem or one of the:

In form-and-accuracy contexts, not only the teachers but also the learners showed conscious orientation to accurate production of the L2, even in the absence of the teacher. One of the ways the participants showed their orientation towards achieving linguistic accuracy was by employing SISR. They used SISR to make their previous or concurrent production grammatically accurate as in Example 1.3. While there are several instances of SISR made by Focal Participant K in this example, what is particularly interesting is the SISR in line 12. Focal Participant K initiates self-repair during his construction of a prepositional phrase and completes the repair himself within the same turn by replacing the trouble source several times (i.e. concurrent repair: ‘of, to, from’). In this excerpt, the pedagogic aim set by the teacher was not on the accurate production of prepositional phrases. In fact, the target construction set by the teacher was by+gerund. However, the learner still made an effort to be as accurate as possible by using his available linguistic resources. In fact, SISR was the most frequently used type of repair organization and this kind of example was found throughout the data not only in form-and-accuracy contexts but also in the meaning-and-fluency and task-oriented contexts. In sum, SISR in form-and-accuracy contexts in this study show how the speakers oriented to and made conscious efforts at producing accurate L2 forms.

Example 1.3

what are be-(0.2)benefai. of knowing your learning style? the best of knowing my learning style is I can. I can(0.2)study I can study with the.besss:tuh-(0.4)condition. ummm-to me. (0.4)because I know how can I study, and how can I improve my study. styl. ah (0.4)study yeah. how-uh (0.2) yeah improve. I know if I improve the(0.2)the(0.4)eh stu. eh stu(0.2)studying skill ((unintelligible)) yeah I can get the good result of. to. from the. yeah. something yeah
4.3.1.2. Preference of sequential order in form–and-accuracy pedagogic contexts.

In form-and-accuracy contexts, some repair sequences become necessary. One particular example of this is where the other, typically the teacher, initiates or completes repair on the students’ trouble source (Appel, 2010; Nassaji, 2013). There are a number of reasons for this phenomenon, which are specific to the L2 classroom context. Primarily, L2 learners often lack the linguistic ability to provide repair for themselves. Therefore, the teacher or more competent learners are asked to complete the repair.

In Example 1.4, Focal Participant K is working on his persuasive argument task and has trouble deciding which verb to use. He initiates self-repair and then asks for teacher assistance (SIOR with teacher completion) as he reaches a point at which s/he is no longer able to proceed and needs to verify that the forms he produced are in fact ‘correct’. In line 01, the learner first initiates self-repair (‘take. take education’) and at the same time turns to the teacher for a completion by leaving the turn incomplete. The teacher then provides repair in the following turn (03). An interesting feature to note in this example is that the other learner also (L1) offers repair completion though he was never asked to by K. L1’s offer is ignored, though, as the noun (‘education’) is not what K wanted the teacher to repair. The teacher offers repair on both the verb and the noun in line 03 (‘have’ for ‘take’ and ‘education programs’ for ‘education’). K then displays what the traditional SLA literature identifies as ‘uptake’ (04) following the teacher’s repair completion (03) (Lyster & Ranta, 1997), or “sequencing-closing third” in CA (i.e. information registering “oh” or action accepting “okay” in the third position) (Schegloff, 2007).

Example 1.4

01 K Sir. They should take. Take education?[or
02 L1 classes
03 T they should have education programs
04 K ah have

Further, in a typical classroom, students take on the role of a novice and the teacher that of an expert. Thus, the teacher is usually expected to lead the lesson and provide correct information to the students. In addition, the teacher may initiate/complete repair rather than wait for the student to initiate/complete the repair for procedural reasons (e.g. because of having to carry on with the given task or time constraints) (Koshik, 2002) and/or for other pedagogical purposes (e.g. using repair as a demonstration of correct language use for other students in the class) (Appel, 2010).
In the following Example 1.4a, the teacher randomly assigns a student to read a paragraph to the whole class (focal Participant- the class) from the hand-out they have been working on. While reading his assigned paragraph, Focal Student J initiates self-repair on the word ‘tries’ (01), but before he could complete the repair the teacher (T) provides an accurate reading of the trouble source (02). In this example, the self-initiated other-repair achieves two purposes: to correct the learner’s inaccurate production of the repairable and also to proceed to the next stage of task (i.e. reading the next sentence by the learner and the next paragraph by another student and so on).

Example 1.4a
01 J imagination uh tra-tra-
02 T→ tries
03 J tries to uh

It is noteworthy that the examples of repair in pedagogic contexts show that the preferred sequential order depends not only on the conversational (or sequential) nature as suggested by Schegloff, Jefferson, and Sacks (1977) but also on the nature of the trouble source and to whom the trouble source belongs.

The learners during group work or pair work with a pedagogical focus on grammatical accuracy were also found to initiate and complete repair on the fellow learners’ production (OIOR). The OIOR in form-and-accuracy contexts may also be, though not always, expanded to SIOR and OISR, where the ‘other’ is the teacher when the learners turn to the teacher for ‘verification’ if they cannot reach agreement among themselves and/or when they do not have ‘confidence’ in their fellow learners’ L2 competency. For example, Focal Participant S and his partner L1 are engaged in pair work. They need to decide which word or phrase is correct in a given sentence (i.e. a lot, lot, many). When S makes an incorrect decision (01), L1 provides a correction in the following turn (OIOR in line 02). As S does not take L1’s repair to be the correct answer (line 03), the sequence expands: the learner initiates repair and asks the teacher (i.e. other) to complete the repair (05). The teacher, however, does not provide a repair completion right away. Instead, the teacher asks a question in line 07, which in turn becomes a question-answer sequence. In line 08, the answer is still inaccurate and results in a further repair sequence. The teacher initiates repair in line 09 by repeating S’s previous turn at a slower pace. However, this repair is completed not by the source of repairable (S) but by another student in L1 (line 10).
teacher finally provides the second pair part for the question in line 06. S finally accepts the teacher’s repair completion to be the correct answer. Examples of such expansions were found frequently throughout the data. Turns such as line 05-06 in Example 1.5, which display the speaker’s lack of (L2) knowledge, are also known as ‘claiming insufficient knowledge’ (Beach & Metzger, 1997). They are usually located in the first position (e.g. line 05-06 in Example 1.5) or in the second pair part of an adjacency pair, which may cause a problem for continuity of talk (e.g. sound stretch, pause, avoidance). These turns serve as evidence of co-construction of knowledge, which is observable in the sequential organization of turns during classroom activities (Sert, 2013; Sert & Jacknick, 2015; Sert & Walsh, 2013).

Example 1.5
01 S There were lot of—a lot lot of—. not lot.
02 L1 Many birds
03 S No I don’t think ‘many’ is eh right. No? I think. Yeah
04 L1 Yeah
05 S I am just a bit confused. Sir.
06 Is there therefore a lot of or many of birds.
07 T so which one sounds more formal?
08 S I think a lot of
09 T A >lot of<
10 L1 Many
11 T Many is a bit more formal. A lot of is okay. It’s grammatical-
12 S How about heaps of?
13 T Very spoken. yeah?
((teacher walks away and moves to the front of the classroom and starts giving instructions for another task))
14 S Many are. okay. many

Not all repair completions provided by a fellow learner were rejected. There were also cases when a fellow learner’s repair completion was accepted by the learner who was the source of the repairable and repair initiator. In Example 1.6, Student F initiates self-repair in line 01 during a group work, and then within the same turn, turns to S for help using their L1 (Korean). This is an example of SIOR. S completes the repair in the following turn and this is accepted by F (i.e. F moves onto the next part in the sentence in the following turn). Note, when the learners in this study accepted repair completions provided by their fellow learners, the repair was usually initiated by the speaker of the trouble source (i.e. SIOR).

Compare this SIOR with the OIOR starting from line 03 in which the same fellow learner (who is not the source of the trouble) initiates and completes the repair. In line 04, S
provides repair on F’s previous turn. Apparently, S thinks the correct pronunciation for the word *numerous* is /numberous/. However, F repeats the trouble source (line 06) in the following turn rather than replacing this original production in line 03. As a result, the trouble source turn still remains as repairable to S and the repair sequence is expanded into two question and answer sequences (line 07-08 and 09-10). In Line 07, S initiates other repair by repeating the trouble source with a rising intonation. In the following turn, F provides a repair completion but less directly by using a negative question (‘isn’t it pronounced as /njuːm(ɔ)rs/?’). Still not satisfied with F’s repair completion in line 08, S initiates another repair by asking F a question about the definition of ‘numerous’ in line 09. In the repair completion in the following turn, F provides the definition of the trouble source in Korean (L1) (10-12). S finally accepts F’s repair completion (13) and carries on with the remainder of the task.

Example 1.6

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In sum, the learners employed SISR and sometimes relied on each other for repair completion especially when the speaker of the trouble source initiated repair and then realized s/he has reached the limit in their L2 capacity to complete the repair. A fellow learner was more likely to be regarded as a competent L2 user in manipulating L2 forms accurately when the speaker of the trouble source acknowledged his/her limitation and initiated repair him/herself. However, when the repair initiation (and/or completion) was offered by a fellow learner without it being first initiated by the speaker of the trouble source (as in the case of OIOR), repair sequences often got expanded as the repair
completion was not accepted right away and the interactants engaged in further repair work among themselves or resorted to the teacher for verification in order to reach a consensus.

4.3.1.3. Speaker of the trouble source and repair trajectory.

In form-and-accuracy contexts, it was found that the same repair trajectory can serve different functions depending on who the speaker of the repairable is. Example 1.7 is a case of SIOR in a teacher-fronted class interaction between teacher-learner during an individual task. The learner (L) asks the teacher (T) a question about a speech topic for her English assignment while working on her individual writing task. While the pedagogic focus of the individual task was on form-and-accuracy, this particular conversation was neither directly related to ESL nor to the task that she was working on. In 04, T’s search for the next utterance is marked by a sound stretch and a pause (i.e. an incomplete turn) (Schegloff, Jefferson, & Sacks, 1977). Then, L helps T to complete the sentence in the following turn (06), not necessarily because the teacher lacked the language ability to do so, but as a means of making a suggestion for the ‘best speech topic’ and to continue the conversation.

Example 1.7

01 L I have a question. What is the best um speech topic for uh English?
02 T for English?
03 L yeah
04 T You could talk about may be:
05 (0.4)
06 L my life? (0.4) no?
07 T I’ll tell you what. Because we are going to talk about speech
08 in ESOL next term as well-I will just have a quick-just give
09 me.one.sec.

In Example 1.8, on the other hand, Students D and S (focal participant-learner) are doing pair work based on a paragraph they just read in the class. The task has a list of comprehension questions in the handout, which instructs the learners to take turns to read-out and give answers to. The pedagogic context, according to the teacher, was a dual one: meaning-and-fluency and form-and-accuracy. Note that the students have the same paragraph in front of them and this makes it easier for the learners to negotiate the correct answer and have a fairly good guess about what their partner is trying to say. In this excerpt, Student D is answering one of the comprehension questions (‘why are possums a hazard to New Zealand farmers?’) but has difficulty in correctly pronouncing the word ‘bovine’ (01). D’s repetition of the repairable with a rising intonation invites S to assist (Appel, 2010) and S provides a repair in the following turn (02).
Example 1.8
01 D ➔ a:hh possums can spread disease for bovin? bovine?
02 S Bovine
03 D Bovine tuberculosis. If farmers and and animals get tuberculosis they bad disease and become weak.
05 they may even die.

Both Example 1.7 and 1.8 are examples of SIOR which initially started out as SISR (line 04 in Example 1.7 and line 01 in Example 1.8). However, the purpose these two repairs serve is different because the source of the repairable instance is different. For the repair in Example 1.7, the speaker of the trouble source who is the teacher, had difficulty completing the sentence (i.e. searching for a lexical item) and the learner in the following turn provided a repair completion (i.e. providing a lexical item that fills the empty slot in the turn); not to correct the teacher but to maintain intersubjectivity and continue the conversation. This is evident in the nature of the repair completion in line 06, i.e. the turn with rising intonation, asking for confirmation. On the other hand, Student D in Example 1.8 had trouble completing his current sentence as he had an issue with pronouncing ‘bovine’, and the repair in the following turn provided by S was a linguistic correction. As opposed to the repair completion in Example 1.7, the repair completion in Example 1.8 was in the form of a direct statement. In addition, both Student D and S in Example 1.8 had studied the same hand-out in class prior to the interaction and knew what vocabulary and content were to be covered in their answer. Thus, it was less likely that the repair was initiated to simply establish intersubjectivity. Further, in the stimulated recall interviews, L in Example 1.7 and S in Example 1.8 confirmed their reasons for providing repair completion, which were in line with the researcher’s analysis. In sum, although these two examples of SIOR have the same repair trajectory and very similar sequential design of turn for repair initiation and completion, the purpose of the repair is different as the source of the repairable differs (i.e. the teacher as opposed to the learners). Therefore, in addition to the nature of trouble, repair in L2 classroom context needs to be analysed in terms of the speaker who is the source of the repairable, what they orient to as repairable and the features of repair initiation and completion in order to fully understand the ways in which speakers show the difficulties they experience and how they resolve them. Such complexities in repair practice in L2 classroom cannot be fully explained by the sequential trajectories of the four repair sequences suggested by Schegloff, Jefferson, and Sacks (1977) alone.
4.3.1.4 Summary.

As Seedhouse (2004, p. 104) notes in form-and-accuracy contexts, the pedagogical focus is on the accurate production of specific linguistic forms. The teacher assesses the learners based on their production and the teacher typically attempts to ensure it corresponds perfectly with the targeted L2. Consequently, there is a very tight connection between the linguistic forms and patterns of interaction, which the learners produce in the L2 and the pedagogical focus that the teacher introduces.

In addition to the findings in Seedhouse (1999, 2004), the learners in this study also showed orientation towards accurate L2 production during interaction among themselves and this focus on linguistic accuracy had an impact on their turn design. When the learners resorted to the their peers (i.e. other speaker) for repair completion, their peers took on the role of ‘teacher’. On the other hand, when the repair was not initiated by the speaker of the trouble source, repair by a fellow L2 learner often resulted in further sequences. In such cases, repair organization was usually expanded with inserted question and answer pairs, and in some cases, the learners turned to the teacher for assistance.

In the data collected in this study, the repair in form-and-accuracy contexts was overwhelmingly initiated by learners themselves while in Seedhouse’s analysis it was the teacher who initiated repair. On the whole, SISR was the most frequent type of repair organization in the form-and-accuracy contexts followed by SIOR and OIOR where the ‘other’ was a fellow learner rather the teacher. Peculiar to the form-and-accuracy contexts, as Seedhouse (2004) pointed out, is when one of the learners in class fails to produce a target L2 form, the teacher invites the other learners to repair the learner’ error (i.e., OIOR, other-repair being conducted by a third party; teacher initiated peer repair). There was no example of such a case in the data collected in this study.

4.3.2 Repair in meaning-and-fluency contexts

In meaning-and-fluency contexts, the pedagogic focus is on the expression of personal meaning (e.g. what the speaker wants to express, such as descriptions of one’s immediate environment, personal relationships, feelings, or general comments about the activities s/he is engaged in) rather than on specific L2 linguistic forms. In other words, the focus of interaction is on promoting fluency rather than accuracy. The pedagogical aim is on maximizing the opportunities for speakers to participate in interaction and the pedagogic focus is manifested in the organization of repair. Repair in this context gives the speakers
(i.e. learners) the interactional space to express personal meanings and develop topics and subtopics of his/her choice while maintaining intersubjectivity. Consequently, the organization of repair is less rigid (e.g. less tightly managed by the teacher) compared to those in form-and-accuracy contexts.

In this data, when the pedagogic focus is on meaning and fluency, the pedagogical task typically involved providing a personal response as in Example 1.9. The pedagogical aim in this lesson was to watch a short video clip as a class first and then for each student to provide a personal response to the clip.

Example 1.9

01 T \(\rightarrow\) it's like personal response. What did you think, what did you feel, what was interesting, what. what do you think. okay?
02 alright so, ((clears throat)) you think you can talk about that?
03 K yea:a
04 T to each other
05 K ye:h yes
06 T \(\rightarrow\) I'll put you into groups. And just remember it's only English
07 what do you think about that, how do you feel, how bad does that make you feel, many question alright?

4.3.2.1. Speaker Orientation to meaning-and-fluency and repair organization.

Meaning-and-fluency contexts often involved pair or group work, and sometimes in a teacher-fronted interaction where the teacher encouraged students to participate in everyday talk (e.g. “what did you do for the weekend?”). In the latter case, the teacher selects an individual student from the class and asks a question which requires a personal response such as what s/he likes to do in his/her spare time and the student provides his/her own answer to the teacher. Although the student is engaged in a teacher-focal participant interaction, the student who is providing the answer is essentially presenting the answer to the whole class.

For example, in Example 1.10, J is a new student and the teacher invites J into teacher-learner interaction first. The teacher asks the student what he did at the weekend. Then she invites Focal Participant D to engage in the same type of teacher-learner interaction (10). The pedagogic focus is on the speaker’s expression of personal meaning and on the contribution of new information to the immediate classroom community. The teacher’s role is more that of a mediator whose purpose is to ensure that the learner’s (speaker’s) message
is conveyed to the other students in the class, as well as a collaborator in the dialogue. The teacher’s utterances therefore contain markers of change of information state and clarification requests (e.g. ‘oh’ in line 27 and ‘really?’ in line 29) (Heritage, 1984a) thereby encouraging a smooth conversational flow and nurturing fluency. The teacher also attempts to keep the other learners engaged, focused, and interested (line 13, 16-17). The OISR in Example 1.10 demonstrates that the teacher replaces the repairable with an additional element to clarify what the learner meant in the previous turn (23). The speaker of the trouble source completes repair by replacing the repairable (24). This is different from the repair initiated in form-and-accuracy contexts, which were purportedly to get the learner to produce a specific L2 form. The learners in this study also frequently employed SISR to repair their own production in meaning-and-fluency contexts. These SISR episodes typically involved concurrent repair with pauses, sound stretches and repetition of fillers within the same turn (21, 22). In Example 1.10, Focal Participant D employed SISR, for example in line 24 (replacing ‘whole day’ with ‘afternoon’) to provide more information rather than repair linguistically.

4.3.2.2. Orientation to linguistic accuracy in meaning-and-fluency contexts.

Seedhouse (2004) suggests that repair of correct and appropriate linguistic forms never occurs in meaning-and-fluency contexts in his data. However, the learners in my data did at times display their orientation to linguistic accuracy during interaction in meaning-and-fluency contexts. For example, D in line 36 in Example 1.10 resorts to the teacher to verify whether his use of ‘mommy’s friend’ is appropriate (i.e. recycling the prior phrase, with rising intonation). He then uptakes the repair completion provided by the teacher (37) in the following turn (38).

Example 1.10

01 J  eh
02  (0.8)
03  auck-auckland city
04 T  auckland city. So what did you do?
05 J  eat
06 T  by yourself?
07 J  yes
08 T  umm: okay. interesting. do you like. do you like spending time alone?
09 J  yes
10 T  okay then Dongju [What did you do? ((In the background some other students are chatting amongst themselves))
11 D  [ah
ah I went to city to cut my hair ist statements chatting in Chinese)

did you hear him? ((to the students chatting)) what did he say? ((the group of students is silent but smiles. Some of them look down at their desk))

okay repeat again

((still looking at the group of students chatting in Chinese)).

but next time listen okay?((turns to D))

I went to city to cut my hair in Saturday, and dated my um eh home stay aunt? (0.4)
in cafe. um In Sunday I just play the game here hh

(yesterday whole day?)

yeah a whole day no eh: afternoon?

afternoon

yeah from afternoon and to dinner. here with my new ESOL Korean friend.

oh

d here

really?

lilly hhhh

so does your aunt live in New Zealand?

um my home stay guardian and I call them aunt

[aa] [a

yeah

a: is is. she eh Korean?

yup. My mom my momiz. my mommy’s friend?

oh okay. Mom’s friend

d yeah mom’s friend.

okay. and. Thank you. Huia? What did you do?

Orientation to linguistic accuracy is also displayed in the interaction between the learners in the absence of the teacher in meaning-and-fluency contexts. In Example 1.11, the students are working on a pair activity on exchanging information about what their learning style is. In line 11, when student Z experiences difficulty in expressing the benefits of his learning style (i.e. SISR, left incomplete), Focal Participant K offers repair in the following turn (12). This is a typical SIOR (i.e. the trouble source belongs to the ‘other’ (Student Z) and repair is initiated by the ‘other’ (Student Z) and completed by the focal participant (Student K) in line 12) found in meaning-and-fluency contexts in this study. K’s turn in line 12 demonstrates that he is not only oriented to accuracy in his partner’s production by recycling the part of the repairable in Z’s previous production (help) in a new syntactic frame, but also to his own production by replacing ‘to’ with ‘for’ in a form of SISR.
Example 1.11

01 Z I don't know. I don't know. benefit of knowing
02 my learning style is I can study more
03 K yeah
04 Z and practice
05 K uh can you give me some egg.examples?
06 Z when I know my learning style I will use.use
07 my learning style to quickly to learning some important
08 K yes
09 Z a: to to remember
10 K oh
11 Z this. this is will help er:
12 K helpful to you. helpful for you
13 Z yeah

Though rare, examples of OIOR focusing on accuracy can also be found in meaning-and-fluency contexts. These were embedded corrections by the teacher (i.e. corrections done in the context of a conversational action. Seedhouse, 2004, p. 152). Embedded corrections play a minimal role in displaying the correct linguistic forms because they do not bring a halt to the current interaction. In the excerpt below (Example 1.12), the teacher is going over a list of comprehension questions on the reading material they have been studying with the whole class and asks Focal Participant S what the first question is (02). Line 04 is a final product produced by the learner S. In the following turn (05), the teacher first affirms S’s previous turn with ‘yeah’ confirming that S has provided the ‘right’ answer (i.e. appropriate content). Then, within the same turn, she uses a connective ‘so’ to carry on with the task while providing an embedded repair on the trouble source: the teacher recycles S’s incorrect production and replaces the repairable by changing the syntactic structure. This embedded correction is immediately followed by a question, which prompts a personal response from the learner (‘why do you think that’). By doing so, the teacher brings the learner’s attention to linguistic accuracy in a minimal way so that her repair does not halt the flow of interaction. That is the teacher does not stop or expand the repair sequence to require the learner to produce the correct L2 forms as was usually the case in the form-and-accuracy contexts (Seedhouse, 2004). Subsequently, Student S continues with the next part of the task, which is expressing his opinion (06) following the teacher’s OIOR. Neither the teacher nor the learner orients to accurate production of the repairable following the OIOR in line 05. In short, repair focusing on linguistic accuracy in meaning-and-fluency contexts is less rigid and contains features such as embedded corrections, which bring minimal attention to the production of L2 forms while providing accurate input.
Example 1.12

01 T so what was the question for the first one?
02 S dreams wh-
03 T dreams
04 S why are dreams important to philippa (decreased volume)
05 T→ yeah so why are dreams important to philippa. why do you think that?
06 S I think dream is imagine to dis. disguise. the truth!
07 T uuhh

Similar to Example 1.12, in Example 1.13, the teacher uses an embedded correction in the second turn position from the trouble source in a form of modulated question to direct S’s attention to his incorrect pronunciation of *leave*. The teacher tries to incorporate the trouble source in her confirmation of S’s answer in line 03 on several occasions (line 04, 06). When these attempts fail to lead the learner to repair the trouble source (i.e. S simply confirms the message contents in line 05, 07), the teacher continues with the current task and provides an instruction for the next part of the task in 08.

Example 1.13

01 T So dreams—What does dream tell us about? What does Philipa's
dream tell us about? Why is it important?
02 S tk. I think she doesn't wanna live in like that situation now!
04 T→ yeah she wants to leave?
05 S yeah
06 T→ leave the situation?
   ((writes leave the situation down on the board))
07 S yeah
08 T yeah. you can write that down in your essay as well. umm and uh-
   ((lines omitted))

IOIR in an unmodulated format (i.e. in a form of a statement; exposed and overt correction of incorrect or inappropriate linguistic forms) does occur, but it appears to be used only when there is trouble, which prevents the interaction from continuing. Example 1.14 below was collected three weeks after Example 1.13. Here, the same Focal Participant S continues to have trouble with the L2 word *leave*. This time though, it is not the incorrect pronunciation of the word but the meaning of the word *leave*. The class has been put into groups of three (group-work). The teacher asks the students whether they want their wives to work or stay home (01-02). Sometime later, the teacher notices that S is not participating much in the group so she joins his group and initiates teacher-learner interaction.
inappropriately uses ‘leave’ to mean that he would let his wife do whatever she wants (04). The teacher initiates repair in a form of a clarification request in line 05 by repeating the trouble source. When this is not immediately acknowledged by S, she initiates another repair in line 07 using a more specific repair initiation ‘you mean plus-’ to prompt repair completion by S. In the following turn, S provides a simple confirmation as a repair completion for this OISR. Then, the teacher provides a more explicit correction in line 09 (i.e. OIOR) to clarify for the group what S should have said to mean what he originally intended in line 04. Thus, the teacher provided a number of opportunities for S to self-complete the repair before she provided a direct form of repair completion (correction).

Example 1.14

01 T what would you do, what would your wife like, what would you like
02 your wife to do or okay? Talk amongst yourselves. ((students are talking to each other in groups))
03 T how about Sangjin
04 S if if if um my wife want to do something. I just leave her.
05 T leave her? Heh[ehe
06 Group [hhhhh
07 T you mean you want to support her?
08 S yeah
09 T →yeah you would support her.okay yeah. not leave her
10 Group [hhhh
11 S [hhh leave

4.3.2.3. Speaker of the trouble source and repair trajectory.

As with form-and-accuracy contexts (Example 1.7, Example 1.8), where the same repair trajectory can have different functions depending on the speaker of the trouble source, in meaning-and-fluency context, the same repair trajectory could serve different purposes depending on the nature of the trouble source. The different features of repair trajectory reflect the ways in which speakers show their orientation to the repairable and solve the difficulty. Both Example 1.15 and Example 1.16 are taken from teacher-learner interaction during an individual task. These two excerpts have the same conversational structure and repair trajectory: a question and answer pair with an inserted other (teacher)-initiated self (student)-repair. In Example 1.15 the learner (L) asks the teacher (T) a question about a classroom activity (01). The teacher treats this question as repairable by repeating L’s utterance in the previous turn with a replacement of the trouble source (other-initiation) using rising intonation (02). L provides a self-repair by giving an acknowledgement in the following turn (03). In line 04, T provides a second pair part (i.e. answer) for L’s question from line 01. The teacher has understood the content of what the learner said in line 01 but
wanted to correct the inaccurate use of the word ‘maori’(02). In the stimulated recall interview, L confirmed that she did not know the word for a Maori meeting place, Marae. So, L decided to simply say ‘go Maori’ hoping that this would be enough for the teacher to guess what she was trying to ask since Maori culture had been the lesson topic for the last few weeks. L also indicated that that she understood T’s repair in 02 as a correction on her inaccurate use of vocabulary ‘Maori’ to refer to Marae.\textsuperscript{xvii}

Example 1.15

<table>
<thead>
<tr>
<th>Turn</th>
<th>Transcript</th>
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</thead>
<tbody>
<tr>
<td>01</td>
<td>L  do we have to go Maori?</td>
</tr>
<tr>
<td>02</td>
<td>T  do we have to go to Marae?</td>
</tr>
<tr>
<td>03</td>
<td>L  aaa yeah</td>
</tr>
<tr>
<td>04</td>
<td>T  \textit{&lt;yes yes&gt;} you have to</td>
</tr>
<tr>
<td>05</td>
<td>L  oh</td>
</tr>
</tbody>
</table>

OISR can also be initiated because the teacher needs to clarify his/her understanding of the learners’ previous turn. Example 1.16 is a conversation between the same learner and teacher from Example 1.15. In line 01, L wants to know whether the singing practice they have been having for the last few weeks is now over. Although L’s question in line 01 is linguistically inaccurate, the teacher’s repair in line 02 is initiated not to correct L’s previous utterance but to clarify the content of the message (i.e. whether they are going to finish practising the song ‘today’). T uses a single linguistic item (i.e. an adjunct) with a rising intonation. In the following turn, L provides a repair proper (03) by repeating the verb from the repairable (from line 01) with the addition of the adverb ‘just’.\textsuperscript{xviii} According to the stimulated recall comments, L provided this particular repair completion to mean ‘finished completely’. Following the repair completion, T provides an answer (04) to L’s question from 01.

Example 1.16

<table>
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<tr>
<th>Turn</th>
<th>Transcript</th>
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<tbody>
<tr>
<td>01</td>
<td>L  do we finish the singing song?</td>
</tr>
<tr>
<td>02</td>
<td>T  \textit{today}?</td>
</tr>
<tr>
<td>03</td>
<td>L  um just finish</td>
</tr>
<tr>
<td>04</td>
<td>T  no no no we will practice again next week</td>
</tr>
<tr>
<td>05</td>
<td>Y  ohhh</td>
</tr>
</tbody>
</table>

Using the four types of repair trajectory proposed by Schegloff, Jefferson, Sacks (1977), Example 1.15 and 1.16 can only be explained as an OISR sequence expanded from a question and answer adjacency pair with the repair initiator on the second turn position and the repair proper on the third turn position. However, these repairs were initiated for
different purposes and had different features accordingly. The repair initiators in these two examples are both in the second turn and in the form of a question, but one repeats the learner’s previous turn with a replacement of the repairable (Example 1.15) and the other simply uses an additional element without recycling the trouble source in the previous turn (Example 1.16). The former is employed to provide a correction while the latter functions as a clarification request. Subsequently, the features of L’s repair completion in the following turn are also different. In Example 1.15, L provides an *acknowledgement-plus confirmation* while in Example 1.16 L repeats the verb from the trouble source and adds a new element. From these examples, it is clear that the sequential organization needs to be considered in relation to the nature of the trouble source and that the features of repair are dependent on the nature of the trouble source and what the speakers orient to as repairable.

4.3.2.4. Summary.

The aim of repair practice in meaning-and-fluency contexts is focused on establishing the factual accuracy of statements and establishing intersubjectivity rather than on production of L2 linguistic forms. While the pedagogical goal and speech exchange system vary, the overall aim is to ensure that sufficient interactional space is allocated to speakers so that they can nominate and develop a topic or subtopic and contribute new information to their speech community (i.e. classroom). Repair in meaning-and-fluency contexts is conducted in a way, which is more similar to ordinary conversation. The repair in this pedagogic context does not aim to obtain a linguistically correct L2 forms from the speakers. Incorrect L2 linguistic and interlanguage forms are frequently ignored, unless they lead to a breakdown in the communication. Further, in accordance with the pedagogic aim, minimal, pidginized interlanguage forms are regarded as valid contributions (both by learners and teachers).

In terms of turn taking, both learners and teachers orient to maintaining understanding and continuing the current conversation rather than producing accurate L2 forms, therefore the turn design is less rigid in comparison to the repair practice identified in the form-and-accuracy contexts. However, both the learners and the teachers at times displayed orientation towards achieving L2 accuracy in their repair. For instance, the learners initiated SISR to obtain a correct L2 form during their turn or turned to a more competent speaker (a peer, a teacher) for repair completion when they could not produce the target L2. The teachers would also direct the learners’ attention to accurate L2 production; however they employed less direct forms of repair initiation in comparison to the ones found in the form-
and-accuracy contexts. They were designed to have minimal impact on the flow of the conversation and resembled the ones in ordinary conversation. For instance, the form of a repair such as ‘you mean’ in Example 1.14 is identical to the kind of clarification request frequently found in ordinary conversation (e.g. initiating repair without overtly implying that an error has occurred).

4.3.3. Repair in task-oriented contexts.
In task-oriented contexts, the teacher introduces the pedagogical focus through tasks and then generally withdraws, allowing the learners to manage the interaction themselves (Seedhouse, 2004). It appears to be typical in this context that there is no focus on personal meaning or linguistic form; but the learners must communicate with each other, that is, take turns in order to complete the task, and their focus is on the accomplishment of the task rather than on the language used. The learners also sometimes resort to the teacher for help when they are having difficulty with carrying out the task. Thus, anything that hinders a successful completion of the task at hand becomes a trouble source. In sum, the pedagogic focus is on the outcome of the activity/task, and the turn-taking system is reflexively related to the task-in-process and oriented to the successful completion of the task. The focus of the interaction is generally not relevant to talk of topic or meaning in this context; the learners’ focus is on the accomplishment of the task.

4.3.3.1. Speaker orientation to task-goal and sequential organization of repair.
The following Example 1.17 is a typical example of focal participant-learner interaction in pair-work in a task-oriented context. The teacher tells the class what information is to be talked about and obtained at the end of the interaction task. In this task, the speakers - Focal Participant K and his partner P - are required to take turns and ask each other a number of designated questions designed by the teacher (01). In such a task, the two interactants need to both ask and answer the questions. That is, one of the speakers, K in this case (Speaker 1) typically asks the other student P (Speaker 2) a question first (03), and the question is followed by an answer by P (04). P then takes the role of an interviewer (05) (provided that there is nothing to repair) and K provides an answer to the question (06). Likewise, the pedagogic goal of the task shapes the interactants’ turn taking organization in the interaction.

Example 1.17
In Example 1.18, Focal Participant H is working in a group with three other learners (L1, L2 and L3). In this task, the students are engaged in a panel discussion. They are to take turns as a presenter and a panel member. There are four topics and each student has to choose one topic each and present it to the other three members of the group who are acting as a panel. The four topics are 1. Water pollution, 2. Traffic congestion, 3. Dangers of travelling and 4. Advice for international students. We can see that Example 1.18 below is an example of how a repair sequence expands until the speakers reach consensus on ‘how to’ in order to establish mutual understanding on completing the task. The first repair sequence identified is OISR. Focal Participant H wants to confirm whether L1 in line 01 (i.e. repairable) is asking him to be the presenter first or to take the first topic (i.e. water pollution). In the second turn position from the trouble source, H initiates repair using a clarification request ‘huh?’ (02). Since L’s repair completion in the third turn position (03) is exactly the same as the source of trouble in line 01 (i.e. repetition of the trouble source), H initiates another repair in line 04 and the sequence expands to another OISR (line 04-05). This time, the repair initiation by H features a more specific clarification request, namely ‘you mean plus’. In the following turn (05), L1 fails to complete the repair and thus in the third turn from the trouble source, H initiates another repair (06). In the following turn (07), L1 provides a repair completion but it is still inadequate for achieving a consensus among the learners (i.e. the need for one of the speakers to choose a topic and present), as it is a simple confirmation ‘yeah’. This breach in mutual understanding results in another two other OISR (08-09, 10-11) until they reach a consensus. The learners’ need to reach a consensus in order to accomplish the task is what drives the interaction and the turn-taking system in repair in task-oriented contexts.

Example 1.18

01 L1 you first
02 H huh?
03 L1 you first
In task-oriented contexts ‘trouble’ is anything, which hinders the completion of the task, and repair is focused on removing such hindrances. The learners’ orientation to task requirements is manifested in their talk-in-interaction and the repair organization is reflexively related. For instance, in the following Example 1.19, K (the focal participant) is working on a pair activity with his classmate P. The task requires them to provide their own answers as to what their study style is. The teacher has instructed the students to provide examples and also state what aspects of their learning style they think are important and why. When K thinks that P is providing a general opinion rather than his own experience thereby deviating from the task requirement, he stops P and initiates repair (05, 07). This is an example of OISR sequence.

Example 1.19

01 K what do you think about that? yeah about that?
02 P what is the important. important thing to speak to other peoples. like tone, or body language like standing standing in the one place
03 K no. tuh. That's not your answer
04 P I know I know. I think
05 K I want your own answer
06 P I think body language is. using the ch. gesture
07 K pardon?
08 P using the:
09 K gesture=
10 P =gesture yeah
11 K gesture yeah
12 K gesture yeah

As Example 1.18 and 1.19 demonstrate, in task-oriented context, one of the mechanisms of repair is that of using repair to accomplish the task (i.e. the speakers display their understanding and manage to negotiate intersubjectivity and reach a shared understanding of the task). However as we will see later, repair also had other functions in this pedagogic context.
The repair sequences found in task-oriented contexts in this study were primarily conducted by the learners, though there were cases where the teacher would intervene to ‘direct’ the learners to complete the task. The excerpt below is a later part of Example 1.19. The teacher breaks up the activity and asks K and P about the progress they have made so far and whether they have followed his instruction and satisfied the task goals\textsuperscript{xx} (line 14-23). Upon checking the students’ progress, the teacher assigns another topic to discuss (24-25)\textsuperscript{xxi}. While checking the student’s progress, K’s incomplete SISR expands to SIOR where the ‘other’ is the teacher (line 21 and then line 23). While this specific repair was focused on providing an accurate L2 syntactic frame for the learner by the teacher (which was not directly related to the task goal), it serves as a platform for the teacher to introduce the next task (i.e. explaining is another way of communicating and nodding is also a way of communicating).

Example 1.20
14 T okay, whose partner had a good idea?
15 K yeah him
16 T ‘kay. What did what did P say?
17 K gesture
18 T gesture. and did he elaborate?
19 did he tell you more? Why is gesture important do you think
20 K because eh- explain.to.(0.4)how to um.(0.4)uh.(0.2)uh-.
21 T it can help you explain
22 K yeah.explain em.
23 T it’s another way of communicating. Alright?
 ((Teacher walks up to the board and writes down “way of communicating” under the category Gesture))
24 now, we can talk about nodding. Nodding is showing that you are
25 agreeing, supporting, all right?

Sometimes, the participants called on the teacher as a resource to assist in repairing the trouble source, which has risen between them. This is a case of SIOR sequence with the teacher being the ‘other’. In the same task as in Example 1.21, K resorts to the teacher to ask about the task procedure (09, 10) after a number of attempts to proceed with the task himself (02, 03, 05, 07).

Example 1.21
01 T turn to your partner and ask them "What did you think?"
02 K what do think?
03 What do you think?
04 P what? What?
05 K eh:
4.3.3.2. Orientation to linguistic accuracy in task-oriented contexts.

Seedhouse (2004) argues that in task oriented contexts, there is never any attempt by a learner in learner-learner interaction to correct another learner’s linguistic forms. However, in this study there were a few instances of linguistic correction by a learner during group work. An example of this is presented in Example 1.22. In this example, there are three learners in the group: Focal Participant (K), student E and student N. The task required each of the students to provide their personal response to the video they had just watched as a class. Prior to this interaction, N and E provided their answers as the beginning of Example 1.22 shows, and K is the last person to provide the answer (01). Thus, K is correct in thinking that everyone has taken their turns and provided a response (03), thereby completing the task. However, E thinks otherwise; he thinks that K has not taken his turn and provided his response, therefore making the task incomplete (05). This difference in the learners’ understanding of the progress in the task they have made so far results in communication breakdown. In addition to the differences in understanding they have about the task, E’s lack of linguistic accuracy in line 05 (‘see’ instead of said, the past-participle for say) becomes a further trouble source and K subsequently initiates repair in the second turn position (06). This results in the first OISR (line 06, 07) and it gets expanded several times as we will see below.

E’s repair completion following the initiation (07) is a repetition of the trouble source (05) but this repair completion does not solve the problem (i.e. helps K to understand what E meant by ‘see’ in line 5). K initiates another repair in the following turn (08) by recycling the trouble source, replacing the repairable with what, indicating more specifically where in the turn the trouble source is. What is interesting about the second repair is that it is OISR where the ‘other’ is a third party (Student N). When it was apparent to N that E, who is the source of trouble, did not have the L2 ability to provide a linguistically correct repair, N volunteers to provide a repair completion instead of E by recycling E’s previous phrase with a replacement of the trouble source (i.e. ‘see’ to ‘said’). E confirms that N’s repair
completion is in fact what he intended to say (10) and the speakers now move on to solving
the original problem (i.e. whether the task is completed). In lines 11 and 13, speaker N
further assists speaker E by elaborating what K needs to do. K finally understands what
speaker E intended to say in line 07 and objects to it in line 14. This results in a further
question and answer sequence (14-15). Later in line 17, E shows his acknowledgement, but
it was not possible for me to know whether or not they came to a mutual understanding of
the situation as the class ended after this sequence.

The turn taking displayed in Example 1.22 suggests that the learners actively participate in
repair practice in order to establish mutual understanding and accomplish the task, but also
address linguistic problems on occasion.

Example 1.22
01 K it is not necessary to use the elephant teeth
02 N yeah I agree with you.
03 K so finished?
04 are you done?
05 E you haven't see
06 K what?
07 E you haven't see:
08 K You haven't what?
09 N ➔You haven't said
10 E you. haven’t said
11 N you (??)express
12 K ah yeah
13 N your interesting idea that you have found.
14 K no no . I I I hhI ask ask I ask him. Did you finish?
15 E yeah
16 K but he says to me. It's not make sense.
17 E oh oh ver: well.

4.3.3.3. Summary.
The pedagogical focus in task-oriented contexts is principally the successful completion of
the task. In order to do so, learners must establish mutual understanding and achieve a
consensus on how to approach the task. This pedagogic focus has an impact on the speech
exchange system and there is a reflexive relationship between the organization of repair and
the pedagogic context in which it occurs.

The most frequently used repair organization in task-oriented contexts found in this data
was OISR with the ‘other’ being a fellow learner. This may be due to the fact that the
teacher usually withdraws after providing the relevant instructions for the task and the interaction takes place between learners in a pair-work or group-work. This is also in accordance with Seedhouse’s (2004) description of repair in task-oriented contexts.

4.4 Discussion

The major findings are summarized and discussed below.

4.4.1. Repair organization in form-and-accuracy contexts.

The majority of the organization of repair sequences found in form-and-accuracy contexts supports Seedhouse (2004) in that the sequential organization of repair was reflexively related to the pedagogic focus. In Seedhouse (2004, p. 104), the pedagogical focus in form-and-accuracy contexts is accurate production of specific L2 linguistic forms chosen by the teacher. Accordingly, in this pedagogic context, the learner production is assessed in principle by the teacher based on whether or not it corresponds to the targeted L2 forms. When it does not, the teacher normally attempts to encourage the learner until s/he is able to produce the target form correctly. Consequently, the repair sequence is ‘tight’ in that the sequential organization of interaction needs to correspond exactly to the linguistic form the teacher introduced. For instance, the teacher initiates other repairs and induces learner completion.

However, there were also some differences in the data found in this study in comparison to Seedhouse’s (2004) account of repair in form-and-accuracy contexts. While Seedhouse emphasized the role of teacher initiation in ensuring accurate production of a specific L2 form/string, the repair sequences found in this study were overwhelmingly initiated by the learners. In the form-and-accuracy contexts found in this study, it was the learners who most frequently both initiated and completed repair on repairable (i.e. SISR) within the same turn. The next most frequent repair sequence was SIOR, during which the focal participants initiated repair when they could not complete their turn due to their limited L2 ability. The repair was then completed by the interlocutor. The fact that the learners proactively initiated self-repair to resolve their linguistic issues (i.e. in order to achieve accurate L2 production) suggests that they were monitoring their L2 and at least in part were aware of their limited L2 competency and the need to produce accurate L2 forms.
In other words, repair was initiated by the learners as well as by the teacher. The learners oriented towards accurate L2 production among themselves (e.g. in pair-work), and this focus on linguistic accuracy in turn had an impact on the turn design. There were two principal ways in which the learners displayed their orientation to L2 accuracy through repair organization. One way was by initiating other-repair on the interlocutor’s previous turn, as in teacher-initiated student-completed repair (i.e. OISR). The other way was when the speaker of the trouble source initiated self-repair on his/her own turn and resorted to the interlocutor to complete the turn (i.e. SIOR). In the former, the repair initiator took on the role of teacher, whereas in the latter it was the interlocutor (i.e. provider of other-completion) who was assigned the role of teacher. However, unlike other-initiation by the teacher, the speaker of the trouble source often rejected repair initiation (on a production problem) by a fellow L2 learner (i.e. the speaker of the trouble source refused to accept that their previous production was incorrect). This rejection typically resulted in an expansion of a repair sequence involving inserted questions-and-answer pairs. In some cases, the speakers would turn to the teacher for a final confirmation or further assistance.

The teachers’ comments collected after the lessons provide an explanation for why there were relatively few teacher initiated repairs or corrections. The teachers often consciously avoided interrupting the students’ turns to correct their production or induce correct production of a specific L2 string. They believed it was important to encourage the students to speak a lot and do so in a comfortable environment. They explained that initiating repair would discourage the students (to continue speaking in L2). The teachers’ indicated that they were inclined to draw the students’ attention to a linguistic error only in certain contexts:

1. When the activity at hand made it necessary to do so, for example when the target form was given in writing. As Teacher 3 said “you don’t want them using the wrong thing throughout the whole class”. Similarly, Teacher 4 commented, "you have to stop them and correct because otherwise you are really wasting your time, you know”.

2. When drawing attention to the L2 form was also beneficial for the whole class or other students. Teacher 2 noted, “sometimes I use it to teach the whole class. And it also kind of takes the pressure off the student who made the mistake, you know”. Teacher 1 observed “if the mistake is also something that the other students are prone to make, I will use it as an example to teach the whole class”.
3. When the teacher thought that a student was too advanced to be making a particular error. Teacher 4 considered that “some of them really shouldn’t be making those kinds of mistakes at this level you know. But it’s not always because they don’t know. Sometimes they just need a little reminder”. Teacher 2 considered that “like if we are learning the present perfect, you expect them to already know verb agreement”

4. When a student was making the same L2 mistake repeatedly. Teacher 1 observed that “they get it right, sometimes they don’t. It’s not always perfect. But if it’s repeated over and over again you know, I’ll have to point it out at some stage.” Teacher 3 commented: The Korean students tend to translate directly from Korean, you know. It’s not too bad. Most of the time, I can sort of guess what it is that they are trying to say. It kind of makes sense but not really in English. You know like they’d say ‘it’s my mind’ instead of ‘it’s up to me’ or ‘leave me alone’ that sort of thing you know. It’s okay when they are talking to their friends, but I just don’t want them to make a habit it or get it wrong in the test or something.

5. When a particular student was open to being corrected in class. Teacher 1 for example, said that she was very careful whom she corrected: I once had a student cry. She was a very good, bright student you know. So I was quite surprised when she started to cry. She later told me that she had been so frustrated and embarrassed. I felt really bad. I had no idea. I guess she just snapped that day so to speak. Since then, I am much more careful, more sensitive I guess.” Teacher 2 was also aware of the need to take individual students’ sensitivities to correction into account: These boys are in a mixed class. So some are older than the others and some are better than the others you know. You’d probably know better than I do, but they have a strict order or hierarchy whatever you call them among them. Like just before the break (Senior student name) said something during his speech and one of the junior boys laughed or giggled, and (Senior student name) and his friends later ganged up on the junior boys to ‘teach them a lesson’. Apparently, you are not supposed to laugh at your seniors, etc. It was so messy. They all got into trouble, etc. So a lot to consider. Some students are fine you know. They even come and ask me “Oh teacher, can you correct me every time I make a mistake”. Of course, that’s not possible.”
Some teachers also said that if they wanted to correct, they would approach the students during an individual activity or provide corrections of their written work. Based on the teachers’ comments, it seems that the teachers’ beliefs and teaching philosophy underlie why there was relatively little teacher initiated repair targeting linguistic accuracy in form-and-accuracy contexts in this study.

4.4.2. Repair organization in meaning-and-fluency contexts.
Seedhouse (2004) claims that repair in meaning-and-fluency contexts is conducted in a similar way to ordinary conversation and as a result its sequential organization is ‘less rigid’ than the repair in form-and-accuracy contexts. He attributes this phenomenon to the pedagogic aim, namely to focus on establishing factual rather than linguistic accuracy and to the overall goal of providing the learners with opportunities to engage in interaction by granting them as much interactional space as possible so that they can freely develop a topic or subtopic. Consequently, he found that incorrect L2 forms are often ignored unless they lead to a serious breakdown in the communication.

The same pedagogic goals were evident in the organization of L2 repair in meaning-and-fluency contexts found in this study. The learners as well as the teachers were focused on maintaining mutual understanding of the content of the speaker’s message rather than on linguistic correctness. Therefore the sequential organization of repair was less constrained in the sense that the repair was not directed at getting a speaker to produce a specific L2 form.

However, interestingly, in this study, repair in meaning-and-fluency contexts was not limited to restoring understanding of message content. Both teachers and students frequently engaged in repair to resolve linguistic problems. The major difference between the repair of production problems in meaning-and-fluency contexts in comparison to form-and-accuracy contexts was that the other-initiation of repair in the former was designed to avoid interrupting the learners’ ongoing turn and subsequent turns. Most distinctively, the teacher initiation of repair would often contain a repetition of the trouble source by itself (leave her? [repetition of trouble source in the previous line] in Example 1.14, line 05), or the trouble source plus an alternative (do we have to go[trouble source] + to Marae [alternative]’ in Example 1.15, line 02), or an alternative (e.g. yesterday, whole day?[alternative] for Sunday[trouble source] in Example 1.10, line 23), or a clarification request in much the same way as found in ordinary conversation (e.g. really in Example
1.10 line 29; you mean+alternative as in Example 1.14 line 7) rather than the Designedly Incomplete Unit (Koshik, 2002) as found in Example 1.22, line 05. While peer initiated repair also contained clarification requests, their repair initiation was distinguished from the teachers’ in that it did not make mention of the trouble source from the previous turn. Typical examples included ‘what?’ ‘huh?’, ‘pardon?’.

Furthermore, while other-initiated repair was the most prevalent form of repair initiation in meaning-and-fluency contexts, the speakers also initiated self-repair to attend to their own production. As in form-and-accuracy contexts, the learners initiated self-repair and left the turn incomplete or requested help so that it could be completed by the next speaker (i.e. SIOR). When the problem at hand was resolved, topic-continuation occurred.

### 4.4.3. Repair organization in task-oriented contexts.

According to Seedhouse (2004), the successful completion of the given task is the principal objective in task-oriented contexts. Thus the teacher usually withdraws after providing the relevant instructions for the task and the learners then need to establish mutual understanding of the task and agreement on how to approach and complete the task among themselves.

In line with Seedhouse’s (2004) description of repair organization in task-oriented contexts, the repair sequences found in this study were usually initiated by a learner during conversation with another learner (OISR). However, the data for task-oriented contexts in this study differed from those reported by Seedhouse (2004), as there were some examples of repair sequences, which were linguistically focused in these contexts. For instance, SISR and SIOR were found but not OISR or OIOR. In fact, task-oriented contexts were the only pedagogic contexts in which OISR sequences focusing on L2 accuracy and OIOR were not found. This is likely due to the fact that the focus in task-oriented contexts is on restoring mutual understanding of the task, specifically regarding the task procedures or achieving the task outcome. Therefore, while the learners might correct their own L2 production (i.e. SISR) or ask for assistance (i.e. SIOR), there was little need to initiate repair to make linguistic corrections on their interlocutor’s previous turn (i.e. OISR, OIOR).

All in all, in the data collected for this study, instances of repair were found least frequently in task-oriented contexts (See Table 3 below). This may simply reflect the fact that conversations in task-oriented contexts were scarce in the data (i.e. the participants rarely
engaged in conversation ‘about’ the task or its procedure). Seedhouse’s (2004) data does not include frequency analyses. It is unclear whether the limited repair sequences in the current data simply reflect the paucity of task-oriented contexts. In addition, the tasks used in this study may have failed to stimulate L2 learners to negotiate or reach consensus on how to approach and complete the task. For instance, the majority of the activities consisted of question-and-answer activities. They involved discussion of a particular topic with peers (e.g. your family, how to reduce waste), where the students asked each other questions to obtain certain pieces of information (e.g. what their parents do and where they live; personal opinions on ways of reducing waste). Another typical type of activity was in the form of comprehension questions: after reading a passage or watching a media file, a list of questions was provided which required the students to take turns asking each other questions from the list and providing answers based on the text.

Table 3 The frequency and percentage of instances of repair in three pedagogic contexts

<table>
<thead>
<tr>
<th>Pedagogic contexts</th>
<th>SISR</th>
<th>OISR</th>
<th>SIOR</th>
<th>OIOR</th>
<th>Total repairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form-and-Accuracy</td>
<td>41</td>
<td>37</td>
<td>5</td>
<td>4</td>
<td>87 (21.5%)</td>
</tr>
<tr>
<td>Meaning-and-Fluency</td>
<td>168</td>
<td>82</td>
<td>38</td>
<td>16</td>
<td>304 (75%)</td>
</tr>
<tr>
<td>Task-Oriented</td>
<td>1</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>14 (3.5%)</td>
</tr>
<tr>
<td>Total number of repairs</td>
<td>210</td>
<td>127</td>
<td>48</td>
<td>20</td>
<td>405/405</td>
</tr>
<tr>
<td>by sequential organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.4.4. Summary.

Seedhouse (2004) proposed, “each context has its own particular pedagogical focus and its own typical organization of repair which is reflexively related to that pedagogical focus” (p. 158-159). That is, each pedagogic context has its own logic and its own definition of what constitutes trouble and hence of what is repairable. The analysis of the data in my study largely supports Seedhouse (2004) in that L2 repair is organized differently according to the different pedagogic contexts. It adds to Seedhouse’s (2004) findings in that the speakers oriented to different aspects of the L2 in a given pedagogic context using repair and the same sequential organization of repair served different purposes to resolve problems of production and understanding. Most distinctively, regardless of the pedagogic aim set by the teacher, learner orientation to L2 accuracy occurred in all three contexts through
different repair sequences - SISR, SIOR, OISR and OIOR (See Table 4 below for a summary). In the cognitive-interactionist paradigm, a distinction has been made between negotiation (i.e. repair in CA) focusing on meaning (i.e. negotiation of meaning) and negotiation focusing on linguistic form (i.e. negotiation of form). The CA analysis presented in this chapter lends support to this distinction.

In addition, while the four types of repair trajectory, namely SISR, SIOR, OISR and OIOR proposed by Schegloff, Jefferson, and Sacks (1977), were evident in the L2 classrooms investigated in this study, the organization of L2 repair can best be understood in relation to the evolving and reflexive relationship between L2 pedagogy and interaction. After a close inspection of the data, in order to account for the complexities of L2 classroom repair in relation to pedagogic contexts, it was found necessary to consider three additional factors in addition to the repair trajectories proposed by Schegloff, Jefferson, and Sacks (1977). These are the nature of the trouble source (i.e. type of trouble), the source of the repairable (i.e. speaker of the trouble source), and the pedagogic context in which the repair trajectory occurs. This study suggests that:

1) Repair practice in classroom interaction can be explicated not only in terms of its sequential position, but also in relation to why the repair was initiated and what it was intended to achieve. While the four repair trajectories proposed by Schegloff, Jefferson, and Sacks (1977) can illustrate the organization of repair in terms of its sequential position, the description of the sequential position (i.e. SISR, SIOR, OISR, OIOR) alone does not illuminate the pedagogical purpose(s), which the repair sequences serve.

2) The different organization and features of repair are associated with the nature of the trouble source (i.e. whether the problem is due to language production or understanding), the source of the repairable (i.e. to whom the repairable belongs), the interlocutors involved (i.e. the participatory structure), and the purpose of the interaction (i.e. the pedagogic aim). For instance, the same repair trajectory can serve different pedagogic purposes depending on the speaker of the trouble source (e.g. a student as opposed to the teacher), how the interlocutors orient to them (e.g. lack of linguistic accuracy as opposed to not being clear about the message content) and the communicative purposes of the interaction (e.g. to correct the learner as opposed to request clarification). The features of repair initiation and completion also need to be accounted for as they reflect the ways in which speakers use repair to signal difficulties and resolve them.
3) The sequential explanation of repair is not the only reason why one type of repair trajectory is preferred over another. Repair in pedagogic contexts has a sequential order of preference that is specific to the content and communicative/social context of the L2 classroom. For example, while Schegloff, Jefferson, and Sacks (1977) suggested self-repair is preferred over other-repair in ordinary conversation due to its sequential nature, other initiation/completion is necessary and sometimes even expected in L2 classroom contexts.

The basic organization proposed by Schegloff, Jefferson, Sacks (1977) is still applicable in that it is not influenced by the speaker of the trouble source or other ‘contextual’ factors. The point is that the organization of L2 classroom repair needs to be understood and analysed in relation to the nature of the trouble source and the speaker involved.

**Table 4 Summary of repair characteristics found in Seedhouse (2004) and the present study**

<table>
<thead>
<tr>
<th>Pedagogical Contexts</th>
<th>Seedhouse (2004)</th>
<th>Present study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form-and-Accuracy</td>
<td>1. The pedagogical focus in form-and-accuracy contexts is on the accurate production of specific L2 linguistic forms chosen by the teacher.</td>
<td>1. The teachers as well as the learners can choose which L2 form should be the focus of repair.</td>
</tr>
<tr>
<td></td>
<td>2. The learners’ production is assessed by the teacher based on whether it corresponds to the targeted form. As a result, the teacher controls the interaction tightly, especially through OISR and OIOR as s/he typically guides the learner to produce the target form correctly.</td>
<td>2. The focal participant as well as their peers can take on the role of teacher to assist an interlocutor to produce a specific L2 linguistic form through SIOR and OISR trajectories.</td>
</tr>
<tr>
<td></td>
<td>3. OISR (teacher-initiated and student-completed repair) is more frequent than OIOR</td>
<td>3. Overall, OISR (teacher-initiated and student-completed repair) and OIOR trajectories were rare.</td>
</tr>
<tr>
<td></td>
<td>4. SISR is frequent</td>
<td>4. The focal participants engaged in SISR trajectories most frequently.</td>
</tr>
<tr>
<td></td>
<td>5. There are only examples of the learner- (speaker of the trouble source) initiated and peer-completed repair (SIOR). There are no examples of peer-initiated and</td>
<td>5. The majority of repairs were initiated by the focal participants (speaker of the trouble source). The focal participants designated the next speaker (the teachers as well as</td>
</tr>
<tr>
<td>Task-Oriented</td>
<td>Meaning-and-Fluency</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>1. The principal objective in task-oriented contexts is the successful completion of the given task and repair is primarily conducted by the learner (speaker of the trouble source) to initiate repair. However, the repair is focused on establishing the factual accuracy of statements rather than on linguistic form.</td>
<td>1. The pedagogic aim concentrates on establishing factual accuracy, rather than the linguistic accuracy of speakers’ utterances.</td>
<td></td>
</tr>
<tr>
<td>2. Learners also initiate repair to repair each other’s previous turns using overt correction techniques. However, the repair is focused on establishing the factual accuracy of statements rather than on linguistic form.</td>
<td>2. The teachers do not usually attempt to repair linguistic errors, unless they lead to a serious breakdown in communication. In such cases, (embedded, exposed, overt) correction of incorrect or inappropriate L2 forms may occur.</td>
<td></td>
</tr>
<tr>
<td>3. The teacher initiation of repair included clarification requests as found in ordinary conversation. In addition, it would often contain a repetition of the trouble source and provision of an alternative form.</td>
<td>3. Other initiated repair involves the same kind of repair (clarification requests) found in ordinary conversation (e.g. wh-questions which initiate repair without implying that an error has occurred).</td>
<td></td>
</tr>
<tr>
<td>4. The peer-initiated other-repair contained clarification requests. These were initiated to solve both linguistic problems as well as understanding problems. However, the learners’ repair initiation differed from the teachers’ in that it often did not contain the trouble source from the previous turn. Typical examples included ‘what?’, ‘huh?’, ‘pardon?’</td>
<td>4. The teachers frequently ignored incorrect L2 forms, but provided linguistic correction when the trouble source prevented the interaction from continuing or when they thought it was important to bring the learners’ attention to particular L2 forms.</td>
<td></td>
</tr>
<tr>
<td>5. Third party repair encouraged by the teacher was not found in this study.</td>
<td>6. When the learner (speaker of the trouble source) initiates repair and fails to complete it, the teacher encourages a third party (i.e. another learner in the classroom) to complete the repair.</td>
<td></td>
</tr>
<tr>
<td>6. Third party repair encouraged by the teacher was not found in this study.</td>
<td>6. The speaker of the trouble source rejected the repair initiation and at times resorted to the teacher for confirmation.</td>
<td></td>
</tr>
</tbody>
</table>
learners.
The teacher usually withdraws after providing the relevant instructions for the task, and the learners initiate repair when there is a need to establish mutual understanding of the task and agreement on how to approach and complete the task among themselves.

2. Occasionally the learners may approach the teacher for further assistance in repairing trouble (SIOR).

3. Sometimes the teacher will intervene to address accuracy during learner-learner interaction.

establish mutual understanding of the task and its procedures.

2. The learners on occasions turned to the teacher for more information on the task (SIOR).

3. The learners initiated self-repair to focus on linguistic problems. As a result, SISR and SIOR were found. Both the other learners and the teachers provided the other-completion of repair. However, there were no instances of OISR or OIOR focusing on linguistic problems. Also, teacher intervention during learner-learner interaction to repair for accuracy was not found in this study.
Chapter 5. Research Question 2: Results and Discussion

5.1 Research Question 2

The second research questions attempted to determine whether there were changes in what participants orient to as repairable over time.

RQ 2. What changes occur in the topic of the repair work (i.e. the ‘repairable’) in SISR, SIOR, OISR, and OIOR sequences involving L2 classroom learners over time?

5.2 Analysis of the data

The starting point for the analysis I carried out to answer Research question 2 was the four repair sequences - SISR, SIOR, OISR, and OIOR (Schegloff, Jefferson, & Sacks, 1977). My original intention to investigate the repairable was according to the linguistic category involved (e.g. noun phrase, verb phrase, etc) (Hellermann, 2009; 2011; Markee, 2008). However, after close inspection of the data collected in this study and in accordance with the principles of conversation analysis, I found that the topics of the repairable needed to be investigated more fully in terms of why the repairable become repairable (i.e. its nature) and in terms of who the source of the problem (i.e. speaker of the repairable) was in the sequential organization of repair rather than in terms of the linguistic category involved. Thus, I undertook an analysis of Schegloff, Jefferson, and Sacks’ (1977) four repair trajectories in terms of the nature and source of the repairable in different pedagogic contexts. In doing so I drew on the work of Chaudron (1977 as cited in Li, 1992), van Lier (1982, 1988), Schegloff, Jefferson, and Sacks (1977) and Schgeloff (2007). In the sections to follow, I will illustrate the different nature of the repairable (i.e. problem) and the features of repair work that are identified with solving these troubles using examples taken from the data collected for the study. It is important to keep in mind that the specifications of problems illustrated here are based on the features of sequential organization of the repair work speakers manifested in response to the trouble source in this study. Therefore, while the features or specifications associated with a particular repair work are referred to as ‘actions’ - such as selection, replacement, etc. - they need to be understood as the characterizations of the turns, or turn constructional units (TCUs) in which they appear and in terms of what they are doing in the repair sequence in order to solve the problem, rather than on their own as particular actions or action formations as such (Schegloff, 2007).
5.2.1. Specification of trouble source.

According to Li (1992) who investigated the characteristics of L2 repair in the different types of classroom interaction in (e.g. teacher-fronted class, group-work, pair-work), a trouble source can be either a problem of production or a problem of understanding. A repairable is categorized as a problem of production when the speaker has problems saying what he/she wants to say. A problem of understanding refers to when the recipient of the trouble source has a problem. However, in the case of an understanding problem, it is difficult to draw a clear line between whether the trouble is solely the hearer’s or both the speaker’s and the hearer’s. For instance, the speaker may have made an incorrect assumption about the hearer’s knowledge or ability to hear with the result that the hearer fails to understand or hear the speaker’s utterance. In this study, a trouble source was categorised as an understanding problem only when the recipient indicated difficulty in hearing and/or understanding the speaker’s previous utterance.

5.2.1.1. Features of production problems.

Three categories of production problems were identified (Li, 1992): (i) Prospective, (ii) Concurrent and (iii) Retrospective, based on where the repairable and the repair initiation (and completion) occurs in the repair sequence (Schegloff, Jefferson, & Sacks, 1977).

(i) Prospective repair

Prospective repair occurs when a speaker has a problem in finishing his/her own utterance. The problem at hand is thus the next-due element within the turn under construction, and it is usually signalled by pauses, sound stretches, and cut-offs. The problematic utterance can either be completed or left incomplete by the speaker (SISR) or completed by the hearer (SIOR). In the case of the latter, repair completion can occur by means of a statement or a question by the hearer in the turn from following the trouble source, and it is usually followed by either an acceptance (e.g. Example 2.1 line 08) or rejection. It can also lead to a further trouble source requiring another repair in which case the second part of the first pair ‘offer’ provided by the hearer becomes the first part of the second pair. This description indicates that repair organization can be explained in terms of an adjacency pair such as invitation/offer and offer/acceptance (Schegloff, Jefferson, & Sacks, 1977). Repair work has embedded and recursive features. Example 2.1 shows an example of how the self-initiation of a repair (lines 03-06) is followed by other-repair (i.e. SIOR) (lines 07) as the repair initiation was left incomplete.
Example 2.1
01 D That is is similar others eh say me to use. bad
02    languages abuse. of course I have. I will be angry.
03    so I think.
04    (0.8)
05    I may I may leport? cyber-uh teachers
06    or police because that (0.2) uh (0.4) what is (0.4)
07    S lawyer=
08    D =yeah lawyer

The speaker of the trouble source can provide the completion within the same turn as a self-repair (Example 2.2: ‘the.the.fa.famers’) or in the third turn position from the trouble source (Example 2.3). In the latter case, it serves as a continuation rather than a self-repair (Schegloff, Jefferson, & Sacks, 1977). For example, line 03 in Example 2.3 is a continuation of Y’s prior turn (line 01), which has been interrupted by the teacher’s acknowledgement in line 02.

Example 2.2 (within the same turn)
01 K a:: I forgot. (0.2) the. the fa.farmers.

Example 2.3 (continuation repair)
01 Y • hhh it was so hard for me umm-
02 T1 yeah
03 Y ! like (0.2) ummmm justssss:
   ((lines omitted))

(ii) Concurrent repair
Concurrent repair refers to when the speaker searches for an element and repairs it in order to make what s/he has said more appropriate (e.g. more precise or correct) within the same turn. Thus, a concurrent repair is essentially SISR in the form of self-editing. In the sequential organization of repair, concurrent repairs can take place before the trouble source (pre-positioned) or after the trouble source (post-positioned). In the former, speakers initiate repair on the next due item, and it is usually signalled by a cut-off, pause, or a sound stretching, and stands in the place of the next-due element. This delays the current turn but carries forward the syntactic projection of the sentence-so-far as in Example 2.4.

Example 2.4
01 K   di di di animals er (0.4) yeah the people er kill
02    the animals eh for (0.4) eh (0.2) selfish. Eh selfish
reasons eh yeah like em money

In a post-position concurrent repair, speakers repair some already-produced element of the turn within the same turn. This can result in syntactic disjunction as it interrupts what is syntactically projected by the sentence-so-far. Typical actions enacted through concurrent repairs in this study are selection, replacement, self-correction, and refinement.

Selection (Example 2.5.) is when the speaker searches for a word and then continues the utterance (line 02) or restarts the utterance, which has been started (line 03).

Example 2.5
01 K then.eh.he he always give to us the the hand-out or
02 ➔eh write on dee boar-eh eh (0.4)white board.
03 ➔and can eh: I can write on my notebook.

Replacement can occur in a form of a self-correction or reformulation. In Example 2.6, K replaces the word result to results (line 02)

Example 2.6
01 K I've already said to you if I improve it learning skill.
02 ➔it can give to me the good result.results

Self-correction (Example 2.7) refers to a situation where the speaker replaces one item by another to correct it. In self-correction, only one item is acceptable or correct and the other is not. Self-correction is thus different from substitution.

Example 2.7
01 K ➔yeah I can get the good result of. to. from the.
02     yeah.somethin’.

Reformulation (Example 2.8) is where the speaker replaces one language structure by another to make it more appropriate.

Example 2.8
01 K ➔your voice your tone is so happy with the-
02     when you're talking about your chemistry teacher.
Lastly, when speakers refine their utterance (Example 2.9), they substitute a word or phrase by another to make it more precise or appropriate. Both items can be linguistically acceptable and the change is just a matter of precision or appropriateness in the context.

Example 2.9
01 T hit you?
02 S yeah
03 T ahhh:
04 S or chopsticks↑ using chopsticks

(iii) Retrospective repair
Lastly, retrospective repair refers to a sequence of repair that starts in either the next turn of another participant or beyond the next turn by the speaker who is the origin of the trouble source. Li (1992) identified three different ways of addressing a production problem in retrospective repair: i) Other repair, ii) Other initiation, Self-repair or Other repair and iii) Third turn self-repair.

i) Other repair is commonly associated with correction in the SLA literature (Lyster & Ranta, 1997) or disagreement in discourse analysis (Varonis & Gass, 1985). In terms of its feature, it is frequently preceded by a pause and can be asserted emphatically in the form of (no+) correction. Li (1992) further divides other repair into modulated and unmodulated correction. When the recipient uses a modulated other correction (Gaskill, 1980 as cited in Li, 1992), it is typically used to repair a production problem in the speaker’s previous utterance. It is usually in question form and indicates the hearer’s ‘uncertainty’ about the interpretation of the previous utterance (Example 2.10).

Example 2.10
01 S tk.I think she doesn't wanna live in
02 like.that.situation now↑
03 T4 yeah she wants to leave↑
04 S yeah
05 T4 lea:ve the situation?
06 S yeah

On the other hand, when the other correction is unmodulated, it is in the form of a direct statement (Example 2.11).
Example 2.11
01 S  There were lot of. a lot. lot of. not LOT.
02 L  Many birds
03    (0.2)
04 S  No I think 'many' is a right. no? I think. Yeah
05 L  yeah

ii) A typical example of other-initiation, self/other-repair of a production is when the teacher or the other-initiator knows the correct form and has the ability to do the repair but withholds repair to allow the student to complete the repair. Other initiation can occur as a clue, a prompt, and a rejection-plus in the turn after the trouble source, and these features could occur in combination with each other (e.g. rejection-plus with clues).

Clues signal that a repairable exists in the previous utterance and that a repair is needed (other-initiated repair in Example 2.12) or they can constitute a repair proper (OIOR in Example 2.13). One way in which teachers provide learners with a clue is by intentionally providing a syntactically incomplete unit (i.e. Designedly Incomplete Unit or DIU as identified in more recent literatures, see Koshik, 2002) following the turn containing the repairable. This allows the learner (i.e. speaker of the trouble source) an opportunity to repair by completing the empty slot in the teacher’s turn (Example 2.12).

Example 2.12
01 T  okay? can we just reduce
02    (0.4)
03 D  food crime?
04 T  okay so wants to reduce crime

Example 2.13
01 Y  do we have to go Maori?
02 T1 do we have to go to marae;
03 Y  eh: aa: yeah

Prompts (Example 2.14) are similar to clues, but there is no clue provided as to what the required information might be.

Example 2.14
01 Y  do we finish the singing song?
02 T1 today?
03 Y  um just finish
In *rejection-plus* (Example 2.15), the initiator of the repair sequence can reject what has been said in the previous utterances without providing extra information or a different opinion.

Example 2.15

01 D from ca-dairy farming?
02 K → eh no
03 D pesti[sides
04 K [pestiside pestisides

Lastly, iii) *Third turn self-repair* (Example 2.16) provides an opportunity for the producer of the trouble to repair in the third turn.

Example 2.16

01 Y don't know. I think we are doing the performance next term
02 P next time
03 Y → yeah term three

*5.2.1.2. Features of repair on problems of understanding:* 

Discerning problems of understanding may be more complicated than identifying production problems, for several reasons. For instance, previous studies of repair have been inconsistent in their use of terminology when discussing repair of understanding problems (Gumperz & Tannen, 1979; Gass & Varonis, 1985; Milroy, 1984; Thomas, 1983, as cited in Li, 1992) and the criteria for identifying them are not clear. This may be due to the fact that problem of understanding can be caused by both the speaker and the hearer. Further, previous studies consider expressions such as *what, sorry, pardon* as typical indicators of the recipient’s problem in understanding without considering the context in which these expressions are used. This can be problematic since expressions like *pardon me?* can be used to indicate the recipient’s difficulty in understanding the content of what was said, or simply the inability to hear the previous utterance (Li, 1992). In a similar vein, the basis for making distinctions between different types of problems (e.g. in terms of the reasons for the difficulty in understanding) is unclear since it is impossible to know what the recipient had in mind when s/he initiated repair. Suggestions for addressing these analytical problems will be discussed after considering the types of understanding problems and their features (5.2.1.3).
Based on the data collected in this study and drawing on the previous literature, the problems of understanding three categories were distinguished: *non-understanding*, *incomplete understanding* and *misunderstanding*. In the following, each of the categories is explained along with the indicators, which identified them.

**i) Problems of non-understanding**

Firstly, a *problem of non-understanding* refers to when there is a lack of sound quality resulting in the recipient failing to *hear* the utterance clearly. The repair process in a non-understanding problem sequence typically consists of three parts: trouble source, other-initiation and self-repair. The problem of non-understanding can only be solved by the speaker of the trouble source through self-repair. This implies that the other initiated self-repair is not determined by the sequence of the organization alone but is related to the nature of the problem (Li, 1992). That is, the repair initiator is unable to undertake the repair and it has to be resolved as OISR sequentially in order for the repair to be completed (e.g. the problem is solved). Li’s (1992) examination of the linguistic features involved in the repair of a non-understanding problem along with the analysis of the data from this study showed that the following indicators were often used to initiate repair: *huh? pardon?, what? sorry?, excuse me?, I don’t understand* (Example 2.17).

To note, this list is not exhaustive and these expressions can also be used to indicate other types of difficulties such as questioning or complaining. For instance, Drew (1997) points out ‘open’ class repair initiators such as *huh? Pardon?* need not always correspond with the recipients’ cognitive state of not having heard or understood. These repair initiators could indicate that they are having trouble with the trouble source turn as it is inappositive or disaffiliative (e.g. a sudden shift in the topic, inappropriate comments in relation to the current topic of conversation). The examples collected in this study, however, indicated that such examples of open class repair without some form of retrieval of the trouble-source by quotation (Schegloff, 2000) were better dealt as *problems of incomplete understanding* as will be explained in the next section. In short, problems of *non-understanding* in this project are treated as problems of *hearing* only.

**Example 2.17**

01 P  just to take a photo  
02 K  yeah  
03 P  and like like may be latin peace ground seek  
04 K  → huh?
ii) Problems of incomplete understanding

Repair of an incomplete understanding problem arises due to clarity of language, clarity of content, and clarity of procedure. When a problem of incomplete understanding is caused by lack of clarity in the language (i.e. it is medium-oriented\textsuperscript{xxiv}), the recipient fails to understand parts of the previous utterance entirely or partly due to difficulty in understanding a specific word (Example 2.18) or a syntactic structure in the speaker’s utterance.

Example 2.18
03 T3 but this time using
04 K using.\text{[using this words}
05 T3 \text{[some some}
06 K some
07 T3 some
08 K some
09 T3 some
10 K \text{what. what is some}
11 T3 some. S-O-M-E

An understanding problem due to clarity of content (i.e. message-oriented) refers to a lack of confidence in the recipient’s understanding of the meaning of an utterance (Example 2.19), or difficulty in understanding the relevance, clarity or certainty of what is said because there is insufficient information or ambiguity in the utterance (Example 2.20).

Example 2.19
01 T4 okay good. where is your opinion? in that paragraph?
02 D \text{um my opinion?}
03 T4 yeah

Example 2.20
01 M my name is Kaimo Fantan
02 Y \text{Kaimo Fantan. is it-}
03 M it's my last name
04 Y ah hh
05 M yeah
Issues in the clarity of procedure (i.e. activity-oriented) arise when the hearer lacks confidence in his/her understanding of the procedure relating to the activity, of how to perform in a given task, or of what to say on a given topic (Example 2.21).

Example 2.21

01 T4 just continue with your work
02 S ➔ Miss. I don't un[erstand number A.
03 T                [um
04 number one?
05 S number two A.

iii) Problems of misunderstanding

Lastly, repair of misunderstanding problems refers to cases when the recipient misunderstands the language (words or structure of the utterance) about the procedure or topic of an activity or required task, which may be correct linguistically but is not appropriate or relevant to the required interaction. Li (1992) associates this type of difficulty in understanding with a problem arising from the socio-cultural interpretation of certain language features rather than with the speaker’s linguistic proficiency or the physiological surroundings. One way in which a problem of misunderstanding can be distinguished from the problem of non-understanding and incomplete understanding, according to Li (1992), is that the latter two can be solved by immediate repair initiation, whereas a problem of misunderstanding often results in a delay in the repair procedure and needs to be treated retrospectively in a manner similar to that of a production problem.

In the data collected for this study, discerning whether the repair initiation by the recipient was truly due to a lack of socio-cultural knowledge was not easy since the trouble source turn(s) produced by the learners were by and large linguistically incorrect in most cases. Therefore, the difficulty, which the speakers experienced, had to be analysed in terms of the sequential organization of the repair, rather than from the researcher’s (psychological) perspective. Only the recognizable misunderstandings, which interfered with the interaction, were included in the analysis, and misunderstandings which did not manifest themselves as
breakdowns in the interaction were not considered. They were also crosschecked with the focal participants’ comments from the stimulated-recall interviews where possible.

Example 2.22 below exemplifies OISR involving misunderstanding. The focal participant 7 asks what type of teacher in general L5 thinks is the best kind (line 01). The answer L5 gives in the following turn (line 02) initially causes no problem (i.e. the conversation carries on). However, several turns later, in line 07-08, the focal participant realizes that L5 has been providing a real-life example, rather than a general type (i.e. in your imagine) and initiates other-repair. As this example shows, when there is a misunderstanding, the trouble source results in a delay in the repair, which occurs several turns later, retrospectively.

Example 2.22
01 P7  what do you think the best teacher t- for you
02 L5  my chemistry teacher
03 P7  why why do you like
04 L5  because the teacher. I think it's the best
05 P7  why?
06 L5  she explains things clearly, writes good notes, tables
07 P7  no no no I mean.the(0.4)best teacher for you.
08  in your imagine
09 L5  oh. my imagination is (0.4) similar to
10  my chemistry teacher.

5.2.1.3. Suggestions and applications for the present study.

In this section, the difficulties in identifying problems of understanding discussed earlier are revisited. Then, the criteria used in this study to identify the problems of understanding are explained. The difficulties were as follows:

- there was no consistent use of terminology or clear criteria for identifying problems of understanding in the previous studies.
- previous studies treated certain expressions (e.g. what, sorry, pardon) as indicators of understanding the problem without considering the context.
- a problem of understanding can be caused by both the speaker and the hearer.
- it is impossible to know what the recipient has in mind when s/he initiates repair.

To distinguish repair initiation as a problem of production as opposed to a problem of understanding, the following criteria were used.
● If the speaker of the repairable replaced or corrected the trouble source following the recipient’s other-initiation, then it was regarded as a production problem on the part of the speaker of the repairable.

● If the speaker of the trouble source simply repeated the repairable after the recipient’s other-initiation, it was regarded as treating the other-initiation as an understanding problem rather than a repair initiation on a production problem.

● If the recipient’s other-initiation in fact concerned a production problem but was regarded as an understanding problem by the speaker of the trouble source, it would have usually generated a further other-initiation since the problem remained unsolved, and this helped the researcher to further decide the nature of problem.

The following is the summary of features identifying a problem of understanding in the context of other-initiation of repair:

● Common expressions like what, sorry, pardon or I did not hear were considered to indicate non-understanding, since the hearer did not show any sign of understanding.

● Repetition or partial repetition of the trouble source with an additional WH-question word, clarification request, confirmation check, comprehension check, was treated as incomplete-understanding.

● When the succeeding utterances made by the recipient did not match the intention of the speaker of the trouble source and showed repeated signs of misinterpretation of the repairable over a number of turns, it was regarded as a misunderstanding.

● Analysis of the problems of understanding initiated by the focal participants was crosschecked with their comments from the stimulated-recall interviews where possible.


Initially, the repair work found in this study were categorized as comprising SISR, SIOR, OISR or OIOR trajectory based on who initiated repair and completed the repair as proposed by Schegloff, Jefferson, and Sacks (1977). However, it became clear that to differentiate the repair behaviour (i.e. nature of trouble, repair initiation and repair completion) of the focal participants and other interlocutors over a stretch of period, each repair trajectory needed to be coded in relation to the speaker of the repairable. To the best of my knowledge, no previous study has approached the issue.
To this end, a distinction was made between the trouble source that belongs to the focal participants and those belonging to other speakers. In the present analysis, SISR refers to the focal participant’s self-initiated self-repair where the trouble source belongs to the focal participant. For the purpose of this study, while SISR of other speakers were still transcribed, they were excluded from the report. In OISR sequences, the trouble source belongs to the person who completed the repair and they were categorized into two subtypes. In OISR Type A (OISR A), the trouble source belongs to the focal participant, and the repair is initiated by the interlocutor and completed by the focal participant. In OISR Type B (OISR B), the trouble source belongs to the speaker other than the focal participant and the focal participant is the ‘other’ who initiates repair. Then, the repair is completed by the speaker of the trouble source (i.e. the speaker other than the focal participant). SIOR sequences were also categorized into two subtypes. SIOR Type A (SIOR A) refers to when the trouble source belongs to the focal participant and s/he also initiates repair. Then, the other speaker completes the repair. On the other hand, it was coded SIOR Type B (SIOR B) when the trouble source belongs to the other speaker and the repair is initiated by this other speaker, and completed by the focal participant. Lastly, OIOR was divided into two subtypes. OIOR Type A (OIOR A) refers to the cases where the trouble source belongs to the focal participant and the repair is initiated and completed by another speaker. In OIOR Type B (OIOR B), the trouble source belongs to the interlocutor other than the focal participant and the focal participant is ‘the other’ who both initiates and completes repair on his/her interlocutor’s trouble source (see Table 5).

5.3 Results

The longitudinal investigation of the characteristics in the topics of repair work (i.e. the ‘repairable’) in this study suggest that there were no apparent changes in the topics of L2 repair work in the different types of repair sequences (i.e. SISR, SIOR, OISR, OIOR) over time. Instead, in L2 classroom contexts, a particular repair sequence was identified as resolving a specific type of repairable (i.e. problem of production, problem of understanding) and involving a particular participatory structure (e.g. teacher-focal participant; peer(s)-focal participant).

In the following sections, I will illustrate the characteristics of the topic of repairable in each of the SISR, SIOR, OISR, and OIOR sequences involving the four focal participants over time with reference to the nature of the repairable, participatory structure and
pedagogic contexts. Focal Participant 1, Participant 3, Participant 5, and Participant 7 were selected out of eight participants for the analysis, as they participated in the classroom interaction recording sessions most regularly. Participant 1 and Participant 7 were involved the stimulated recall interviews while Participant 3 and Participant 5 were not. Table 6 shows the classroom recording sessions and the stimulated recall interviews in which these focal participants were involved. For convenience sake, each focal participant is referred to as P1 (Participant 1), P3 (Participant 3), P5 (Participant 5), and P7 (Participant 7) in the excerpts provided. Likewise each of the four teachers is numbered as T1 (Teacher 1), T2 (Teacher 2), T3 (Teacher 3), and T4 (Teacher 4), and the other students who were involved in the interaction are labelled L1 (learner 1), L2 (learner 2) and so forth. It should be noted that some focal participants employed only some of the types of repair trajectories, not all 7 types of repair organization are listed in Table 5.

Table 5 Source of repairable, repair initiation and proper by types of repair trajectory

<table>
<thead>
<tr>
<th>Type of repair trajectory</th>
<th>Source of repairable</th>
<th>Repair initiator</th>
<th>Repair completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>SISR</td>
<td>Participant</td>
<td>Participant</td>
<td>Participant</td>
</tr>
<tr>
<td>SISR by other (excluded)</td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
</tr>
<tr>
<td>OISR (Type A)</td>
<td>Participant</td>
<td>Other</td>
<td>Participant</td>
</tr>
<tr>
<td>OISR (Type B)</td>
<td>Other</td>
<td>Participant</td>
<td>Other</td>
</tr>
<tr>
<td>SIOR (Type A)</td>
<td>Participant</td>
<td>Participant</td>
<td>Other</td>
</tr>
<tr>
<td>SIOR (Type B)</td>
<td>Other</td>
<td>Other</td>
<td>Participant</td>
</tr>
<tr>
<td>OIOR (Type A)</td>
<td>Participant</td>
<td>Other</td>
<td>Other</td>
</tr>
<tr>
<td>OIOR (Type B)</td>
<td>Other</td>
<td>Participant</td>
<td>Participant</td>
</tr>
</tbody>
</table>

Table 6 Classroom interaction recording and stimulated recall interviews: Focal participant 1, 3, 5, and 7

<table>
<thead>
<tr>
<th>Participants / Recording sessions</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
<th>Session 5</th>
<th>Session 6</th>
<th>Session 7</th>
<th>Session 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>P1 SRI</td>
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134
5.3.1 Participant 1

5.3.1.1 SISR.

As will be discussed later in this chapter, by its nature, self-initiated self-repair on one’s own repairable concerns a production problem rather than an understanding problem (of someone else’s previous turn). The majority of production problems in this study were resolved through SISR irrespective of the pedagogic aim, the types of classroom interaction (e.g. teacher-fronted class, pair-work, group-work, individual task) and the interactants involved (teacher, fellow learners). Participant 1, like the other focal participants, initiated and completed repair on her production problems within the same turn most often. The following example is a typical example of SISR addressing a production problem. This particular repair during which the trouble source was replaced (‘what kind of’ with ‘what sort’), took place during interaction between a peer (L1) and the focal participant (P1) in pair-work in a meaning-and-fluency context.

Example 2.23

01 L1 no hand eh my mother is a business woman
02 and my father is teacher
03 P1 ➔ oh! cool. what kind of-what sort?

5.3.1.2 OISR A.

When the trouble source belonged to the focal participant, and the repair was initiated by the other speaker (i.e. recipient) and completed by the focal participant (i.e. speaker of the repairable), the nature of the repairable could either be a problem of production or understanding. The data showed that both the problems of production and understanding were repaired through OISR in form-and-accuracy contexts and meaning-and-fluency contexts. A point of note is that when the teacher initiated the repair - whether it was a production or understanding problem - the pedagogic context in which the repair was found was almost always form-and-accuracy xxv. On the other hand, it was always the peers who initiated repair on the focal participant’s understanding problem in meaning-and-fluency contexts xxvi.
In line with the findings for OISR B, which will be discussed in the following section, in OISR A sequences, a particular participatory structure (e.g. the speakers involved in a repair sequence, for instance, teacher-focal participant as opposed to focal participant-fellow learner) seemed to appear more frequently in a certain pedagogic context. For example, a repair sequence between the teacher and the focal participant was found more often in form-and-accuracy contexts while learner-learner interaction was more often found in meaning-and-fluency contexts. In addition, the nature of the repairable was more often recognized as a production problem during the teacher-focal participant interaction while more understanding problems were repaired during interaction between the learners.xxvii

5.3.1.3. OISR B.

When the focal participant recognized the previous turn produced by her interactant (whether it was the teacher or peer) as a repairable and initiated repair, it was to resolve an understanding problem. More specifically, Participant 1 initiated the ‘other-repair’ when she did not understand (i.e. non-understanding problem) or only partially understood her partner’s previous turn (i.e. incomplete-understanding).

All instances of OISR B, where the trouble source belonged to a fellow learner, took place during meaning-and-fluency contexts. On the other hand, when the speaker of the trouble source was the teacher, the repair work occurred during form-and-accuracy contexts.

5.3.1.4. SIOR A.

There was no example of SIOR A in the data collected for Participant 1. There was no occasion where the focal participant initiated repair of her own production problem and it was completed by her interlocutor. The issue of frequency will be dealt in the answer to the next research question. To mention briefly here, Participant 1 had the lowest ratio of self-initiation of repair in comparison to other focal participants, thus reducing the chance of self-initiated repair being completed by other speakers (i.e. SIOR). There can be two explanations for this phenomenon. Participant 1 may have believed that her L2 production was accurate, therefore not in need of repair, or she may have planned her speech carefully before speaking (i.e. as private speech), thus reducing repair during production. However, as the stimulated recall interview questions focused only on actual instances of repair, it could not provide any insights into why she did not initiate self-repair.
5.3.1.5. SIOR B.

Participant 1 provided repair completion during interaction with peers as well as the teacher when they initiated repair and asked for assistance (e.g. *how do you say it?*) or left the turn incomplete (e.g. pauses, sound stretches, use of *umm, uh*). Consequently, these repairables were regarded as production problems. The repair initiation typically involved a word search and took place regardless of the pedagogic contexts. There was no example of repair of L2 syntax. Example 2.24 is an example of SIOR B between the focal participant and the teacher in a form-and-accuracy context.

Example 2.24

01 T1 You could talk about may be
02 (0.4)
03 P1 ➔ my life? No?
04 T1 I will tell you what. Because we are going to talk
05 about Speech in ESOL next term as well
((lines omitted))

5.3.1.6. OIOR A.

OIOR sequences are correction. Only the teacher provided correction on Participant 1’s (inaccurate) L2 production through OIOR on one occasion, and it occurred in form-and-accuracy context. Example 2.25 shows how the teacher attempts to promote learner self-repair without negative evaluation (e.g. ‘no’) by inserting *um* and the stretch of sound *eh::*, followed by a pause. When Participant 1 does not complete the repair in the possible next turn, the teacher completes the correction of the trouble source by first accepting the incorrect form (*yup*) followed by the correction (line 04).

Example 2.25

01 P1 ‾ onometapoeya; 
02 T1 ummm eh::
03 (0.4)
04 ➔ yup.onometuhpea eh:

5.3.1.7. OIOR B.

There was no occasion in which the focal participant provided correction on her interlocutor’s trouble turn.
5.3.2 Participant 3

5.3.2.1. SISR.

The examples of SISR collected suggested that whether the aim of the lesson (or activity) concerned accuracy or fluency, Participant 3, typically oriented to accurate production of L2. The following Example 2.26 was found in pair-work during interaction between a peer and the focal participant in a meaning-and fluency context.

Example 2.26

P3 → uh. may be possums uh eat uh like to eat new zealand native.tree.trees and native bir-eh oops eggs of native birds. yeah

5.3.2.2. OISR A.

The other speakers (e.g. teachers, peers) initiated repair on Participant 3’s previous turns when they recognized it as involving either a production or understanding problem. As for the participatory structure, only the peers initiated repair to resolve Participant 3’s understanding problem in meaning-and fluency contexts, while repair on production problem was initiated by both the teachers and fellow learners. As with the case in Participant 1, it was only the teacher who initiated other repair on production problem in form-and-accuracy contexts, while the repair (on production problem) was initiated by both the peers and learners in meaning-and fluency contexts.

5.3.2.3. OISR B.

Participant 3 initiated repair only when he had difficulty understanding his interlocutor’s previous turn. There was no instance of Participant 3 initiating repair to resolve the other speaker’s production problem. As for the source of the repairable, the trouble source could belong to the teacher or to his peer. While Participant 3 initiated repair in all three pedagogic contexts, in form-and-accuracy and task-oriented contexts, it was only the teacher whom he engaged in repair sequence. In meaning-and-fluency contexts, the focal participant engaged in repair work with both the teacher and his peers.

5.3.2.4. SIOR A.

When the focal participant initiated repair on his repairable in the previous turn and it was completed by the other speaker, the repair was initiated by the speaker of the trouble source
to attend to his own production problem. The teachers, more so than the fellow learners, provided repair completion on Participant 3’s production problems.

Repair on production problems occurred more often in meaning-and-fluency contexts than in other contexts and it was only in meaning-and-fluency contexts where the focal participant engaged in repair sequences with his peers. In form-and-accuracy and task-oriented contexts, the interlocutor (i.e. provider of repair completion) was always the teacher.

5.3.2.5. SIOR B.

There was no example of SIOR B in the data.

5.3.2.6. OIOR A.

OIOR A occurred when the recipient recognized the focal participant’s previous turn as a production problem. OIOR A sequences were in fact corrections, which offered more appropriate choices of lexical items or syntactic structures. Both the teacher and other learners provided corrections for Participant 3 throughout the data collection period. However, it was always the teacher who provided correction in form-and-accuracy contexts, while it was always the peer who provided correction in meaning-and-fluency contexts.

5.3.2.7. OIOR B.

When Participant 3 recognized the speaker of the repairable lacked L2 ability to repair it, he offered correction. An interesting point is that all OIOR B took place during interaction between the focal participant and the fellow learner in pair-work and teacher-fronted interaction in meaning-and-fluency contexts. Example 2.27 was found in teacher-fronted classroom interaction. Here, L1 is addressing the whole class so anyone is free to respond, including the teacher (line 02). However, it is the focal participant who provides linguistic correction in line 03.

Example 2.27

01 L1  hhhh he wants to kill every person
02 T2  yeah?=
03 P3  \rightarrow  =every people
04 L1  h[hh
05 L2  [(clears throat)
5.3.3 Participant 5

5.3.3.1 SISR.

All instances of SISR found in the data collected for Participant 5 concerned production problems. Approximately half of the data was found in form-and-accuracy contexts (21 out of 45 instances) and the other half in meaning-and-fluency contexts (24 out of 45 instances). In both pedagogic contexts, the focal participant was engaged in interaction with both the teacher and his peer.

5.3.3.2 OISR A.

All instances in which the focal participant’s previous turn was recognized as a trouble source by the recipient and completed by the focal participant took place during interaction between the teacher and the focal participant. The repairs addressed the focal participant’s production problems in both form-and-accuracy contexts and meaning-and-fluency contexts while understanding problems were repaired only in meaning-and-fluency contexts.

5.3.3.3 OISR B.

Participant 5 initiated repair on his interlocutor’s previous turn (i.e. the repairable) when he had difficulty understanding it both in form-and-accuracy and meaning-and-fluency contexts. There was one occasion in which the focal participant initiated repair on his teacher’s previous turn (Example 2.28) and it was found in meaning-and-fluency context.

Example 2.28

01 T4 twelve. and what time did you wake up?  
02 P5 today?  
03 T4 (nods)  
04 P5 8'o clock

5.3.3.4 SIOR A.

When the focal participant recognized his own production problem, he initiated repair either by leaving the turn incomplete (for example by halting, or stretching sound at a point where he was experiencing difficulty in terms of production), or by asking his interlocutor for help. These forms of repair initiation were found both in form-and-accuracy and meaning-and-fluency contexts. Example 2.29 shows an example of how the focal participant initiates repair on a L2 word during its production and then asks the teacher to complete it (in meaning-and-fluency contexts). In line 04, Participant 5 starts to produce the
problematic word ‘dissatisfied’. He then stretches the word at the point of difficulty (/dissa/), leaving it incomplete. In the following turn, the teacher provides repair completion. In the same excerpt, the focal participant also asks for the teacher’s intervention more explicitly (line 07).

Example 2.29
01 T responsibility. Can P5 read that paragraph?
02 P5 Ruth ignore her responsibilities as a parents. On
03 Philpa's birthday she only thinks of herself.
04 And she can ex.escape.the reality that she is diseeh:
05 T de-satisfied
06 P5 disssastifaid. instead of fairy tale.
07 she drugs. when the pill and the. what's that?
08 T 'ooze
09 S booze has eaten the word

As for the participatory structure, while the teacher-focal participant interaction was found in both pedagogic contexts, focal participant-peer interaction was found only in meaning-and-fluency contexts.

5.3.3.5. SIOR B.
All instances of repair completion provided by the focal participant on other speakers’ self-initiation of repair occurred during interaction between the focal participant and fellow learners in teacher-fronted classroom interaction in meaning-and-fluency contexts. What was interesting about SIOR B sequences in Participant 5’s data was that the focal participant provided repair completion even when the repair initiation did not openly invite him to do so. Example 2.30 illustrates how the focal participant volunteers to help his fellow learner. The fellow learner (L1) is reading out aloud a handout to the class. The speaker of the trouble source experiences a production problem (line 04), and Participant 5 offers a repair completion (line 05).

Example 2.30
01 L1 tra- tra-
02 T4 tries
03 L1 tries to uh
04 P5 escape
05 L1 escape her
5.3.3.6. **OIOR A.**

Two instances of other-correction were found in meaning-and-fluency contexts. Both examples were found in teacher-fronted classroom interaction and a peer and a teacher provided each correction respectively. Example 2.31 is an example of OIOR provided by the teacher.

Example 2.31

01 P5   it's really hard-eh it's really easy
02 to connecting the people
03 T4→ conne[ct the people
04 P5   [so we don't need to waiting people to eh texting

5.3.3.7. **OIOR B.**

OIOR B is other-correction provided by the focal participant. All examples were found in meaning-and-fluency contexts during interaction between the learners. Unlike OIOR A, which were found only in teacher-fronted classroom interaction, focal participant 5 provided correction also during pair-work.

5.3.4 Participant 7

5.3.4.1. **SISR.**

Out of 71 instances of SISR, only two instances took place during interactions between the teacher and the focal participant as opposed to interactions between the focal participant and his peer(s). Participant 7 initiated (and completed) repair on his own production problems far more frequently during interaction with his peers. Further, except for one occasionxxviii, all SISR sequences were found in meaning-and-fluency contexts. Participant 7 was the only focal participant who did not have any instances of SISR during form-and-accuracy contextsxxix.

5.3.4.2. **OISR A.**

In the data collected for Participant 7, all instances of OISR A in which the repairable belonged to the focal participant and repair was initiated by the other speaker and completed by the focal participant, involved interaction with his peer rather than the teacher. With regard to the pedagogic contexts in which they occurred, all OISR A concerned resolving understanding problems in meaning-and-fluency contexts.
5.3.4.3. OISR B.

When Participant 7 initiated repair on his interlocutor’s the previous turn, it was to resolve the difficulty the focal participant experienced in understanding it. When the focal participant noticed the ‘gap’ between his L2 and his interlocutor’s production (the teacher’s or other learners’) repair initiation took place. All repair instances between the learners were found in meaning-and-fluency contexts, while all instances of repair found in form-and-accuracy contexts took place between the teacher and the focal participant. In task-oriented contexts, both types of participatory structure were found. OISR B was the only repair sequence in focal participant 7’s data that appeared in all three pedagogic contexts.

5.3.4.4. SIOR A.

All instances of the repair that was initiated by the focal participant but could not be sufficiently resolved by him (e.g. because he lacked L2 competency or other knowledge to do so) were completed by the teacher regardless of the pedagogic context. These repairs targeted resolving the focal participant’s production problem. Except for one occasion, all repairs happened during interaction between the focal participant and the teacher in both meaning-and-fluency and task-oriented contexts.

5.3.4.5. SIOR B.

There was only one example of SIOR B found in the data collected for Participant 7 (Example 2.31). It was found in meaning-and-fluency context during group-work. This was an unusual example of SIOR B as Participant 7 was actually the third person in the interaction. In the excerpt below, Learner 1 (L1) is describing a specific part from the video they had watched as a class. Learner 2 (L2) thinks that L1 is talking about a different part of the film. When this misunderstanding between the two learners becomes apparent (lines 01-07) to Participant 7, who had been a by-stander, he offers to repair it (line 08) by explaining what Learner 1 meant in line 01 (trouble source).

Example 2.31
01 L1 I think human must kill some animals ( ) kant kant we can't
02 kill animals just for fu:n like like this people.
03 L2 ( ) purpose
04 L1 oh yea yes and eh-
05 L2 no people. human killed the animal for purpose. for the
06 chemistry. for the development of chemistry.
07 L1 eh [but but ( )
08 P7 ➔ [ah he means. did you see deh deh human killed the bear and
5.3.4.6. OIOR A.

There was no instance of OIOR A found in this data.

5.3.4.7. OIOR B.

There was no instance of OIOR B found in this data.

5.4 Summary

The findings for Research Question 2 suggest that there were no apparent changes overtime in the topics of repair work in the different types of repair sequences. The topics of repair work, namely problems of production and understanding, by and large were recognized and resolved consistently through particular types of sequential organization of repair (See Table 5 for a summary of the different patterns) involving a specific participatory structure.

5.4.1. SISR.

Irrespective of the pedagogic aim of the activity/task, the focal participants initiated and completed repair within the same turn as the trouble source whenever they recognized their own production as repairable. The pedagogic contexts and the speakers involved in SISR indicate that, overall, the focal participants initiated SISR more frequently during interaction with their peers in meaning-and-fluency contexts, and with the teacher in form-and-accuracy contexts.

5.4.2. OISR.

OISR A: When the repairable belonged to the focal participant, and the recipient (e.g. a teacher or fellow learner) initiated repair, the topic of the repairable could either be a production problem or an understanding problem. All in all, the teachers recognized and initiated repair on the focal participants’ production problems more often than the fellow learners in both form-and-accuracy and meaning-and-fluency contexts. On the other hand, the peers initiated repair on the focal participants’ production problems more frequently during meaning-and-fluency contexts than in any other pedagogic context. When the nature of repairable concerned an understanding problem, the majority of OISR sequences occurred in meaning-and-fluency contexts.
When the focal participant initiated repair on his/her teacher’s previous turn, it was to resolve an understanding problem only. The source of repairable could either be the teacher or a peer, and the repair sequences were found in all three pedagogic contexts.

### 5.4.3. SIOR.

**SIOR A:** In SIOR sequences, repair was self-initiated to resolve the speaker’s own production problem but left incomplete so that the interlocutor(s) in the following turn could complete it. Usually, the focal participants initiated self-repair and invited the teacher to complete it in all three pedagogic contexts. Repair completion by peers, on the other hand, was found during meaning-and-fluency, and task-oriented contexts.

**SIOR B:** The focal participant rarely provided other-completion for an interlocutor’s self-initiation of repair on a production problem. With the exception of focal participant 1, the repair completions were almost always provided for a peer and they were found in meaning-and-fluency contexts.

### 5.4.4. OIOR.

**OIOR A:** When the other speakers initiated and completed repair on the focal participant’s previous turn, it was to provide linguistic correction. Both the teachers and the peers provided correction. In essence, OIOR A sequences were ‘other’-correction focusing on L2 accuracy. They were found not only in form-and-accuracy contexts but also in meaning-and-fluency contexts. However, there was no example of OIOR A involving the correction of linguistic errors in task-oriented contexts.

**OIOR B:** the focal participants provided correction only for their interlocutor’s previous turn. They were found only in meaning-and-fluency contexts.

Table 7 is an overview of frequency of each type of repair sequence found in L2 pedagogic contexts and the type of trouble source it repaired.

**Table 7 Repair sequences in pedagogic contexts and the nature of the repairable**

<table>
<thead>
<tr>
<th>Patient 1</th>
<th>Participant 3</th>
<th>Participant 5</th>
<th>Participant 7</th>
</tr>
</thead>
</table>

145
<table>
<thead>
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<th>Type of repair sequence</th>
<th>Pedagogic contexts</th>
<th>Nature of problem</th>
<th>Frequency</th>
<th>Pedagogic contexts</th>
<th>Nature of problem</th>
<th>Frequency</th>
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Key:
**Pedagogic contexts**
FA: form-and-accuracy
MA: meaning-and-fluency
TO: task-oriented
X: not found

**Nature of problem**
PR: production problem
UN: understanding problem

5.5 Discussion
To answer research question two, the repairable in each repair sequence was investigated in terms of the nature of the trouble source, the speaker of the repairable, the repair initiator, and the pedagogic contexts in which the repair took place. Regarding the topics of repair, the analyses in this study indicated no apparent changes in the topics of repair work in different types of repair sequence involving L2 classroom learners over time. However, an observable pattern was revealed in the relationship between the topics of repair, the participatory structure and the type of repair organization. In the “variable approach” to repair in the L2 classroom, which was introduced in the literature review of this thesis, van Lier (1988) and Kasper (1986) suggested certain types of L2 activity or teaching goals bring about certain types of repair. That is, as the pedagogic focus of the classroom varies so does the organization of repair. More recently, Seedhouse (1999, 2004) attempted to extend van Lier (1988) and Kasper (1986)’s claim by providing a detailed description of how repair is organized within different L2 classroom contexts (i.e. form-and-accuracy, meaning-and-fluency, task-oriented). Based on the analysis of collected excerpts from a number of studies, Seedhouse (2004) concluded that that the relationship between the organization of repair and pedagogic focus is a reflexive one in that the organization of repair and what constitutes repairable varies according to the pedagogical focus introduced by the teacher.

However, L2 repair work found in this study suggests that in addition to the findings of previous research, irrespective of the pedagogic focus initially set by the teacher, the participatory structure (i.e. the speakers involved), and the speaker (i.e. source) of the repairable were crucial determinants of what was recognized as a trouble source (i.e. the nature of the trouble source) and in designing the sequential organization of repair work in
all three pedagogic contexts. The teachers as well as the learners determined what was the issue at hand to be repaired and the decision made an impact on the organization of repair within the given pedagogic context.

The detailed analysis of L2 classroom interaction data overtime in this study suggests that within a particular pedagogic activity or task, what constituted repairable varied considerably depending on to whom they were speaking at the time of repair and a particular participatory structure was more likely to be found in certain pedagogic contexts. For instance, repair sequences between the focal participant and the teacher was more often found in form-and-accuracy contexts, while more learner-learner interaction was found during repair in meaning-and-fluency contexts. In addition, more repair was initiated to resolve production problems when the teacher was involved in the interaction.

In the following, I will present and discuss the major findings from the investigation of the ‘repairable’ in SISR, SIOR, OISR, and OIOR sequences involving L2 classroom learners over time in terms of the nature of repairable, the speaker of the repairable and the pedagogic contexts.

5.5.1. Self-initiated Self-repair (SISR).

Regardless of the pedagogic contexts and the interlocutors involved, SISR sequences were employed by the focal participants to resolve their own production problems. For instance, in Example 2.32, we can see what the focal participant initially said, what he realizes as repairable (tree), and how he repairs it (by adding plural-s to the noun ‘tree’, trees). For this reason, SISR is a valuable tool in examining what aspects of L2 production the speakers specifically orient to and how this orientation may change (Bardovi-Harlig & Dornyei, 1998; Chen 1990; Fincher, 2006; van Hest, 1996). The L2 learners in this study oriented to achieving grammatical accuracy whenever they recognized their production as repairable irrespective of the pedagogic aim of the lesson introduced by the teacher. When the trouble source was repaired (while the final outcome of the repair was not always ‘correct’), the speaker resumed the previous course of interaction.

Example 2.32
01 L1 what do possum eatuh
02 P3 uh, may be possums uh eat uh like to eat new zealand
03 ⇒native.tree.trees
One interesting finding about SISR was that, while SISR focuses on achieving L2 accuracy, 80% of the SISR sequences were found in meaning-and-fluency contexts and mostly eventuated during interactions between the learners. On the other hand, when the focal participants initiated SISR in form-and-accuracy contexts, they were more often than not engaged in interaction with their teachers. To explain this we need to have a closer look at the types of classroom activities during which the repair took place in each pedagogic context.

When the focal participant was engaged in interaction with the teacher, the classroom activity almost always involved either teacher-fronted classroom interaction or individual tasks and these were more readily found in form-and-accuracy contexts than in meaning-and-fluency contexts. On the other hand, the participants engaged in SISR during interaction with their peers in pair-work and group-work, and these two types of classroom activities were most often found in meaning-and-fluency contexts. This suggests that certain types of classroom activities were more likely to be employed in certain pedagogic contexts and they occurred in a specific type of participatory structure.

In addition, on the whole, irrespective of the pedagogical aim of the lesson/task, L2 speakers more often initiated and completed repair on their L2 production during interaction with their peers. There can be a number of reasons for this phenomenon. It may be because interaction with their peers, which usually occurred during pair- or group-work, allowed the learners more time and interaction space to practice their L2 than other types of classroom interaction. Or it could be due to the fact that the L2 learners felt it was easier to repair their own production with their peers than their teachers, who they may have perceived as assessing and evaluating their performances (Philp, Walter, & Basturkmen, 2010).

5.5.2. Other-initiated Self-repair: when the repairable belongs to the focal participant (OISR A in this study).

The interlocutors (the teachers and peers) initiated repair to resolve both production and understanding problems when the repairable belonged to the focal participant. While production problems were resolved in both form-and-accuracy and meaning-and-fluency contexts, understanding problems were resolved only in meaning-and-fluency contexts, except for the four instances found in form-and-accuracy contexts in Participant 1’s data.
Interestingly, all repairs found in the form-and-accuracy contexts took place during interaction between the teacher and the focal participant resolving production problems, while the peers initiated repair to resolve production problems only in meaning-and-fluency contexts. Again, the type of classroom activity may have played a role. While the same types of classroom interaction (e.g. pair-work, group-work, teacher-fronted classroom interaction, individual task) were found in both pedagogic contexts, the focal participants were engaged in interaction only with the teacher during teacher-fronted classroom interaction and in individual tasks. On the other hand, interaction with their peers was found predominantly during pair-and-group work. This suggests that while both teachers and peers oriented to L2 accuracy by initiating other-repair, the focal participants were more likely to engage in interaction with the teacher in teacher-fronted classroom interaction and individual tasks and these were more often found in form-and-accuracy contexts and with their peers in pair-and-group work which were more often found in meaning-and-fluency contexts. In the case of understanding problems, the repair was more likely to be initiated in meaning-and-fluency contexts by peers than by teachers.

However, there may be differences between the types of repair initiation on production problems that the speakers received from the teachers and their peers. Both Examples 2.33 and 2.34 are taken from meaning-and-fluency contexts during teacher-fronted classroom interaction, and they differ only in terms of the participatory structure. In Example 2.33 the peer (L1) initiates repair on the focal participant (P)’s production problem. In Example 2.34, the teacher (T3) is the one who initiates repair on the focal participant’s production problem. Note that while L1 in Example 2.33 initiates repair by asking the focal participant what it is that he wants to say in Korean, the teacher in Example 2.34 guides the learner by prompting him using a Designedly Incomplete Unit (DIU) in the repair initiation. A teacher’s use of DIUs is common as the teacher usually ‘knows’ what the learner should say in the next turn (Koshik, 2002). What is interesting here is how the differences in the repair initiation affect the type of repair completion. In Example 2.34, the focal participant simply produces a L2 word to fill in the empty slot in the teacher’s repair initiation in the previous turn. On the other hand, in Example 2.33, the focal participant is allowed more space (i.e. speech floor) to experiment with his L2. While it is unclear which type of repair initiation is more beneficial for L2 speakers (Ellis, 2007; Ellis, Loewen, & Erlam, 2006; Iwashita, 2003), we can see how the repair initiation and the completion in the same pedagogic context can differ depending on the participatory structure and the repair initiator involved in the repair of a production problem.
Example 2.33

P  our spending-so we can eh more exercise. break eh a lot of brek time? uh as using .technology? before eh. more than be.before? a mwōlahaeyatoechi
  ((tr.:eh what should I be saying?))

T4  more than-hhhh that's okay

L1  mwōlako halyōko
  ((tr.:what are you trying to say?))

P  ((turning to L1)) yesnalpota. p’yōnlihatako yesnalpota
  ((tr.:more than before. It is convenient more than before))
  eh so we have. We can have a lot of break time more than before

Example 2.34

T3  okay? can we just reduce:
P  food crime

In contrast, such differences were less obvious in repair of understanding problems. Example 2.35 and Example 2.36 show repair in meaning-and-fluency contexts during teacher-fronted classroom interaction resolving understanding problems. These two excerpts differ in terms of the speakers involved in the repair. The teacher (T4) in Example 2.35 uses a clarification request (i.e. line 02, sorry?) and the learner in Example 2.36 repeats the repairable word (i.e. line 02 bombs?) as a clarification request. When the speaker of the repairable recognized these initiations as repair on an understanding problem, there seems to be no difference in the repair completion whether the interlocutor was the teacher or the peer. The focal participants simply repeat the trouble source (line03, Example 2.35) or repeat it with an additional element (line 03, Example 2.36) in the following turn.

Example 2.35

01 P  eight'o cock
02 T4  sorry?
03 P  eight'cock
04 T4  eight? that's very late

Example 2.36

01 P  we can use bombs
02 L  bombs?
03 P  bombs (0.2)nuclear
5.5.3. Other-initiated Self-repair: when the repairable belongs to the interlocutor (OISR B in this study).

The focal participants initiated repair on their interlocutor’s trouble source turn to resolve understanding problems. Examples were found in all three pedagogic contexts. In line with the analysis of previous repair sequences, the focal participants were more likely to engage in repair with their teachers in teacher-fronted classroom interaction and individual tasks in form-and-accuracy contexts and with their peers in meaning-and-fluency contexts during pair- and group-work. The findings were mixed for the task-oriented contexts - both teachers and peers engaged in repair with the focal participants.

It is worth mentioning that the focal participants initiated repair to resolve only understanding problems. Just why the focal participants did not initiate repair on their interlocutor’s production problems in the previous turn is not clear (i.e., why they did not initiate repair was not asked in the stimulated recall interviews). One possibility is that in the OISR B sequences, approximately half the time the focal participants were engaged in interaction with the teacher. The teachers, in general, did not introduce production problems in their previous turns. Another possibility can be found in the literature. In general, L2 learners were reportedly reluctant to provide each other with feedback on their L2 production, for several reasons. They may have lacked the L2 ability or did not want to interrupt the conversation or believed that providing feedback may be face-threatening (Philp, Walter, & Basturkmen, 2010).

5.5.4. Self-initiated Other-repair: when the trouble source belongs to the focal participant (SIOR A in this study).

SIOR A was one of the most noteworthy repair organizations found in the data. In this repair organization, the focal participants would initiate self-repair on their own production problem and then deliberately leave the turn incomplete or request assistance, so that the next speaker completed the turn for them. In the former, the focal participants typically stopped or stretched or raised the intonation of the last syllable of the problematic L2 word so that their incomplete turn indicated its need to be completed by the next speaker (Example 2.37). The repair initiations were also often accompanied by facial expressions such as pressing (pursing) of the lips, frowning while gazing at their interlocutor(s), and raising of eyebrows. On the other hand, the requests for completion could include more specific questions such as what does it mean? as in Example 2.38, or laying out or
repeating the alternatives such as bovin? bovine?, as in Example 2.39. Then, the recipient would provide assistance in the following turn.

Example 2.37
04 P5 ➔And she can ex.espcape.the reality that she is. disseeh:
05 T dee-satisfied
06 P5 disssastifaid. instead of fairy tale.

Example 2.38
((both speakers are looking at the hand-out. L1 starts to read the first question from the hand-out))
01 L1 what di.dissis possums carry?
02 P3 ➔ikey mwusun ttusiya
   ((tr.:what does it mean so?))

Example 2.39
01 P ➔a:hh possums can spread disease for bovin? bovine?
02 L bovine
03 P bovine tuberculosis

These repair patterns were specifically employed by the focal participants in order to continue conversation with their limited L2 ability. They were found during interaction between the focal participants and the peers as well as the teachers in all pedagogic contexts and in a various types of classroom interaction. For instance, teacher-focal participant interaction was not limited to teacher-fronted classroom interaction during form-and-accuracy contexts as was the case with the previous repair sequences. The teachers undertook completion of repair during pair work, group-work, and individual tasks as well as during teacher-fronted classroom interaction. Interaction with peers, on the other hand, was found only during meaning-and-fluency contexts and task-oriented contexts.

5.5.5. Self-initiated Other-repair: when the repairable belongs to the interlocutor (SIOR B in this study).

The number of SIOR B sequences was small and the majority of instances were found in two focal participants’ data (focal participant 1 and 5). This may be due to the limitations in the data collected – there were simply not enough instances of the interlocutors initiating self-repair on production problems to be completed by the focal participants. Similarly, the peers may have felt self-conscious in speaking - more so than their peers who were the focal participants - thus reducing the likelihood of initiating self-repair that would lead to SIOR sequences. In fact, Focal Participant 5’s SIOR B sequences were found during
interaction with another focal participant (Focal Participant 7). Conversing with another focal participant may have provided more opportunities for Focal Participant 5 to resolve the production problems of his interlocutor.

What was interesting about focal participant 5 was that he offered repair completion when he had no obligation to do so. For instance, Participant 1 provided repair completion during pair-work in which the participatory structure designated her as the next speaker. On the other hand, Participant 5 was often found to voluntarily provide repair completion on other learners’ repair initiation, regardless of the pedagogic contexts. In Example 2.40, as this was a teacher-fronted classroom interaction during a lockstep classroom activity in meaning-and-fluency context, the teacher also could have completed the repair as she did in line 02, or, as a matter of fact, anyone in the class could have provided the repair completion. Participant 5’s attention to L2 accuracy seems to be idiosyncratic to this learner.

Example 2.40
01 L1 tra- tra-
02 T4 tries
03 L1 tries to uh
04 P5 \(\rightarrow\) escape
05 L1 escape

5.5.6. Other initiated Other repair: when the repairable belongs to the focal participant (OIOR A in this study).

OIOR sequences are in essence correction. They were found only during form-and-accuracy contexts and meaning-and-fluency contexts and were provided by the teachers and peers as linguistic correction. Interestingly, only teacher correction was found in form-and-accuracy contexts while both teacher and peer correction was found in meaning-and-fluency contexts. While there were more instances of OIOR in meaning-and-fluency contexts, the difference was nevertheless marginal. As OIOR sequences are usually associated with linguistic correction in L2 classroom context, the fact that these were found in meaning-and-fluency contexts is notable. Further, in meaning-and-fluency contexts, the peers initiated correction during teacher-fronted classroom interaction as well as during pair-work. This point will be further discussed in the following section for OIOR B.
In addition, though the nature of repair is correction, as the following example shows, in accordance with the pedagogic context, the teacher carries out her correction so as to have minimal impact on the ongoing conversation. Rather than bringing the conversation to a halt until the learner produces the correct form of the repairable (Seedhouse, 2004), the teacher allows the learner to continue with his present production.

Example 2.41
01 P5 it's really hard-eh it's really easy
02 to connecting the people
03 T4 → conne[ct people
04 P5 [so we don't need to waiting people to eh texting
05 back? we can just chat in the internet so
06 T4 yeah

5.5.7. Other initiated Other repair: when the repairable belongs to the interlocutor (OIOR B in this study).
OIOR B was found only during meaning-and-fluency contexts and only during the interaction between the learners. This suggests that the focal participants provided linguistic correction for their peers, though very rarely in this data, and they oriented to achieving linguistic accuracy regardless of the pedagogic aim of interaction.

The type of classroom activity during which the OIOR sequences were found also provides further support for this observation. With regard to the classroom activity in the meaning-and-fluency contexts, the focal participants provided the corrections during pair-work and teacher-fronted classroom interaction. The fact that the L2 learners provided correction for their peer (OIOR A as well as OIOR B) in teacher-fronted classroom interaction in meaning-and-fluency contexts is an interesting point to note, for two reasons: firstly, throughout the collected data, pair-work was the commonest type of classroom interaction found in meaning-and-fluency contexts. Subsequently, repair during peer-interaction was expected to take place most often in pair-work activities. OIOR B, however, was more frequent in the teacher-fronted classroom interaction. Secondly, in pair-work, the focal participant is, by default, the most likely person to provide correction. On the other hand, in teacher-fronted classroom interaction, the focal participant has no such obligation, as there are other interlocutors, especially the teacher, to provide the ‘correct’ L2. The following example is a typical example of OIOR in teacher-fronted classroom interaction in a
meaning-and-fluency context. This conversation takes place among a group of speakers (including the teacher and Participant 5, and though the latter does not have to, he provides correction (line 06) in the turn following his peer’s (L1) repairable (line 04)).

Example 2.42

00 T4 no Tuesday.Because all of you had the math assessment
01 L1 wow
02 L2 wow
03 L1 one by one
04 P5 one on one
05 L1 one on one

Therefore, the fact that more OIOR initiated by the focal participants were found in the teacher-fronted classroom interaction, may suggest that the focal participants more readily took on the role of teacher to provide linguistic correction during this particular type of interaction than in other types of classroom activities (see also Example 2.27) in order to resolve other’s production problems.

5.5.8. Summary of discussion for Research Question Two.

The analysis of repairable in relation to the nature of trouble source, speaker of trouble source, participatory structure, repair organization, and pedagogic contexts indicated that while SISR, which focused on resolving one’s own production problem was found in a variety of participatory structures and the pedagogic contexts (i.e. the speakers initiated SISR regardless of who the recipient was and what the pedagogic aim set by the teacher was), there was a polarity in the participatory structure, the types of classroom interaction and pedagogic contexts in which the repair took place in OISR, SIOR, and OIOR sequences.

Repair sequence between the teacher-focal participant was predominantly found during teacher-fronted classroom interaction and individual task and repair sequences between the learners were found mostly during pair-and-group work. In turn, teacher-fronted classroom interaction and individual tasks were the commonest type of classroom interaction found in form-and-accuracy contexts and the pair-and group-work was more often found in meaning-and-fluency contexts than in form-and-accuracy or task-oriented contexts. Accordingly, the focal participants received more peer-repair-initiation or peer-repair-completion in meaning-and-fluency contexts while there was more teacher-repair-initiation and-completion in form-and-accuracy contexts.
In OISR, with regard to the nature of the repairable, by and large, the teachers rather than
the peers initiated repair on the focal participants’ linguistic problems. The focal
participants received more other-initiation of repair of their production problems when they
interacted with the teacher, and they engaged in more repair sequences with the teacher
during teacher-fronted classroom interaction and individual tasks, which were
predominantly employed in form-and-accuracy contexts. The peers rarely initiated repair on
the focal participant’s production problems and when they did it was only during
interaction in meaning-and-fluency contexts.

When the focal participants were engaged in conversation with their peers, they initiated
(other-initiated) repair to resolve understanding problems rather than to resolve production
problems belonging to their peers. In general, more repair work took place during meaning-
and-fluency contexts than in any other contexts. This suggests that the L2 learners were
more likely to be engaged in repair work when the type of classroom interaction allowed
them to have more interaction spaces and they initiated repair to resolve understanding
problems rather than production problems. However, as to why the focal participants did
not initiate other-repair to resolve their peers’ production problem in this study is not clear.

Through SIOR sequences, the focal participant initiated self-repair on their production
problem, but rather than completing it on their own, they designated the next speaker to
complete the repair in all three pedagogic contexts. The focal participants initiated more
self-repair when they were engaged in interaction with the teacher regardless of the
pedagogic contexts and the type of classroom interaction. Since the repair dealt with
production problems that they could not resolve on their own, the focal participants may
have been more inclined to seek assistance from the teacher rather than their peers. In a
similar vein, the focal participants rarely provided repair completion when their peers self-
initiated repair (i.e. on a production problem). This phenomenon could also be attributed to
the general lack of self-initiated repair by the peers that lead to other-completion.

Through OIOR, the focal participants received linguistic correction in both form-and-
accuracy contexts and meaning-and-fluency contexts. Regardless of the pedagogic context
and whether the repair initiator was the teachers or peers, more correction was provided
during teacher-fronted classroom interaction. The focal participants, similarly, provided
linguistic correction for their peers during teacher-fronted classroom interaction but all the instances of OIOR were found in meaning-and-fluency contexts.

In sum, the findings in this study not only support Seedhouse’s previous claim (1994, 2004), which proposes that what constitutes repairable varies according to the pedagogical focus introduced by the teacher, but also offer further implications for L2 repair in classroom contexts. The pedagogic focus introduced by the teacher does not always dictate what the learners recognize as repairable. The participatory structure, types of classroom interaction, and the pedagogic contexts all had an impact on what was recognized as repairable and how it was repaired (i.e. the sequential organization of repair). The previous perspective on the pedagogic contexts of L2 classroom and L2 repair needs to take into account the nature of the trouble source, the speaker of the repairable, and the participatory structure, as well as the pedagogic contexts in which repair work takes place.
Chapter 6. Research Question 3: Results and Discussion

6.1 Research Question Three: Changes in the frequency and organization of repair

The third research question examines the quantitative and qualitative changes in the types and organization of repair sequences over time.

RQ 3. What changes occur in the SISR, SIOR, OISR, and OIOR sequences involving L2 classroom learners over time?

a. Are there changes in the frequency of the different types of repair sequences over time?
b. Do changes occur in the organization of SISR, SIOR, OISR, and OIOR sequences?

6.1.1. Analysis of the data.

Initially, in order to answer Research Question 3, the number of times in which SISR, SIOR, OISR, and OIOR repair work appeared in the L2 classroom interaction was counted. In order to investigate the changes in the sequential organization of SISR, SIOR, OISR, and OIOR, each repair sequence needed to be analysed in terms of at what point in a repair sequence the repair was initiated and completed. The sequential positions in which the repair initiation and completion appeared were examined with reference to the sequential position of repair identified by Schegloff, Jefferson, and Sacks (1977) (Figure 7) and quantified.

Figure 7 Sequential positions of repair (Schegloff, Jefferson, & Sacks, 1977)

1. Same-turn repair: within the same turn as the trouble source
2. Transition space repair: in the transition space following the trouble source
3. Second position repair: in the turn immediately following the trouble source
4. Third position repair: in a third positioned turn
   (cf. Third turn repair: without reference to the recipient’s indication of a trouble source; similar to transition space repair which occurs in the transition space following the trouble source)
5. Fourth position repair: in a fourth positioned turn

In order to trace each focal learner’s repair practice over time, a distinction between the repair work of the focal participants and the rest of the speakers was needed. To this end, the speaker of the repairable and who initiated and completed repair were distinguished in terms of whether the focal participants or the other speakers (i.e. the teachers and fellow learners) were involved. Each type of repair trajectory was categorized as Type A and Type B. A repair sequence was categorized as Type A when the source of the repairable was the
focal participant and as Type B when the speaker of the repairable was the teacher or the other learners. Since the purpose of this study was to trace the repair behaviours of the focal participant, only the SISR sequences belonging to the focal participants were examined (i.e. there was no need to further divide SISR into Type A or B). Consequently, 7 types of repair sequences were identified as shown in Table 5 in the results for Research Question 2. The table is repeated here for convenience sake (Table 8).

Each of these seven types of repair sequence was then examined in terms of the pedagogic context in which it occurred (i.e. form-and-accuracy, meaning-and-fluency, task-oriented), the type of interaction (i.e. teacher-fronted classroom interaction, group-work, pair-work, individual task), the participatory structure (i.e. teacher-focal participant, focal participant-other learners, focal participant-class), the nature of trouble source (i.e. production problem, understanding problem), and the type of repair (i.e. prospective, concurrent, retrospective, non-understanding, incomplete understanding, misunderstanding). The sequential position in which the repair was initiated and completed was investigated using the sequential positions of repair identified by Schegloff, Jefferson, and Sacks (1977) (Figure 7). When an ambiguous instance arose, it was neither dismissed as an abnormal case nor forced into one of the categories; instead, it was carefully re-examined to account for its ambiguity from the participants’ point of view. However, the ambiguous cases were not included in the quantitative analysis. At all times, the frequency analyses involved in the present study were based on a detailed case-by-case analysis of the repair instances. In the following section, I will present the results of the frequency analysis of the different types of repair sequences and the sequential organization of repair work of the four focal participants overtime.

Table 8 Source of repairable, repair initiation and proper by types of repair trajectory

<table>
<thead>
<tr>
<th>Type of repair trajectory</th>
<th>Source of repairable</th>
<th>Repair initiator</th>
<th>Repair completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>SISR</td>
<td>Participant</td>
<td>Participant</td>
<td>Participant</td>
</tr>
<tr>
<td>SISR by other (Excluded)</td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
</tr>
<tr>
<td>OISR (Type A)</td>
<td>Participant</td>
<td>Other</td>
<td>Participant</td>
</tr>
<tr>
<td>OISR (Type B)</td>
<td>Other</td>
<td>Participant</td>
<td>Other</td>
</tr>
<tr>
<td>SIOR (Type A)</td>
<td>Participant</td>
<td>Participant</td>
<td>Other</td>
</tr>
<tr>
<td>SIOR (Type B)</td>
<td>Other</td>
<td>Other</td>
<td>Participant</td>
</tr>
<tr>
<td>OIOR (Type A)</td>
<td>Participant</td>
<td>Other</td>
<td>Participant</td>
</tr>
<tr>
<td>OIOR (Type B)</td>
<td>Other</td>
<td>Participant</td>
<td>Participant</td>
</tr>
</tbody>
</table>
6.2 Results

The frequency of each type of repair trajectory in each of the classroom recording sessions for each focal participant is presented in graphs (Figure 8–11) and tables (Table 9–12) below. During the nine month period of data collection, there was a maximum of eight classroom-recording sessions for each participant. The numbers in the column for Recording Sessions (far left-hand-side) in the table indicate the chronological order in which the recordings were collected. For example, the number 1 in the Recording Session for Focal Participant 1 (Table 9) indicates that the data occurred in the first recording session (e.g. in April) and Recording Session 8 indicates that it was the last recording session (e.g. in December). The numbers in each type of repair work indicate how many times a specific type of repair was found in the recording session. For example, for Focal Participant 1 (Table 9), there was a total of 18 repair sequences in the first recording session (the farthest right-hand-column), of which two were SISR, seven were OISR A, eight were OISR B, and one was SIOR B. There were no examples of SIOR A, OIOR A and OIOR B in the first recording session. For Focal Participant 1, the total number of SISR sequences was 13, 26 for OISR A, 25 for OISR B, four for SIOR B, and one for OIOR A as the bottom row shows. There were no instances of SIOR A and OIOR B found in the entire data for Focal Participant 1.

Figure 8 Participant 1: Frequency of types of repair sequences by time

Table 9 Participant 1: Frequency of each type of repair sequence by recording session

<table>
<thead>
<tr>
<th>Recording Sessions</th>
<th>SISR</th>
<th>OISR A</th>
<th>OISR B</th>
<th>SIOR A</th>
<th>SIOR B</th>
<th>OIOR A</th>
<th>OIOR B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>18</td>
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<td>4</td>
<td>3</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>
### Table 10 Participant 3: Frequency of each repair sequence by recording session

<table>
<thead>
<tr>
<th>Recording sessions</th>
<th>SISR</th>
<th>OISR A</th>
<th>OISR B</th>
<th>SIORA</th>
<th>SIORB</th>
<th>OIOR A</th>
<th>OIOR B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
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<td>-</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>46</td>
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<td>0</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>6</td>
<td>18</td>
<td>23</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>137/137</td>
</tr>
</tbody>
</table>

**Figure 10 Participant 5: Frequency of types of repair sequences by time**
Table 11 Participant 5: Frequency of each repair sequence by recording session

<table>
<thead>
<tr>
<th>Recording Sessions</th>
<th>SISR</th>
<th>OISR A</th>
<th>OISR B</th>
<th>SIORA</th>
<th>SIOR B</th>
<th>OIOR A</th>
<th>OIOR B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>21</td>
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<tr>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>15</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>88/88</td>
</tr>
</tbody>
</table>

Figure 11 Participant 7: Frequency of types of repair sequences by time

Table 12 Participant 7: Frequency of each repair sequence by recording session

<table>
<thead>
<tr>
<th>Recording Sessions</th>
<th>SISR</th>
<th>OISR A</th>
<th>OISR B</th>
<th>SIORA</th>
<th>SIOR B</th>
<th>OIOR A</th>
<th>OIOR B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
One noteworthy observation is that the relative frequency of the different types of repair stayed fairly constant over the different recording sessions. That is, the number of repairs did not change (e.g. increase or decrease) with specific reference to the time in which they were produced. In this study, as the graphs show, one specific type of repair was employed more frequently by the speakers than other types of repair and the frequency of this ‘preferred’ sequence remained relatively constant throughout the data for all focal participants. As will be explained later, this occurrence of a particular type of repair seemed to depend on the nature of the trouble source and the interlocutors involved in the repair work rather than the time the data were collected.

As for the sequential positions of repair initiation and completion in the organization of repair, the data in this study showed that they were organized as reported in the literature (Schegloff, Jefferson, & Sacks, 1977; Schegloff, 2007). For example, the recipient’s repair initiation (i.e. other-repair initiation) on the interlocutor’s trouble source in the previous turn usually occurred in the second turn position and the repair completion by the speaker of the trouble source in the third turn position. There were only a few exceptions to this pattern due to inserted sequences during the repair work.

In the following section, I will present the findings focusing on each focal participant. The frequency of each type of repair work and the sequential position of the repair initiator and completion will be explained with reference to the type of trouble source, the type of repair employed, the participatory structure involved, the type of pedagogic activity, and the pedagogic context they were found in.

6.2.1. Participant 1.

6.2.1.1. SISR.

There were a total of 13 SISR sequences in the data for focal participant 1. All 13 instances of SISR were initiated to resolve the speaker’s production problems. Out of these 13 repair sequences, 11 occurred between the learners in meaning-and-fluency contexts,
while two took place between the teacher and the focal participant in form-and-accuracy contexts. Of the 11 repairs in meaning-and-fluency contexts, eight were found during pair work and the rest (three) during group work. For the two SISR instances found in form-and-accuracy context, one took place during teacher-fronted classroom interaction and the other during an individual task. In terms of the sequential organization of repair, all SISR instances involved a form of self-editing within the same turn as the trouble source (i.e. prospective repair, concurrent repair) except for one instance, which occurred as a continuation in the third-turn position. The table below (Table 13) is a summary of frequency of SISR sequences, the nature of the trouble source, pedagogic contexts, participatory structure, types of classroom interaction and the sequential organization of repair (initiation and completion).

### Table 13 Summary of frequency of SISR sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SISR</td>
<td>13</td>
<td>PR</td>
<td>FA (2)</td>
<td>T-P (2)</td>
<td>TF (1)</td>
<td>Prospective, Concurrent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MF (11)</td>
<td>L-L (11)</td>
<td>PW (8)</td>
<td>[Same turn], [3rd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GW (3)</td>
<td>Prospective, Concurrent [Same turn]</td>
</tr>
</tbody>
</table>

**Key:**

**Nature of problem**
PR: production problem; UN: understanding problem

**Pedagogic contexts (frequency)**
FA: form-and-accuracy; MF: meaning-and-fluency; TO: task-oriented

**Participatory structure (frequency)**
T-P: teacher-focal participant; L-L: peer-focal participant; P-C: focal participant-whole class

**Type of classroom interaction (frequency)**
TF: teacher-fronted classroom; PW: pair-work; GW: group-work; IND: individual task

**Sequential organization of repair**
*the ordinal numbers in the square brackets represent the position of repair initiation/completion in the sequential organization of turns*

[sequential position of repair initiation, sequential position of repair completion]

Same turn: within the same turn as the trouble source
2nd: Second position repair (in the turn immediately following the trouble source)
3rd: Third position repair (in a third positioned turn)
4th: Fourth position repair (in a fourth positioned turn)
6.2.1.2. OISR A.

There was a total of 26 instances of OISR A repairs where the trouble source belonged to the focal participant, and the repair was initiated by another speaker and completed by the focal participant. Ten of the 26 instances of these repairs concerned production problems while 16 concerned understanding problems.

Among the ten instances of OISR A, which concerned production problems, six repairs took place in form-and-accuracy contexts. All these six repairs were found during interaction between the teacher and the focal participant while the focal participant was working on individual tasks. Regarding the types of repair work, all of these repair instances were categorized as retrospective repair. All retrospective repair initiations were positioned in a second turn and completions in a third turn. The rest of the repair sequences concerning production problems (i.e. four) took place in meaning-and-fluency contexts. These were also retrospective repairs. Two of them occurred during an individual task between the learners while the other two took place during a teacher-fronted class activity between the teacher and the focal participant. All repair initiators were second turn positioned and all repair completions were third turn positioned.

The majority of the 16 instances of OISR A concerning understanding problems took place in meaning-and-fluency contexts (12 out of 16) with just four occurring in form-and-accuracy contexts. All of the 12 repair sequences in meaning-and-fluency contexts occurred between the learners. Seven of them occurred during individual tasks, three of them during pair-work and another three during teacher-fronted-classroom interaction. All repair initiators were in the second turn from the trouble source and the repair completion followed immediately after (i.e. third turn position). The repair sequences in the form-and-
accuracy contexts occurred between the teacher and the focal participant: two during individual tasks and two during teacher-fronted classroom interaction. These repair sequences were initiated to resolve incomplete and non-understanding problems. All initiators were in the second turn position and all completions were in the third turn position, except for one occasion where the repair sequence was between the teacher and the focal participant during an individual task when the repair initiator was in the fourth turn from the trouble source and the completion in the 7th turn due to an inserted question-and-answer pair (Table. 14).

Table 14 Summary of frequency of OISR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA (6)</td>
<td></td>
<td></td>
<td>T-P(6)</td>
<td>IND(6)</td>
<td></td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td>PR (10)</td>
<td></td>
<td></td>
<td>T-P(2)</td>
<td>TF (2)</td>
<td></td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td>MF(4)</td>
<td></td>
<td></td>
<td>L-L(2)</td>
<td>IND (2)</td>
<td></td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td>OISR A 26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td>FA(4)</td>
<td></td>
<td></td>
<td>T-P (4)</td>
<td>TF(2)</td>
<td></td>
<td>[2nd, 3rd]</td>
</tr>
<tr>
<td>UN (16)</td>
<td></td>
<td></td>
<td></td>
<td>IND(2)</td>
<td></td>
<td>[4th, 7th]</td>
</tr>
<tr>
<td>MF(12)</td>
<td></td>
<td></td>
<td>L-L(12)</td>
<td>PW(3)</td>
<td></td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TF(3)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2.1.3. OISR B.

All 25 instances of OISR B concerned resolving understanding problems. 14 of these took place in meaning-and-fluency contexts and 11 in form-and-accuracy contexts. The repair work in the meaning-and-fluency contexts occurred during pair-work activities between the learners, and focused on resolving incomplete understanding and non-understanding problems. All repair initiators were in the second position and the repair completions were in the third position.
The rest of the repair work, which occurred in form-and-accuracy contexts, took place between the teacher and the focal participant. There were 11 instances: four occurred during individual tasks, seven in teacher-fronted classroom interaction. All repair initiators were in the second turn position and all repair completions were found in the third turn position. These repair sequences addressed incomplete understanding and non-understanding problems (Table 15).

Table 15 Summary of frequency of OISR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OISR B</td>
<td>25</td>
<td>UN</td>
<td>FA (11)</td>
<td>T-P (11)</td>
<td>TF(7)</td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MF(14)</td>
<td>L-L (14)</td>
<td>PW(14)</td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
</tbody>
</table>

6.2.1.4. SIOR A.

There were no examples of SIOR A where another speaker completed Participant 1’s self-initiated repair.

6.2.1.5. SIOR B.

There were four instances of SIOR B where the focal participant provided repair completion for the interlocutor’s self-initiated repair. All four repairs concerned solving production problems and they were all prospective repairs with the completion in the second turn. Two of these repairs took place in form-and-accuracy contexts and the other two in meaning-and-fluency contexts. Within the form-and-accuracy contexts, one of the repair sequences occurred during interaction between the teacher and the focal participant in an individual task and the other in pair-work during interaction between the learners. There were two repair sequences in meaning-and-fluency contexts, which took place during interaction between learners in pair-work (Table 16).

Table 16 Summary of frequency of SIOR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair</th>
<th>Total</th>
<th>Nature</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.2.1.6. OIOR A.
The only one OIOR A repair found in the data for this focal participant took place during teacher-fronted classroom interaction in a form-and-accuracy context. The interlocutors were the teacher and the focal participant and the repair concerned resolving a production problem. The type of repair was a retrospective repair and the repair initiation was in the second turn and the completion in the third turn position (Table 17).

Table 17 Summary of frequency of OIOR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIOR A</td>
<td>1</td>
<td>PR</td>
<td>FA (1)</td>
<td>T-P(1)</td>
<td>TF(1)</td>
<td>Retrospective [2\textsuperscript{nd}, 2\textsuperscript{nd}]</td>
</tr>
</tbody>
</table>

6.2.1.7. OIOR B.
There was no occasion when this focal participant made correction on her interlocutor’s repairable.

6.2.2. Participant 3.
6.2.2.1. SISR.
A total number of 81 instances of SISR were found in the data for Participant 3. 18 of these 81 SISR sequences were found in form-and-accuracy contexts, and the rest (63) in meaning-and-fluency contexts. The repair sequences in form-and-accuracy contexts were all prospective and concurrent repairs: three of them took place during individual tasks between the teacher and the learner, and another three during teacher-fronted classroom interaction. The rest of the repair sequences (13 of them) in this pedagogic context
occurred during teacher-fronted class interaction between the learner and the class (i.e. speaking in front of the whole class).

In meaning-and-fluency contexts, there were 63 instances of SISR. Of these, 27 repair sequences were found in pair-work during interaction between the learners, and 36 in teacher-fronted classroom interaction. Among the 36 repair sequences found during the teacher-fronted classroom interaction, 21 repair sequences took place during interaction between the focal participant and the class, 13 between the teacher-and the focal participant and two instances during interaction between learners.

The majority of these repairs were sequentially positioned in the same turn as the trouble source (i.e. concurrent repairs and prospective repairs). A few exceptions were found in the teacher-fronted classroom interaction: five prospective repairs were left incomplete. They were found during interaction between the focal participant and the class. These incomplete repairs generally made the other-completion in the following turn necessary, and this will be further explained in the section for SIOR A (6.2.2.4). There were also three retrospective repairs in which the repair was completed in the third turn position during interaction between the teacher and the focal participant. In a typical example of a third-turn retrospective repair the focal participant completed his first turn (i.e. first pair part) and the teacher’s response followed in the second turn (i.e. second pair part). Instead of starting a new first pair part in the third turn, the focal participant initiated repair on his first turn in the form of an addition (Table 18).

Table 18 Summary of frequency of SISR sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SISR</td>
<td>81</td>
<td>PR</td>
<td>FA (18)</td>
<td>L-C(13)</td>
<td>TF(13) TF (3) IND (3)</td>
<td>Prospective, Concurrent [Same turn]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MF (63)</td>
<td>T-P(6)</td>
<td></td>
<td>Prospective, Concurrent [Same turn]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P-C (21)</td>
<td></td>
<td>Prospective, Concurrent [Same turn]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T-P(13)</td>
<td>TF(36)</td>
<td>Retrospective [3rd]</td>
</tr>
</tbody>
</table>

170
6.2.2.2. OISR A.

There were six instances of OISR A repairs found in the data. Four resolved production problems and two understanding problems. With regard to the pedagogic contexts in which they were found, only one repair sequence was found in a form-and-accuracy context while the rest (five) were found in meaning-and-fluency contexts. The one repair instance found in the form-and-accuracy context concerned resolving a production problem and it occurred in teacher-fronted classroom interaction between the teacher and the focal participant. The repair initiation was in the form of a DIU (Designedly Incomplete Unit) in the second turn position and the repair completion in the following turn (i.e. third turn position).

Of the five repair sequences found in the meaning-and-fluency contexts, two instances occurred during pair-work between the learners. One of them concerned resolving a production problem with the repair initiator in the second turn position and the completion in the third turn position. One other repair resolved an incomplete understanding problem, with the repair initiation in the next turn from the trouble source (second turn) and the completion in the turn immediately following the repair initiation (third turn).

The rest of the repair sequences (three) took place during teacher-fronted classroom interaction. One of them concerned resolving an incomplete understanding problem with the repair initiation and completion in the second and third turn respectively. The other two repair sequences were initiated to resolve production problems. Of these two repair instances, one of them occurred between the teacher and the focal participant and the other between the learners. In the former, the teacher initiated the repair by using a DIU in the second turn position and the focal participant completed it in the following turn (i.e. an answer that was required to complete the teacher’s DIU). In the latter instance, the repair initiation was also in the second turn position (but was not a DIU) and the completion in the third position (see Table 19).

Table 19 Summary of frequency of OISR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair</th>
<th>Total</th>
<th>Nature</th>
<th>Pedagogic</th>
<th>Participatory</th>
<th>Type of</th>
<th>Sequential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sequence</td>
<td>number of problem</td>
<td>contexts</td>
<td>structure</td>
<td>classroom interaction</td>
<td>organization of repair</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------</td>
<td>----------</td>
<td>-----------</td>
<td>-----------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>OISR A</td>
<td>6</td>
<td>FA (1)</td>
<td>T-P(1)</td>
<td>TF(1)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PR (4)</td>
<td>T-P(1)</td>
<td>TF (1)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MF(3)</td>
<td>L-L(2)</td>
<td>PW(1)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
<td></td>
</tr>
<tr>
<td>OISR B</td>
<td>6</td>
<td>UN (2)</td>
<td>MF(2)</td>
<td>L-L(2)</td>
<td>PW(1)</td>
<td></td>
</tr>
</tbody>
</table>

6.2.2.3. OISR B.

All 18 instances of OISR B sequences concerned resolving understanding problems. These repairs were found in all three pedagogic contexts: six in form-and-accuracy contexts, nine in meaning-and-fluency contexts, and three in task-oriented contexts.

Within the form-and-accuracy contexts, all six repair sequences took place between the teacher and the focal participant. There were five instances of repair found during teacher-fronted classroom interaction. three of these five repair sequences were initiated to resolve non-understanding problems and two to resolve incomplete understanding problems. Regardless of the problem type, all repair initiations and completions were found in the second turn position and the third turn position respectively. There was one repair that was found during pair-work that resolved an incomplete understanding problem. Here, the repair was also initiated in the second turn and completed in the third turn.

In the meaning-and-fluency contexts, five repair sequences were found in teacher-fronted classroom interaction during interaction between the teacher and the focal participant while four instances were found in pair-work during interaction between the learners. All repairs concerned resolving incomplete understanding problems except for one repair sequence, which was initiated to resolve a non-understanding problem. This one instance of repair of a non-understanding problem was found during interaction between the teacher and the focal participant. Regardless of the problem types, all repair initiations were found in the second turn position and the repair completion in the third turn position.

Finally, three repair sequences were found in task-oriented contexts during individual tasks. Again, the repair initiations and the completions were all in the second turn position and the third turn position respectively, and they resolved incomplete understanding problems (see Table 20).
Table 20 Summary of frequency of OISR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OISR B</td>
<td>18</td>
<td>UN (18)</td>
<td></td>
<td></td>
<td></td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FA (6)</td>
<td>T-P(6)</td>
<td>TF(5) PW(1)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MF(9)</td>
<td>T-P(5) L-L(4)</td>
<td>TF (5) PW (4)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TO(3)</td>
<td>T-P (3)</td>
<td>IND(3)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
</tr>
</tbody>
</table>

6.2.2.4. SIOR A.

All 23 instances of SIOR A sequences concerned resolving production problems. Two of these repair sequences were found in task-oriented contexts during interaction between the teacher and the focal participant while the focal participant was engaged in pair-work. The repair initiations were in the same turn as the trouble source and completions in the second turn position.

The rest of the repair sequences (21 of them) were found in form-and-accuracy contexts and meaning-and-fluency contexts. In the former, there were two repair instances (all between the teacher and the focal participant) and in the latter, there were 19. One of the two repair sequences found in the form-and-accuracy contexts took place during an individual task and the other during teacher-fronted classroom interaction. The repair sequences found during the individual task were prospective repairs in which the repair initiation was within the same turn as the trouble source and the repair completion in the next turn (second turn). The other repair, which took place during the teacher-fronted classroom interaction, was also a prospective repair but the repair completion did not take place until the 5\textsuperscript{th} turn as there were inserted question-and-answer pairs (i.e. repair initiation resulted in further questions from the teacher).

In the meaning-and-fluency contexts (19), 13 repair instances took place in teacher-fronted classroom interaction during interaction between the teacher and the focal participant. The rest (six) were found during pair-work between the learners. All of these six repairs were prospective repairs in which the repair initiation was within the same turn as the trouble
source, left incomplete and completed by the other speaker. The sequential organization of repair found during interaction between the teacher and the focal participant in the teacher-fronted classroom interaction was less homogenous: nine were prospective repairs with the repair initiation within the same turn and the completion in the following turn. There were four repairs with differing sequential positions. Three of the repair initiations were in the same turn as the trouble source and completions were in the fourth turn position, and one repair sequence had the initiation in the same turn as the trouble source and the completion sixth turn position from the trouble source due to inserted sequences (Table 21).

### Table 21 Summary of frequency of SIOR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIOR A</td>
<td>23</td>
<td>PR(23)</td>
<td>T-P(2)</td>
<td>IND(1)</td>
<td>Prospective</td>
<td>[Same turn, 2nd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>T-P(13)</td>
<td>TF(1)</td>
<td>Prospective</td>
<td>[Same turn, 5th]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MF(19)</td>
<td>[Same turn, 2nd]</td>
<td>Prospective</td>
<td>[Same turn, 2nd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Same turn, 4th]</td>
<td>TF(13)</td>
<td>Prospective</td>
<td>[Same turn, 4th]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Same turn, 6th]</td>
<td>PW(6)</td>
<td>Prospective</td>
<td>[Same turn, 6th]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TO(2)</td>
<td>T-P (2)</td>
<td>Prospective</td>
<td>[Same turn, 2nd]</td>
</tr>
</tbody>
</table>

6.2.2.5. **SIOR B.**

There was no example of SIOR B.

6.2.2.6. **OIOR A.**

There were seven instances of OIOR A in focal participant three’s data. OIOR A sequences were in fact other-corrections. Both the teacher and the other learners provided corrections for Participant 3 throughout the data collection period. Of these, three instances were found in form-and-accuracy contexts and four in meaning-and-fluency contexts. With regard to
the sequential position of repair, all were retrospective repairs. This meant that the repair was initiated (and completed) in the turn position (i.e. second turn) following the trouble source.

OIOR sequences provided correction of the focal participant’s production problems. The three repair instances found in the form-and-accuracy contexts took place during interaction between the teacher and the focal participant: two during individual tasks and one during teacher-fronted classroom interaction. The four repair sequences concerning production problems in the meaning-and-fluency contexts occurred during interaction between the learners: two during pair work and two during teacher-fronted classroom interaction (see Table 22).

Table 22 Summary of frequency of OIOR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIOR A</td>
<td>7</td>
<td>PR (7)</td>
<td>FA (3)</td>
<td>T-P(3)</td>
<td>IND(2)</td>
<td>Retrospective [2nd, 2nd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MF(4)</td>
<td>L-L(4)</td>
<td>TF(1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TF (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PW (2)</td>
<td></td>
</tr>
</tbody>
</table>

6.2.2.7. OIOR B.

There were two instances of OIOR B repair sequences and both were found in meaning-and-fluency contexts during interaction between learners. One was found during pair-work and the other during teacher-fronted classroom interaction. Both repairs were retrospective repairs with the repair initiation in the second turn position and completed in the same turn as the initiator. An interesting point to note is that all OIOR B repairs took place between the focal participant and fellow learners during pair-work and teacher-fronted classroom interaction in meaning-and-fluency contexts (See Table 23).

Table 23 Summary of frequency of OIOR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
</table>

175
6.2.3. Participant 5.

6.2.3.1. SISR.

In the data collected for Participant 5, there were 45 instances of SISR. These repairs were all initiated to resolve production problems. 24 of the 45 repairs were found in meaning-and-fluency contexts and 21 were found in form-and-accuracy contexts.

The repairs found in the meaning-and-fluency contexts were prospective (15) and concurrent (nine) repairs. There was one exception - a third-turn position repair (i.e. a retrospective repair). This particular repair work took place during group-work among the learners. Excluding this one third-turn repair, 11 of the 24 SISR instances occurred during interactions between the learners in pair-work. The rest of the repair sequences (12) were found during interaction between the teacher and the focal participant in individual tasks (two) and in teacher-fronted classroom interaction (ten).

As for the SISR found in the form-and-accuracy contexts (21), three repair instances took place during interaction between the teacher and the focal participant in individual task. Two of them were concurrent repairs and one of them was a prospective repair. The rest of the repairs found in other types of classroom interaction involving the teacher and the focal participant also showed a similar pattern. There were nine instances of repair work found during interaction between the teacher and the focal participant in teacher-fronted classroom lessons. Three of these repairs were concurrent repairs while six were prospective repairs. There were nine SISR instances found in learner-learner interaction. Four of them were found during pair-work and the rest during teacher-fronted classroom interaction. These were all prospective repairs (see Table 24).

Table 24 Summary of frequency of SISR sequence, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of contexts</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIOR B</td>
<td>2</td>
<td>PR (2)</td>
<td>MF(2)</td>
<td>L-L(2)</td>
<td>TF (1)</td>
<td>PW (1)</td>
</tr>
</tbody>
</table>

[2nd, 2nd]
6.2.3.2. OISR A.

There were 15 instances of OISR sequences where the trouble source belonged to the focal participant and the repair was initiated by the other speaker and completed by the focal participant. Of these 15 repair instances, three repair sequences were found in form-and-accuracy contexts while 12 were found in meaning-and-fluency contexts. All of Participant 5’s OISR A repair sequences took place during interaction between the teacher and the focal participant.

The three repairs in form-and-accuracy contexts occurred during pair-work (1) and teacher-fronted classroom interaction (2). The repair was initiated to address the focal participant’s production problem by the other speaker in the next turn (i.e. second turn) and the repair was completed by the focal participant in the turn following the repair initiation (i.e. third turn).

In meaning-and-fluency contexts (12), five repairs were initiated to resolve the focal participant’s production problems. Of these five repair instances, two were found during group-work and three during teacher-fronted classroom interaction. Except for one repair in teacher-fronted classroom interaction, which had the repair initiation in the 4th turn and the completion in the 5th turn due to inserted turns, the repair sequences had the repair initiation in the second turn position and the completion in the third.

On the other hand, seven repair sequences addressed problems of understanding. Five of these seven repair instances were found during group-work and concerned non-understanding problems while two concerned issues of misunderstanding. Of these two
repair instances, one was found during an individual task and the other during pair-work. All repairs resolving non-understanding problems were initiated in the second turn position and the completion in the third. On the other hand, repair was initiated to resolve misunderstanding problems (i.e. two examples) in the 7th turn and the 12th turn from the trouble source and completed in the 10th and 19th turn respectively (see Table 25)

Table 25 Summary of frequency of OISR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OISR A</td>
<td>15</td>
<td>MF(5)</td>
<td>T-P(8)</td>
<td>TF(3)</td>
<td>GW(2)</td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GW(2)</td>
<td></td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PW(1)</td>
<td></td>
<td>Retrospective [10th, 19th]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MF(7)</td>
<td>T-P(7)</td>
<td>IND(1)</td>
<td></td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GW(5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2.3.3. OISR B.

All instances of repair concerned understanding problems. Of the seven OISR B sequences, six were found in meaning-and-fluency contexts while one was found in a form-and-accuracy context. This one instance of OISR B was a retrospective repair resolving an incomplete understanding problem with the repair initiation in the second turn and the completion in the third turn position.

Of the six repairs in the meaning-and-fluency contexts, one was found during interaction between the teacher and learner in teacher-fronted classroom interaction and involved
resolving an incomplete understanding problem. The repair initiation was in the second turn and the completion in the third turn position. The rest of the repairs (five) were found during interaction between the learners in group-work. Two of these resolved incomplete understanding problems and three non-understanding problems. All repair initiations were in the second turn position and the completions in the third turn position (see Table 26).

Table 26 Summary of frequency of OISR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA(1)</td>
<td>L-L(1)</td>
<td>PW (1)</td>
<td></td>
<td></td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
<td></td>
</tr>
<tr>
<td>OISR B</td>
<td>7</td>
<td>UN(7)</td>
<td>T-P(1)</td>
<td>TF(1)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MF(6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L-L(5)</td>
<td>Retrospective [2\textsuperscript{nd}, 3\textsuperscript{rd}]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GW(5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2.3.4. SIOR A.

There were seven instances of SIOR A repairs. These were initiated by the focal participant to resolve his own production problems. All of these repair instances were prospective repairs in which the repair was initiated within the same turn as the trouble source, and completed in the next turn (i.e. second turn) by the other speaker. One of these occurred during interaction between the teacher and the focal participant pair-work in form-and-accuracy context, and this was the only SIOR A repair sequence found in this pedagogic context. The rest of the repair instances (six) were found during meaning-and-fluency contexts. Three repair instances occurred during interaction between the learners in pair-
work and three between the teacher and the learner in teacher-fronted classroom interaction (see Table 27).

Table 27 Summary of frequency of SIOR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIOR A</td>
<td>7</td>
<td>PR (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FA(1) T-P(1) PW (1) Prospective [Same turn, 2nd]

MF(6) L-L(3) PW(3) Prospective [Same turn, 2nd]

T-P(3) TF(3) Retrospective [Same turn, 2nd]

6.2.3.5. SIOR B.

All four instances of repair completion provided by the focal participant on his interlocutors’ self-initiation of repair (i.e. the trouble source belongs to a speaker other than the focal participant) occurred during teacher-fronted classroom interaction in meaning- and fluency contexts. The initiations were in the same turn as the trouble source and the completion in the second turn.

Table 28 Summary of frequency of SIOR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIOR B</td>
<td>4</td>
<td>PR (4)</td>
<td>MF(4)</td>
<td>L-L(4)</td>
<td>TF (4)</td>
<td>Retrospective [Same turn, 2nd]</td>
</tr>
</tbody>
</table>
6.2.3.6. **OIOR A.**

Two instances of OIOR A were found during teacher-fronted classroom interaction in meaning-and-fluency contexts. These repairs were initiated and completed in the next turn immediately following the repairable. One of the OIOR instances took place during interaction between the learners (i.e. a peer correction on the focal participant’s production problem in the previous turn) and the other during interaction between the teacher and the focal participant (i.e. a teacher correction on the focal participant’s previous turn) (see Table 29).

Table 29 Summary of frequency of OIOR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIOR A</td>
<td>2</td>
<td>PR (2)</td>
<td>MF(2)</td>
<td>L-L(1) T-P(1)</td>
<td>TF (2)</td>
<td>Retrospective [2nd, 2nd]</td>
</tr>
</tbody>
</table>

6.2.3.7. **OIOR B.**

All eight instances of OIOR B were corrections provided by the focal participant on his interlocutor’s production problems and they were positioned in the second turn from the trouble source. They all took place during interaction between the learners in meaning-and-fluency contexts. Five of these eight repairs were found in teacher-fronted classroom interaction and the other three instances were found during pair-work (see Table 30).

Table 30 Summary of frequency of OIOR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
</table>
6.2.4. Participant 7.

6.2.4.1. SISR.

There were 71 instances of SISR found in Participant 7’s data and all the repair sequences were initiated to resolve production problems. 70 of them occurred in meaning-and-fluency contexts while one repair instance – a concurrent repair - was found in a task-oriented context. It took place in interaction between learners during an individual task.

Among the 70 repair sequences found in meaning-and-fluency contexts, seven occurred during group-work between the learners. These were prospective (five) and concurrent (two) repairs, which took place within the same turn as the trouble source. Then, there were two repair sequences found in interaction between the teacher and the focal participant during individual tasks. One of these was a concurrent repair and the other a prospective repair.

The rest of the repairs - 60 of them - occurred in meaning-and-fluency contexts during pair-work between the learners. 59 of them were prospective (38) or concurrent repairs (21). There was one instance of a retrospective repair: the focal participant completed his turn (first turn) and his interlocutor the second turn. In the third turn, the focal participant initiated repair on his previous turn as an addition (i.e. first-turn or the trouble source). This was a very rare SISR sequence. No SISR was found in form-and-accuracy contexts for Participant 7 (see Table 31).

Table 31 Summary of frequency of SISR sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIOR B</td>
<td>8</td>
<td>PR (8)</td>
<td>MF(8)</td>
<td>L-L(8)</td>
<td>TF (5)</td>
<td>Retrospective [2nd, 2nd]</td>
</tr>
</tbody>
</table>
6.2.4.2. **OISR A.**

All ten instances of OISR A were found during meaning-and-fluency contexts and they were initiated by the interlocutors to resolve understanding problems. All repair initiations were in the second turn position and the completions in the third turn position. Of the ten repair sequences, only one sequence was found during interaction between the teacher and the learner (during an individual task). This particular repair was initiated to resolve the teacher’s incomplete understanding.

The rest of the repair sequences (nine) involved the focal participant’s peers. Two were found during group resolving incomplete understanding problems. The rest (seven) were found during pair-work, six of which resolved incomplete understanding problems and one repair resolved a non-understanding problem (see Table 32).

![Table 32 Summary of frequency of OISR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair](attachment:image.png)
There were 20 instances of OISR B sequences. They were all initiated by the focal participant to resolve understanding problems, and all the repair initiations and the completions were in the second turn position and the third turn position respectively. In other words, when Participant 7 initiated repair on the previous turn of another speaker, it was to resolve the difficulty the focal participant experienced in understanding rather than to repair his interlocutor’s production problem, and he did so immediately after the trouble source turn.

Of these 20 repair sequences, six were found in form-and-accuracy contexts. These repairs were initiated to resolve incomplete understanding problems and they all happened during interaction between the teacher and the focal participant in teacher-fronted classroom interaction.

On the other hand, there were nine repair sequences found during interaction between the learners in meaning-and-fluency contexts. Four of them occurred in group-work. Of these four, half of them resolved incomplete understanding problems and the other half non-understanding problems. The rest of these nine repair instances took place in pair-work (5). While three of them resolved incomplete understanding problems, two were focused on resolving non-understanding problems.

Then, there were five repair sequences found in task-oriented contexts. These took place during individual tasks. They all concerned incomplete understanding problems. Three
were found during interaction between the learners while the other two appeared during interactions between the teacher and the focal participant (see Table 33).

**Table 33 Summary of frequency of OISR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair**

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA(6)</td>
<td>T-P(6)</td>
<td>TF(6)</td>
<td>Retrospective [2nd, 3rd]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OISR B</td>
<td>20</td>
<td>UN</td>
<td>MF(9)</td>
<td>L-L(9)</td>
<td>PW (5) GW (4)</td>
<td>Retrospective [2nd, 3rd]</td>
</tr>
<tr>
<td>TO(5)</td>
<td>L-L(3)</td>
<td>IND(5)</td>
<td>Retrospective [2nd, 3rd]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**6.2.4.4. SIOR A.**

The nine instances of SIOR A were found in two pedagogic contexts: six in meaning-and-fluency contexts and three in task-oriented contexts. All the repair sequences were initiated to solve the focal participant’s production problems. In the meaning-and-fluency contexts, all repair initiations took place within the same turn as the trouble source and the completion in the second turn. These repair sequences were found during interaction between the teacher and the focal participant. With regard to the types of pedagogic activities, one repair instance was found during an individual task, one during pair-work, two during group-work and two during teacher-fronted classroom interaction.

On the other hand, three repair instances were found in task-oriented contexts during individual tasks. One of these took place during interaction between the learners and the other two during interaction between the teacher and the focal participant (see Table 34).
Table 34 Summary of frequency of SIOR A sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIOR A</td>
<td>9</td>
<td>PR (9)</td>
<td></td>
<td></td>
<td>T-P(6)</td>
<td>MF(6)</td>
</tr>
<tr>
<td>TO(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GW(1) PW(1) IND(1)</td>
<td>Prospective [Same turn, 2nd]</td>
</tr>
</tbody>
</table>

6.2.4.5. SIOR B.

There was only one instance of SIOR B found in the data collected for Participant 7. This was an unusual example. It was found in group-work during interaction among the learners in a meaning-and-fluency context to resolve an incomplete understanding problem. The focal participant who completed the repair was a third party in the interaction (see Example 5.37 in footnote 36). The repair initiation was in the 2nd turn and the completion in the 6th turnxxxv (see Table 35).

Table 35 Summary of frequency of SIOR B sequences, the nature of trouble source, pedagogic contexts, participatory structure, types of classroom interaction, and sequential organization of repair

<table>
<thead>
<tr>
<th>Repair sequence</th>
<th>Total number</th>
<th>Nature of problem</th>
<th>Pedagogic contexts</th>
<th>Participatory structure</th>
<th>Type of classroom interaction</th>
<th>Sequential organization of repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIOR B</td>
<td>1</td>
<td>PR (1)</td>
<td>MF(1)</td>
<td>L-L(1)</td>
<td>GW(1)</td>
<td>Retrospective [2nd, 6th]</td>
</tr>
</tbody>
</table>
6.2.4.6. **OIOR A.**
There was no instance of OIOR A found in the data for Participant 7.

6.2.4.6. **OIOR B.**
There was no instance of OIOR B found in the data for Participant 7.

6.3 **Summary**

There are two parts to this summary. In the first part, I will summarise the frequency of the different repair sequences in each focal participant’s data. A frequency table is provided for each participant. The horizontal rows display the frequency of different types of repair in each classroom interaction recording. The frequency of each repair type is recorded vertically. The ordinal numbers indicate the frequency and the percentages in the brackets indicate the proportion of repair in the given recording session.

I then provide a summation of each repair organization in terms of the nature of trouble source, the type of repair, the participatory structure, the type of classroom interaction, and the pedagogic contexts in which they were found. The total percentage in the vertical row indicates the proportion of repair sequences found in a given recording session based on the total number of repairs found in the data. The total percentages in the horizontal rows indicate the percentage of each repair type based on the total number of repairs found.

6.3.1. **Summary of the frequency of repair sequences.**

6.3.1.1. **Participant 1.**

Participant 1 engaged in OISR sequences most frequently. When there were no instances in which the participant engaged in OISR B sequences (e.g. Recording session 4, 6, 8), OISR A was the most frequent repair sequence (66.66%). When these two types of repair organizations were found together in the same recording session, though the difference was marginal, OISR B sequences were more frequent than OISR A (with the exception of Recording session 2). There were no instances of SIOR A and OIOR B repair found in her data. In sum, the frequency of repair organizations was in the order of OISR A (26/37.63%), OISR B (25/36.23%), SISR (13/18.84%), SIOR B (4/5.79%), and OIOR A (1/1.44%). In addition, Participant 1 was the only focal participant who did not have SISR sequences as the most frequent type of repair sequence. This indicates that the focal participant’s trouble source was repaired more often by her interlocutors than herself, and
the focal participant initiated repair on her interlocutor’s previous turns more often than on her own turns.

6.3.1.1. Participant 3.
Participant 3 engaged in SISR more often than in any other repair sequences throughout the data collection period. There were a total of 81 SISR repair sequences, comprising 59.12% of the participant’s data. In other words SISR took up more than a half of the whole repair work found in each classroom recording. The only exception to this pattern was Recording Session 5, in which SISR took up 40% of the total repair work. In this particular class, Participant 3 engaged in fewer instances of repair work overall in comparison to other recording sessions. Excluding SISR, the frequency of repair sequences in which Participant 3 engaged was in the order of SIOR A (23/16.78%), OISR B (18/13.13%), OIOR A (7/5.10%), OISR A (6/4.37%), and OIOR B (2/1.45%). There were no instances of SIOR B. While focal Participant 3 rarely provided ‘other’ corrections (OIOR B), he often initiated self-repair (SISR, SIOR A) and provided ‘other’ repair initiation on his interlocutor’s previous turn.

6.3.1.3. Participant 5.
Participant 5 engaged in SISR most frequently in all the classroom recordings. The proportion of SISR was more than a half of the total data (45/51.13%). The frequency of the rest of the repair sequences was in the order of OISR A (15/17.04%), OIOR B (8/9.09%), OISR B (7/7.95%), SIOR A (7/7.95%), SIOR B (4/4.54%), and OIOR A (2/2.27%). SIOR B sequences were found only in the first recording session (i.e. when he was paired up with another focal participant in class). Excluding SISR, the range of the rest of the repair sequences in each classroom recording was between 5 and 1. Thus, there was little real difference in the other repair types.

6.3.1.4. Participant 7.
Except for the first and the last classroom recordings, Participant 7 employed SISR more frequently than the other types of repair sequences (71/63.96%). Apart from SISR, the frequency of repair organization was in the order of OISR B (20/18.01%), OISR A (10/9%), SIOR A (9/8.10%) and SIOR B (1/0.9%). There were no instances of OIOR A and OIOR B. Apart from self-initiated repair on his own production problem, Focal Participant 7 engaged in repair to resolve understanding problems most of the time. A point to note is that when the total number of repair sequences in each classroom recording was ten or fewer the range
of the different types of repair organization excluding the SISR was very small (i.e. 3 being the biggest and 1 being the smallest).

Table 36 Participant 1. Frequency of each repair organization in each session (%)

<table>
<thead>
<tr>
<th>Recording Sessions</th>
<th>SISR</th>
<th>OISR A</th>
<th>OISR B</th>
<th>SIOR A</th>
<th>SIOR B</th>
<th>OIOR A</th>
<th>OIOR B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td></td>
<td>(11.11%)</td>
<td>(38.88%)</td>
<td>(44.44%)</td>
<td>(5.55%)</td>
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<td>-</td>
<td>-</td>
<td>(26.08%)</td>
</tr>
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<td>(11.11%)</td>
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<td>(37.63%)</td>
<td>(36.23%)</td>
<td>(5.79%)</td>
<td>(1.44%)</td>
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Table 37 Participant 3. Frequency of each repair organization in each session (%)

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<th>Recording Sessions</th>
<th>SISR</th>
<th>OISR A</th>
<th>OISR B</th>
<th>SIOR A</th>
<th>SIOR B</th>
<th>OIOR A</th>
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<td>(3.44%)</td>
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<td>(137/137)</td>
</tr>
</tbody>
</table>

Table 38 Participant 5. Frequency of each repair organization in each session (%)

<table>
<thead>
<tr>
<th>Recording Sessions</th>
<th>SISR</th>
<th>OISR A</th>
<th>OISR B</th>
<th>SIOR A</th>
<th>SIOR B</th>
<th>OIOR A</th>
<th>OIOR B</th>
<th>Total</th>
</tr>
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<tbody>
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<td>2</td>
<td>7</td>
<td>8</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>18</td>
</tr>
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<td>(38.88%)</td>
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<td>(5.55%)</td>
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<td>-</td>
<td>-</td>
<td>(26.08%)</td>
</tr>
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<td>-</td>
<td>8</td>
</tr>
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<td>(50%)</td>
<td>(37.5%)</td>
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<td>-</td>
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<td>(12.5%)</td>
<td>-</td>
<td>(11.59%)</td>
</tr>
<tr>
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<td>(22.22%)</td>
<td>(11.11%)</td>
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<td>(5.79%)</td>
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<tr>
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<td>(29.41%)</td>
<td>(23.52%)</td>
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<td>(18.84%)</td>
<td>(37.63%)</td>
<td>(36.23%)</td>
<td>(5.79%)</td>
<td>(1.44%)</td>
<td>-</td>
<td>-</td>
<td>(137/137)</td>
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</table>
6.3.2. Summary of sequential organization of repair.

The following section summarizes each repair type in terms of its sequential organization, the nature of the trouble source, the type of repair, the interlocutors involved and the pedagogic contexts in which it took place.

6.3.2.1. SISR.

The frequency analysis of the sequential organization of SISR showed that all SISR instances were initiated to resolve the speaker’s production problems. They were typically initiated within the same turn as the trouble source and completed within the same turn as a form of self-editing (i.e. prospective repair, concurrent repair). There were only a few instances of SISR in which the repair was initiated in the same turn as the trouble source but completed in the third turn position as a continuation. These third turn repairs usually
occurred as a result of interrupting the second turn produced by the interlocutor. There were very few third-turn repairs that were retrospective repairs. That is, the focal participant repairs his/her first turn in the third turn as an addition following the second turn of his/her interlocutor. Lastly, there were a number of prospective repairs in which the turn including the repair was left incomplete. These incomplete self-repairs made the other-repair completion in the following turn relevant (i.e. self-initiated other-repair).

With regard to the pedagogic contexts in which the repairs were found, except for Participant 5, there was a large imbalance between the numbers of SISR found in meaning-and-fluency contexts and in form-and-accuracy contexts. For Participant 1, Participant 3, and Participant 7, the majority of SISR sequences occurred in meaning-and-fluency contexts.

All in all, repair in task-oriented contexts was rare. Thus, the chance of finding SISR in this particular pedagogic context was even scarcer. The total number of SISR sequences found in specific pedagogical contexts was in the order of: meaning-and-fluency, form-and-accuracy, and task-oriented contexts. This also coincides with the total number of repair sequences found in each of the pedagogic contexts.

With regard to the participatory structure in SISR, in form-and-accuracy contexts, the focal participants usually repaired their production when conversing with the teacher. On the other hand, focal participants engaged in more repair work when they were speaking with their fellow learners especially during pair-work in meaning-and-fluency contexts. SISR sequences were also frequently found when the focal participants were speaking to the entire class during teacher-fronted classroom interaction. While pair-work is known to allow more opportunity for individual student talk (Yi, 1992) and thus more repair, the types of classroom activities or their interlocutors did not prevent the participants from initiating self-repair in this study.

6.3.2.2. OISR A.

OISR A sequence was a subtype of OISR in which the trouble source belonged to the focal participant, and the repair was initiated by the interlocutor and completed by the focal participant. In most instances, the repair was initiated in the turn immediately following the repairable (i.e. second turn) and completed in the turn immediately following the repair
initiation (i.e. third turn). There were only a few cases in which turns (e.g. a question-and-answer pair) were inserted between the repair initiation and the completion.

More repairs were initiated during meaning-and-fluency contexts than in the other two pedagogic contexts. In meaning-and-fluency contexts, most repairs were initiated to resolve understanding problems (mostly resolving incomplete understanding problems) and more repairs were initiated during interaction between the learners than during interaction with the teachers. On the other hand, in form-and-accuracy contexts, most repair instances were initiated to resolve production problems. In form-and-accuracy contexts, more repairs were initiated during interaction between the teacher and the focal participant than during interaction between the learners.

Both teachers and peers initiated repair on the focal participants’ previous turn when they recognized it as containing either a production or understanding problem. However, it was almost always the teachers who initiated repair to resolve the focal participants’ production problems. One interesting finding was that when the teachers initiated repair on the focal participants’ production problem in a previous turn, they often employed a Designedly Incomplete Unit (Koshik, 2002) to initiate repair. This in turn made the repair completion by the focal participant in the immediately following turn relevant. Further, most of the repairs on understanding problems were initiated due to incomplete understanding and non-understanding problems rather than misunderstanding problems. This may have contributed to the pattern found in this study - the repair initiations immediately followed the turn including the trouble source rather than later as the conversation progressed.

6.3.2.3. OISR B.

The focal participants initiated more repair on their interlocutor’s repairable during meaning-and-fluency contexts than in the other two types of pedagogic contexts (i.e. form-and-accuracy and task-oriented). The focal participants initiated ‘other’ repair in the turn immediately following the repairable (2nd turn) and the repair was almost always completed in the following turn (3rd turn) by the interlocutor. All repairs were initiated to resolve understanding problems. With regard to the participatory structure, the focal participants engaged in the repair work with both the teacher and fellow learners in meaning-and-fluency contexts while the interlocutor was always the teacher (except for the one instance found in Participant 5’s data) in form-and-accuracy contexts. The sequential organization of OISR B suggests that the focal participants noticed the ‘gap’ between their understanding
and the interlocutor’s previous turn fairly immediately and initiated ‘other’ repair to resolve it in all three pedagogic contexts. The repair was completed in the immediately subsequent turn.

6.3.2.4. SIOR A.

Based on the data collected for Participant 3, Participant 5, and Participant 7 (as there was no example available from Participant 1’s data), the following observations were made. In SIOR, the participants initiated repair to resolve their own production problems and most repair sequences were found in meaning-and-fluency contexts. Regarding the sequential organization of repair, the majority of repair initiations were in the same turn as the trouble source, either left incomplete or in which the focal participants asked for assistance, thus making the next turn repair completion by the other speaker relevant. As for the participatory structure, there were more repair completions by teachers than by learners in all three focal participants’ data.

6.3.2.5. SIOR B.

The analysis of SIOR B sequences was based on data collected for Participant 1, Participant 5, and Participant 7 as there were no examples found in Participant 3’s data. The findings indicated that more repair sequences were found during meaning-and-fluency contexts than in the other two contexts. All repair initiations were found within the trouble source turn and the completion in the second turn. However, one exception to the data involved Participant 7. In this particular instance, the repair completion took place in the 6th turn and the focal participant was a third party in the interaction.

As for the interlocutors involved, except for one repair sequence, all repairs took place between the learners. This suggests that the focal participants made efforts to provide repair completions on their peers’ production problems. However, SIOR B sequences were less frequent than SIOR A xxxvii.

6.3.2.6. OIOR A.

OIOR sequences were in effect ‘other’ corrections. The analysis of OIOR A was based on three focal participants’ data: Participant 1, Participant 3, and Participant 5. Participant 7 displayed no instances of OIOR A in his data. It was mostly the teachers who provided the correction, but in some instances, their peers also corrected the focal participants’ previous turn. OIOR took place in the second turn immediately following the trouble source turn.
6.3.2.7. OIOR B.

OIOR B sequences were very rare in the data collected. These sequences were found only in the data collected for Participant 3 and Participant 5. The examples found in these two participants’ data were similar in their characteristics. All repairs were initiated during meaning-and-fluency contexts during interaction between the learners and all repair sequences happened in the second turn position from the trouble source.

6.4 Discussion

The analysis has revealed that the frequency of different repair types indicated no notable change over the data collection period. Further, the sequential organization of each type of repair (i.e. where in the sequential turn the repair was initiated and completed) also remained consistent over time.

Previous CA studies have drawn connections between the frequency of repairs and changes in the sequential organization of repair (i.e. increased number of turns in a sequence), learners’ L2 proficiency or the ability to participate in social practices (Brouwer & Wagner, 2004; Hellermann, 2009, 2011; Kasper, 2006). In fact, in this study, the focal participants’ English as a second language proficiency test scores did increase with time. These tests consisted of general ESL test questions selected by the classroom teachers from various ESL textbooks. The focal participants were tested on their reading, writing, grammar, and speaking skills at the end of each school term (there were four school terms in a year). However, there was no change in the frequency of repair types and the sequential organization of repair in this study with reference to time. Thus, this study did not find any relationship between the incidence of repair types and increased proficiency.

On the other hand, a closer look at the frequency of repair type and the sequential organization of repair in individual focal participants’ data with reference to the nature of trouble source, the participatory structure, the type of classroom interaction and the pedagogic contexts, provided insight into the frequency data.

I will now discuss changes in the frequency of repair type in relation to the nature of repairable, the types of participatory structure, the types of classroom interaction, and the pedagogic contexts. This is followed by a discussion of changes in the sequential organization of each repair type.
6.4.1. Frequency of each repair type.
In this study, some types of repair organization occurred more often than other types of repair while some types of repair sequence were not observed at all in some participants’ data. Explanation for this phenomenon rests in two factors: what the speakers recognized as a trouble source at the time of interaction and who the speaker was engaged with in the repair sequence in the given pedagogic activity. The discussion focuses on SIOR A, OISR, SIOR B and OIOR sequences.

6.4.1.1. Case of SIOR A.
No instance of SIOR A sequence was found in Participant 1’s data. Unlike the rest of the focal participants who engaged in SISR most frequently (more than 50% of their total data), Participant 1 only had 18% of her repair work dedicated to SISR. The fact that the first pair part in SIOR A sequences is essentially self-initiated repair on one’s own production problem, and that Participant 1 did not engage in much SISR explains the scarcity of SIOR A in her data. As to why she did not initiate as much self-repair as other focal participants, there are two possibilities. Focal participant 1 was the only student among the four focal participants who was from a different high school. The ESL classroom environment she was in may have affected her motivation (Kasper, 1985; Seedhouse, 1999; van Lier, 1988) to initiate self-repair on her linguistic problems during production. One other possibility is that Participant 1 may simply not have been concerned about her linguistic/production problems. These two factors could also explain why there were no instances of her providing corrections for her interlocutors (OIOR B). However, as the participants were not asked why they did not initiate repair in the stimulated recall interviews, this explanation is entirely speculative. In contrast, Participants 3, 5 and 7 engaged in SISR frequently in their data. SISR, in fact, consisted of 59.12%, 51.13% and 63.96% of their total data respectively. Accordingly, these focal participants often engaged in SIOR A where they initiated repair to resolve their own production problem and also asked for their interlocutor’s assistance. As for the reasons why these focal participants initiated self-repair, this will be discussed in detail in Research Question 4.

6.4.1.2. Case of OISR.
Consideration of the pedagogic contexts and the participatory structure found during interaction may also provide further clues to the focal participants’ repair behaviour. For example, Participant 1 engaged in OISR most frequently throughout. Approximately 62%
of Participant 1’s repair work was found in meaning-and-fluency contexts and approximately 95% of the repair sequences were found during interaction with her peers with the majority (60.4%) initiated to resolve understanding problems. Since meaning-and-fluency focused contexts afford L2 speakers chances to engage in interaction while maintaining mutual understanding of the message content rather than focusing on linguistic correctness (Seedhouse, 2004), Participant 1 would have had more opportunities to initiate and complete repair on understanding problems than on production problems. For the focal participants 3, 5, and 7, OISR was the second most frequently employed repair sequence in their data. They were found mostly in meaning-and-fluency contexts (63.7%) to resolve understanding problems (85.2%) during interaction between the focal participants and their peers as well as the teachers. Again, this phenomenon could be attributed to the fact that the teachers in this study focused on providing more meaning-and-fluency focused lessons than form-and-accuracy or task-oriented focused classroom activities, thus encouraging interaction on establishing mutual understanding of factual (i.e. message content) accuracy rather than linguistic accuracy (Seedhouse 2004).

6.4.1.3. Case of SIOR B.
In contrast, the scarcity of SIOR B (i.e. the interlocutor initiates self-repair on production problems and the focal participant provides repair completion) can be attributed to two factors. First, there were fewer instances of form-and-accuracy contexts in comparison to meaning-and-fluency contexts in the data. Second, in order for the focal participants to provide ‘other-completion’ of repair in SIOR sequences, their interlocutor (i.e. the L2 learners who were not participating in the research but agreed to be present in the classroom and be recorded) first needs to initiate self-repair on their own turn (i.e. sequential implicativeness of turn) (Schegloff, 1979). This point will be further discussed in the results for Research Question 4. These L2 learners may have been reluctant to initiate repair on their own L2 production problem for various reasons (e.g. ranging from personal habit to being conscious of the voice recorder and/or their peers), thereby reducing the chances for the focal participants to provide other-completion.

On the other hand, Focal Participant 1 and Focal Participant 5 did engage in SIOR B sequences. As explained earlier, in the case of Focal Participant 5, all instances of SIOR B were found when he was paired up with another focal participant (Participant 7). Because the interlocutor was also a focal participant participating in the research, this may have provided Focal Participant 5 with more opportunities to provide repair completion than the
other focal participants who engaged in interaction with non-participating speakers. In the case of Participant 1, the fact that she engaged in SIOR B indicates that while she was reluctant to repair her own production problems or provide linguistic corrections for her interlocutors (OIOR B), she readily co-constructed her interlocutor’s utterance when her interlocutor initiated repair on production problems and resorted to her for assistance.

6.4.1.4. Case of OIOR.
Lastly, in comparison to the other types of repair organization, neither the interlocutors nor the focal participants engaged in OIOR as much and examples of OIOR sequences were rare in all focal participants’ data. This phenomenon is believed to be due to the face-threatening act associated with linguistic correction in L2 classroom contexts (Philp, Walsh, & Basturkmen, 2010). Again, as no questions were asked regarding why they did not initiate repair in certain contexts, the observation is a postulation at best.

6.4.2. Changes in the sequential organization of each repair type.
6.4.2.1. SISR.
As for the sequential position of repair initiation and completion in SISR, repair initiation on one’s own turn almost always took place within the same turn, or at the turn transition relevant place (i.e. at the end of the turn) as a form of self-editing (i.e. prospective repair, concurrent repair). There were only a handful of instances of SISR in which the repair was completed in the third turn position as a continuation or an addition. These third turn repairs took place as a result of an interrupting second turn produced by the interlocutor. The lack of interrupting turns may suggest that the interlocutors - both the peers and the teachers in the L2 classroom contexts examined in this study - allowed the focal participants to hold ‘the (speech) floor long enough’ so that the self-initiated repair on production problem could be completed by the speaker of the trouble source and preferably within the same turn.

6.4.2.2 SIOR.
There were a number of cases of prospective repairs (i.e. repair within the same turn as the trouble source) in which the turn including the repair initiation was left incomplete or explicitly referred to the next speaker for completion, thus making the next turn repair completion by the other speaker relevant and even necessary. Interestingly, though these repair initiations focused on resolving production problems, most of these repair sequences were found in meaning-and-fluency contexts (79%) rather than in the other two types of pedagogic contexts.
One other point of note is that the prospective repairs (e.g. ‘fa.fa.famers’) which were left incomplete and did not involve an overt request for assistance (e.g. ‘how do you say it?’) tended to occur often when the focal participant was speaking with the teacher or with a learner they considered more ‘advanced’. The participants commented in the stimulated-recall interviews that when they left their repair initiation incomplete, they were expecting the other speaker to help find the right answer (i.e. finish the turn). Therefore, the learners relied on their interlocutors to co-construct and complete their repair initiation, and they did so by leaving the turn incomplete without using an overt request for assistance. In response, the recipients completed the repair initiation in the next turn. In this way, the first turn by the speaker of the trouble source specifies or projects a space for the second component (i.e. repair completion), and the ways in which the recipient provides repair completion depends on how the speaker is oriented towards what the first speaker is saying (Family, Durus, & Ziegler, 2015; Ono & Thompson, 1996). While there was no difference in the sequential organization of SIOR in this study, whether there were any qualitative differences between designating the next speaker to complete the turn by leaving the repair initiation incomplete as opposed to asking for assistance explicitly with regard to the repair completion needs more investigation.

6.4.2.3 OISR.

When other-repair was initiated on the interlocutor’s previous turn, it almost always took place in the second turn position and the repair completion by the speaker of the trouble source followed in the third turn position (Schegloff, Jefferson, & Sacks, 1977; Schegloff, 2004). With regard to pedagogic context, in most cases, the repairs in the meaning-and-fluency contexts were initiated to resolve understanding problems (mostly incomplete-understanding problems) while the repair sequences found in the form-and-accuracy contexts were initiated to resolve production problems, but not exclusively so. An interesting point to note is that the participatory structure seemed to be related to the pedagogic contexts in which the repairs took place. For instance, more OISR were initiated during interaction between the teacher and the focal participant in the form-and-accuracy contexts than during interaction between the learners. On the other hand, in meaning-and-fluency contexts and task-oriented contexts, repair was more likely to be initiated during interaction between the learners than during interaction between the focal participant and the teacher.
While inserted sequences (e.g. adjacency pairs such as question-and-answer pair) are common in L1 repair studies (Schegloff, 2007), inserted sequences and expansion during L2 repair sequence were rare in this study. The speakers in the L2 classroom contexts noticed the ‘gap’ between their L2 and the interlocutor’s production fairly immediately, and the repair was completed in the turn immediately following the repair initiation. The focal participants and their interlocutors, both the peers and the teachers were very much focused on resolving the trouble source as soon as they could and moving on without more ado (i.e. the speakers always resumed their original conversation course as soon as the repair sequence was closed). The sequential organization of L2 repair shows that repair in L2 classroom contexts did not result in a major deviation from the original course of conversation or prevent the fulfilling of the initial pedagogical aim set by the teachers.

On the other hand, the repair sequence could become complicated (i.e. expand with inserted turns) when the trouble source concerned a production problem belonging to a learner and the other-repair was initiated by another learner - for instance, when a previous turn was recognized as a linguistic problem by the peer (i.e. other-speaker) and the speaker of the trouble source would refuse to complete the repair sequence by amending their trouble source turn immediately. Instead, they would engage in further question-and-answer pairs to challenge each other or turn to the teacher or other (more experienced) peers for resolution or validation. In such repair sequences, ‘negotiation of form’ (Lyster, 2001) took place more actively and more extensively.

6.4.2.4. OIOR.

OIOR sequences were in effect ‘other’ corrections on the interlocutor’s previous turn and they were initiated and completed in the turn immediately following the trouble source turn (i.e. in the second turn position). When the sequence was completed, the speaker of the trouble source resumed his/her next turn. Overall, OIOR sequences were rare in the data collected.

The majority of OIORs found in this study took place during teacher-fronted classroom interaction in meaning-and-fluency contexts. For the teachers, this particular type of interaction may have created more opportunities or made it more appropriate for them to provide correction as they controlled the interaction to a greater extent than in other types of classroom activities (e.g. pair-work, group-work).
In teacher-fronted classroom interaction, L2 learners have no obligation to provide correction; in pair-or group-work on the other hand, the focal participant or their peer is the most available next speaker to provide correction. The fact that all learners (i.e. focal participants and their peers) initiated OIOR sequences in teacher-fronted classroom interaction in meaning-and-fluency contexts may suggest that this particular type of classroom activity in this pedagogic context encouraged learner-initiated OIOR to take place. It is possible that L2 learners felt more comfortable providing linguistic feedback in an open conversation setting, such as teacher-fronted classroom interaction where anyone can be the next speaker, than they did in a pair- or group-work where providing linguistic correction could be considered a face-threatening act (Philp, Walsh, & Basturkmen, 2010). The relationship between different types of participatory structure and classroom interaction with regard to frequency of L2 OIOR sequences needs more investigation.

6.4.3. Summary of discussion for Research Question Three.

The frequency analysis of each repair type and its sequential organization has shown when and how frequently a particular type of repair sequence occurs in L2 classroom interaction and the need to take multiple factors, in addition to the pedagogic aim set by the teacher, into consideration. They factors include: the interlocutors involved at the time of repair; the type of trouble source recognized by the speakers, and the type of classroom interaction (i.e. pedagogic activity). These factors are interconnected and interact together in designing the sequential organization of repair in L2 classroom contexts. The speakers in L2 classroom conversation sequence their turns in repair to achieve particular pedagogic and communicative objectives: they repair their own linguistic problems (e.g. SISR, SIOR), resolve the linguistic problem of their interlocutor (e.g. OISR, SIOR), repair understanding problems arising from the interlocutor’s previous turn (e.g. OISR), and provide linguistic correction (e.g. OIOR). The speakers engage in a repair sequence as soon as they recognize the trouble source and resume their previous course of interaction prior to the repair immediately after the repair is complete.

So far, I have focused on the relationship between the repair sequences and the nature of trouble source, the speaker of trouble source, the participatory structure and the pedagogic contexts. In order to gain a more comprehensive understanding of the L2 classroom repair and investigate the changes in the learners’ L2 through repair over time, the second part of the research examined the syntactic properties L2 repair (Fox & Jasperson, 1995). More specifically, it examined the syntactic constituents in which the repair took place, namely
repair initiation and completion, and the syntactic properties of repair patterns in SISR, SIOR, OISR and OIOR sequences. In addition, the changes in the syntactic properties of the learners’ SISR overtime were investigated in depth as a means of tracing learner L2 syntax in repair and its development.
Chapter 7. Research Question 4: Results and Discussion

7.1 Research Question Four: Syntax of L2 repair

What are the syntactic properties of L2 classroom learners’ SISR, SIOR, OISR and OIOR?
What changes occur in the syntactic properties of SISR over time?

The first part of Research Question 4 deals with the syntactic characteristics of the repair sequences found in the L2 learners’ classroom interaction. These were investigated by examining two syntactic properties of the repair sequences: repair site and repair pattern. A repair site is the syntactic site where repair is initiated and completed. A repair pattern refers to the ways in which the repaired segment and the repairing segments are organized by the speakers (i.e. the syntactic features of the repair). These will be explained in more detail in the following sections. The second part of the research question investigates whether there were changes in the repair sites and repair patterns found in the self-initiated self-repair sequences over time in order to trace the L2 syntax available to the focal participants.


It was not possible to know prior to the analysis whether the syntactic characteristics of L2 repair found in this study could be organized using the syntactic frames identified in Fox and Jasperson (1995) xxxviii. Therefore, the categories of the syntactic constituents (renumbered here as Figure 12) and the patterns of English repair (renumbered here as Figure 13) identified by the authors were used only as a reference xxxix. In accordance with the principle of ‘unmotivated looking’ in CA research, the categories of syntactic constituents and syntactic patterns of L2 repair in this study were established as a result of the data analysis, not determined a priori. In short, the analysis focused on where in the turn the repair was initiated and completed and how, not whether, the syntactic constituents and types of repair patterns identified in Fox and Jaserpson (1995) were present in the data.

Figure 12 Types of syntactic constituents in repair identified in Fox and Jasperson (1995)

1. Repair initiated during the subject noun phrase
2. Repair initiated after the subject noun phrase
3. Repair initiated during construction of the verb
4. Repair initiated after the verb
5. Repair initiated after the copula
6. Repair initiated during a direct object noun phrase
7. Repair initiated during prepositional phrases
8. Repair initiated during a predicate nominal/adjective
9. Repair involving changes from one syntactic type to another

**Figure 13 Types of repair pattern identified in Fox and Jasperson(1995)**

Type A recycle word
Type B replace word
Type C recycle prior phrase including word
Type D recycle prior phrase, replace word
Type E recycle with addition
Type F change syntactic framework
Type G abort (abandon structure, start new structure)

The changes in the patterns of syntactic categories and the types of repair patterns were investigated in order to examine the L2 syntax available to the participants in the interactions they participated in and how their participation in repair sequences changed over time (Schegloff, 1979; Fox & Jasperson 1995). To date, neither in the field of L1 and L2 linguistics nor in conversation analysis, has much attention been paid to the topic of repair in relationship to syntax. Apart from the work of Fox and Jasperson (1995), investigation of repair and the relevance of syntax in spoken data is almost non-existent. Further, to my knowledge, there has not been a study of L2 (English) repair and its syntax in English as a second language in classroom contexts. Consequently, I acknowledge that the conclusions I reach are exploratory and preliminary. To note, as one departure from the traditional CA studies, the current study implements a quantitative analysis in order to obtain a general picture of the organization of learners’ L2 repair and its syntactic characteristics. The frequency analysis of the present study, however, is not done in isolation. It is built on the detailed case-by-case analysis of repair instances examined from the participants’ point-of-view.

### 7.1.1.1. What counts as repair.

Before describing the categories of syntactic constituents identified in the L2 repair sequences, a few words are in order. While all repair instances were examined, in answering Research Question 4, an utterance was counted as repair only if it involved some kind of syntactic alteration to the (emerging) utterance (i.e. syntactic form), such as repetition or replacement of a word or phrase (Fox & Jasperson, 1995). Consequently, some types of repair utterances were excluded from the final analysis. As was the case in Fox and Jasperson (1995), I excluded repair utterances in which fillers (e.g. *um* or *eh*) were followed by the projected syntax as in Example 3.1.
Example 3.1
I was um (2.0) happy↑

In addition, the instances in which the speakers cut off the end of a word (usually accompanied by a pause), as if initiating repair, but then continued with the utterance as projected, were excluded from the syntactic analysis (Example 3.2).

Example 3.2
I know those girls. They are (1.2) from our school.

Further, non-verbal instances of repair found in the data were also excluded from the analysis. For instance, the recipient of the trouble source would signal at times that there is problem in the previous utterance produced by the interlocutor by means of a physical action such as frowning or changing gaze or tilting one’s head to one side without verbalizing anything. When such actions were acknowledged by the speaker of the trouble source as an indication of trouble, s/he would repair his/her previous utterance (Example 3.3) or ask for further information (e.g. *what?*, *ehm?*). In the same way, the speakers could also complete a repair using non-verbal means. Examples include actions such as pointing at an object with a finger and nodding in silence (Example 3.4). These were excluded from the analysis.

Example 3.3
01 P1 oh I am going to miss you.
02 are you doing music in Japan?
03 K ((looks directly at P1, brings her chin forward and frowns))
04 P1→are you doing music in Japan?
05 K →((tilts her head to the left and frowns at the same time))
06 (0.4)
07 P1→music?

Example 3.4
01 P7 so what is your opinion?
02 L1 me?
03 P7→((slowly nods))
04 L1 your opinion eh yeah um I thought((lines omitted))

Taking syntactic alteration as an indication of repair meant that it was necessary to rely to a degree on the researcher’s experience with English syntax to decide whether or not a given
repair involved syntactic alteration and where the site of repair initiation and completion was. For instance, if the segment containing the completion of the repair was the beginning of a clause, the repair initiation was considered a replacement of the beginning of clause. To illustrate, in Example 3.5, the repaired segment (i.e. the repairable) is indicated in brackets [   ] with an asterisk, * which indicates the segment that includes the item where the repair begins. The repairing segment (i.e. repair proper) is given in boldface (Fox & Jasperson, 1995). Here, the repairing segment that is beautiful follows the repaired segment in brackets [that eh-*] which is a relative clause. Thus, the repair is considered to be initiated at clause level.

Example 3.5
I want to: um live in a house [that eh -*] that is beautiful

It was not, however, always possible to identify the syntactic constituent of the repaired segment based on the site of the repairing segment. This was especially the case in the analysis of OISR and SIOR sequences. Example 3.6 is a typical example of OISR of such cases. The other-initiation in line 02 is in a form of a clarification request (e.g. huh?, what?), which entails no recycling of the previous turn. Consequently, based on the transcript alone, I, as an analyst, cannot be certain which syntactic element in line 01 the repair addressed. In such cases, the repair initiation had to be categorized as ‘repair initiation of the whole TCU’. Now, let us turn to the analysis of repair completion. In the subsequent turns (03-04), the speaker of the repairable recycles (i.e. repeats) some parts of the turn leading up to the prepositional phrase, recycles the repairable and replaces it. The turn following the repair completion accepts this as a completion (line 05) and it does not lead to further repair sequences (i.e. the repair is complete and the speakers resume conversation).

Example 3.6
01 A yeah. So so I was on time. for. movie
02 B ?hum?
03 A ((clears throat)) I was uhm eh (0.4) on time?
04 In time? for movie?
05 B umm

For the repair initiations and completions produced by Focal Participants 1 and 7, comments from the stimulated recall interviews were available as a cross-reference. However, for the other interlocutors (i.e. the teachers and fellow learners), the analysis had to rely on the transcripts alone.
Categorization of the syntactic constituents, however, does not suggest that the speakers and recipients *consciously knew* what L2 syntactic categories were being repaired and what the ‘correct’ alternatives were. Rather, the analysis was based on the assumption that the speakers were likely to have known or to have had some knowledge of what kind of L2 syntactic units would occur in similar syntactic slots. They may thus have had some notion of syntactic similarity or substitutability as they repair (Levelt, 1983\textsuperscript{xiii}). That being said, the current analysis attempts to track the ‘notions’ of L2 syntax the learners displayed at the time of repair and over time.

### 7.2 Results: Research Question 4-I

In the sections that follow, the types of syntactic constituents and repair patterns found in L2 SISR, OISR, SIOR and OIOR are explained in detail.

#### 7.2.1. SISR.

In this section, I will present the types of syntactic constituents in which SISR sequences were initiated and the syntactic patterns of repair identified for Participant 1 (P1), Participant 3 (P3), Participant 5 (P5) and Participant 7 (P7). The focal participants were found to initiate SISR in the following categories of syntactic constituents: (1) Repair could be initiated during production of the subject noun phrase. The subject noun phrase could both be at turn-initial and non turn-initial position. Turn-initial position refers to the whole TCU (i.e. the beginning of a whole turn) (Schegloff, 1979). Non-turn initial positions are TCU beginnings that are not turn initial. They are clause beginnings which are syntactically embedded and do not occur at the beginning of a TCU. (e.g. the subject nouns in a relative clause); (2) Repair could be initiated *after* the subject noun phrase is possibly complete; (3) Repair could be initiated during formulation of the verb. This includes repair during formulation of the verb complex including auxiliary and main verb combinations; (4) Repair could be initiated after the verb. The verb complex is hearably complete (i.e. occurs before a required object noun or locative phrase); (5) Repair could be initiated after the copula. The main verb is some form of *be*, which is generally followed by a predicate nominal/adjective; (6) Repair could be initiated within the direct object noun phrase after the verb complex is complete; (7) Repair could be initiated within a prepositional phrase, usually following a direct object or immediately after the verb complex; (8) Repair could be initiated during formulation of a predicate nominal/adjective. If the verb is a copula, then it is normally followed by a predicate nominal or predicate adjective.
In fact, the descriptions of SISR ‘during’ and ‘after’ formulation of a certain syntactic constituent in Fox and Jasperson (1995) resemble those of ‘prospective’ and ‘concurrent’ repair in this study (for a detailed definition and example, refer back to Research Question 2). For instance, in prospective repair, the speaker has difficulty finishing the current utterance (i.e. the next-due element - for example, *fa.fa.famers*) while concurrent repair is essentially repair ‘after’ formulation in that the speaker repairs some already-produced element of the turn within the same turn (e.g. *the thing (0.2) important. important thing*).

**Figure 14 Types of syntactic constituents in L2 SISR**

1. Repair initiated during the subject noun phrase  
2. Repair initiated after the subject noun phrase  
3. Repair initiated during construction of the verb  
4. Repair initiated after the verb  
5. Repair initiated after the copula  
6. Repair initiated during the direct object noun phrase  
7. Repair initiated during the prepositional phrase  
8. Repair initiated during the predicate nominal/adjective

The following is a description of the syntactic organization of SISR found in this study:

**Figure 15 Types of syntactic patterns in L2 SISR**

*Repair at a word level*

(A) repair could be initiated at a word level and that word could be recycled by itself  
(B) repair could be initiated at a word level, and that word could be replaced with a word (e.g. a single item)  
(F) repair could be initiated at a word level where the Turn Constructional Unit (TCU) including that word is aborted, and a new TCU begins. This type of repair could involve changing from one syntactic type to another. Here, repair can be initiated on any syllable and syntactic constituent in an utterance. Whenever repair is initiated, a syntactic construction is abandoned and a new syntactic element is substituted.

*Repair at a phrase level*

(C) repair could be initiated at a phrase level, and some part of the turn leading up to the repairable word could be recycled, including the repairable word where the repair was initiated  
(D) repair could be initiated at a phrase level, and some part of the turn leading up to that repairable could be recycled, with a replacement of the repairable

*Repair at a word or phrase level*

(E) repair could be initiated at word or phrase level involving recycling with the addition of a new element(s) preceding or following the repairable in the repairing segment  
(G) repair could be initiated at a word or a phrase level. The repairable is recycled, but placed within a modified syntactic frame.
Figure 16 Types of repair pattern in L2 SISR

Type A recycled word
Type B replaced word
Type C recycled prior phrase including word
Type D recycled prior phrase, replacing word
Type E recycled word/phrase with additional element(s)
Type F aborted (abandon structure, start new structure)
Type G recycled repairable but placed within a modified syntactic frame

7.2.1.1. Types of syntactic constituents and repair patterns in L2 SISR.

In this section, each type of syntactic constituent where the SISR was initiated and the types of repair patterns that appeared with it will be presented. As was pointed out in the literature review, not all repair patterns were identified with each and every syntactic constituent. In the initial analysis, a total number of 210 SISR sequences were identified. Then, the categories of repair that did not involve some form of syntactic alterations (as explained in 7.1.1.1) were excluded. As a result, 148 instances of L2 SISR became available for the final analysis.

(1) Repair initiated during the subject noun phrase

Self-initiated self-repair of the subject noun phrase in the turn-initial position of a TCU and non turn-initial position of a TCU were investigated.

**Type A: Recycled word**

Example 3.7
hhh (0.4) and [wa-*] what have you been doing in the last weekend?

**Type C: Recycled prior phrase including word**

Example 3.8
um (0.4) [my fffa*-].**my favourite** colour is um pastel tone.

There were two syntactic patterns of repair in SISR involving formulation of the subject noun phrase: recycling of the repairable word (Type A, 18 instances) and recycling of the phrase including the repairable (Type C, 5 instances). In recycling the subject noun phrase, the repairing segment recycled the subject noun as well as the determiner in the repaired segment rather than the subject noun alone as was found in the repair of direct object noun phrases. This phenomenon will be discussed in due course. That is, the recycling process
went back to the position of the determiner in the repaired segment. For instance, in Example 5.8 the determiner *my* in the repaired segment is recycled in the repairing segment with the noun *favourite*, which was cut-off during its formulation, as opposed to simply reformulating the noun [*my fffa*]. *favourite*. This pattern was found in all three syntactic positions in which the subject noun phrase was repaired: whole turn-beginnings, non-turn initial TCU beginnings, and turn initial TCU beginnings.

(2) Repair initiated after the subject noun phrase

**Type A: Recycled word**

Example 3.9

then. [*he*] he always give to us the hand-out or write on the white board

Example 3.10

[*eh people*] yeah people ext.extrem eh.experiment like the inject the. labbit and chickens. [*she*]. *she*’s writing it not good.

**Type B: Replaced word**

Example 3.11

And [*he-*] *she* is like write stuff on the paper

**Type D: Recycled prior phrase, replace word**

Example 3.12

cool. [*what kind of-*] what sort?

Example 3.13

ah and (0.2)ah [*this actions*]. *this stuff* grow hardly

**Type F: Abort (abandon structure, start new structure)**

Example 3.14

uhm may be I think. the most I like the class is. TI? teacher's.Teacher's speaking is not fast and um not slow. his tone is good. and [*he.*] *his* gestures too much

The majority of subject noun phrases in this category of repair consisted of pronouns (e.g. *I, he,she,it*). I suspected that pronouns were more likely to be repaired after rather than during formulation due to their monosyllabic nature. Further, Type C (recycled prior phrase
including a word) was absent from this data while Type D (recycled prior phrase with word replacement) was one of the common patterns (four instances out of ten repairs).

(3) Repair initiated during construction of the verb

Type A: Recycled word

Example 3.15
[I ca-*] I can do that

Example 3.16
The government should tell them this behaviour can. [cor*.] corrupt social.

Example 3.17
um I have [li-*] live in Seoul which is my

Type B: Replaced word

Example 3.18
eh people yeah people [ext.extrem] eh.experiment like the inject the. labbit and chickens.

It appears that repair initiated during formulation of the verb/verb complex is tightly constrained. The repairs in this syntactic position took place only in the form of recycled or replaced word. There were no instances of repair initiated at a phrase level (Type C, D), or repair involving additional elements in the repairing segment (Type E). Further, there were no cases in which an auxiliary and the main verb combination was recycled together irrespective of the type of auxiliary verb or the form of the main verb (Example 3.16, Example 3.17). On the other hand, there were instances where the auxiliary verb was recycled with the subject noun phrase as in I can in Example 3.15. This phenomenon will be revisited in the Discussion section of this chapter.

(4) Repair initiated after construction of the verb

Type A: Recycled word

Example 3.19
I I I hh [I ask*] ask I ask him.

Example 3.20
[I feel]. I feel sad.
Example 3.21
[tell-*] tell us about (inhale) eh a lot a lot of teachers

*Type C: Recycled prior phrase including a word*
Example 3.22
because [she find*] she find for me.

*Type D: Recycled prior phrase, replaced word*
Example 3.23
yeah. [How do you feel*]. How did you feel about that?

*Type E: Recycled word/phrase with additional element(s)*
Example 3.24
so [we have*]. we can have a lot of break time

*Type F: Abort (abandon structure, start new structure)*
Example 3.25
yeah learning type. [your-*]. What is your learning type?

*Type G: Recycled repairable within a modified syntactic frame*
Example 3.26
uh. may be possums uh [eat*] uh like to eat new zealand native.tree.trees

More repairs took place after the verb complex was formulated than during its construction. Of all the types of repair patterns, only Type B (replaced word) was non-existent in the repair of verb after it was formulated. Replacing of the repairable took place only when the repairing segment was a phrase (i.e. Type D). In the data, the most common pattern of repair involved recycling the main verb and the subject noun phrase. That is, there was a strong tendency for the speakers to recycle the repaired segment by returning to the beginning of a syntactic unit. The only exception to this pattern was found in the imperatives (Example 3.21), where only the verb was recycled. This phenomenon was assumed to be due to the sentential structure of imperatives in which the subject noun phrase is left ‘empty’. For instance, in Example 3.21 the empty subject noun phrase slot of the TCU is understood to be ‘you’. In such cases, only the verb or [verb+direct object noun] was recycled together (e.g ‘[give me-*] give me.’)
(5) Repair initiated after the copula

Type A: Recycled word

Example 3.27
That [is*] **is** similar others eh say me to use bad languages abuse.

Type B: Replaced word

Example 3.28
What [are*].were possums brout to new zealand.

Type C: Recycled prior phrase including a word

Example 3.29
[she is not*].**she is not** good explain

Example 3.30
yes be helpful. because [I am*] **I am** writing in style

Type F: Abort (abandoned structure; new structure started)

Example 3.31
why. [why government *is] **they bring** this new zealand?

Recycling and replacement of a word was more common than recycling a phrase. When a phrase was recycled, the copula verb was recycled with the subject noun phrase in the turn initial position as well as non-turn initial position, but they were never recycled with the complement. This was similar to the repairs initiated after construction of the verb That is, the verb was recycled by returning back to the subject noun of the TCU but not with the complement following the verb.

(6) Repair initiated during a direct object noun phrase

Type A: Recycled word

Example 3.32
a.possums were brought to new zealand to start a [indi*].**industry**
Do you. Do you want [fir*].**first**?
Example 3.33

give to me the [print*].eh handout.

Type C: Recycled prior phrase including a word

Example 3.34

[reduce di:*] reduce di:

Type D: Recycled prior phrase; replaced word

Example 3.35

our spending. so we can eh more exercise. [break eh*] a lot of break time? uh as using .technology?

Type F: Abort (abandon structure, start new structure)

Example 3.36

uh. may be possums uh eat uh like to eat new zealand native.tree.trees and [native bir.ah-*] eggs of native birds. Yeah

When repair was initiated within the direct object noun phrase, the learners usually recycled the direct object noun by itself (Type A; 18 instances out of 41 repairs) rather than recycling back to the beginning of the direct object noun phrase (i.e. the local constituent) as L1 speakers are known to do (Fox & Jasperson, 1995).

There was only one example where the recycling of the direct object noun went back to the verb. In Example 3.34, the repair is initiated after the determiner di. The repairing segment goes back to the verb reduce and recycles the determiner di. Although I do not have a clear explanation for this unique case, its organization may result from one of several factors: Firstly, it may be relevant that this is an imperative sentence. It is not certain at this stage what impact the absence of the subject noun phrase could possibly have on the repair pattern based on the examples found in this data (cf. Example 3.21). Secondly, it may also be relevant that the speaker in this example was not able to complete the direct object noun phrase in the repairing segment (i.e. he was not able to produce the noun following the determiner). In fact, the focal participant commented in the simulated recall interview that he was searching for a noun that could come after di (i.e. waste). The interview comments, however, did not provide further information as to whether recycling back to the verb was due to the speaker’s word search during the formulation of the direct noun phrase or not.
(7) Repair initiated during prepositional phrases

Type A: Recycled word

Example 3.37
they bring. for (0.2) [tuboculosis*]. tuboculosis.

Type B: Replaced word

Example 3.38
what do you think the best teacher [t-*] for you

Example 3.39
so they had. to spend cold windter [with*]. without woone

Example 3.40
I can get the good result [of*]. to. from the. yeah.something

Type C: Recycled prior phrase including a word

Example 3.41
K what do you think [about that*]? yeah about that?

Type D: Recycled prior phrase with replaced word

Example 3.42
[helful to you*] helpful for you

Type E: Recycled word with additional element(s)

Example 3.43
she's not write on [the board*]; the white board.

Type F: Abort (abandon structure, start new structure)

Example 3.44
your voice your tone is so happy [with the]. when you're talking about your chemistry teacher.

Example 3.45
because people kill animals to (2.0) enjoy their life? [for (2.0)the] (2.0) did you did you see the human makes the boots with the snake?
Prepositional phrases usually come at the end of a TCU, either following a direct object or immediately after the verb complex. For this particular syntactic constituent, the participants recycled or replaced a word within the local constituent (e.g. the prepositional phrase, including the noun phrase within it). There was no instance in which the speakers recycled back to the verb in the TCU. There was one instance in which the repair went back to the verb (Example 3.42). Here, the repair went back to the beginning of a finite clause, and this was the only instance of recycling that involved going back as far as the verb. However, as was the case in Example 3.34 (direct object noun phrase), this was a sentence with an implied subject as in an imperative sentence. In addition to this, in Type E, the recycling was limited to the noun phrase within the prepositional phrases, as was the case with SISR during the prepositional phrases.

(8) Repair initiated during a predicate nominal/adjective

Type A: Recycled word
Example 3.46
It is [cha.eh]. children poverty.

Example 3.47
yeah always. This is [sad*] sad in class.

Type C: Recycled prior phrase including a word
Example 3.48
some stuff. they don't know what's wrong so they think it's [the right thing*]. right thing.

Type D: Recycled prior phrase with a replaced word
Example 3.49
[It's really hard*]-eh it's really easy to connect the people

Type E: Recycled word with an additional element(s)
Example 3.50
I know Eastside is too strict but that is [t-]*.way too strict to him. driving. only driving

Repairs initiated during the predicate nominal/adjective following a copula seemed to follow a similar pattern to that found in the repair of the direct object noun phrases. Repairs
in these two syntactic sites both entail postverbal repair. In the case of repair of a predicate nominal, the focal participants usually recycled the noun in the noun phrase without recycling back to the determiner. Moreover, recycling of both the predicate nominal and predicate adjective never involved going back to the copula or the subject noun phrase in TCU initial position. One exception to this example is Example 3.49 (Type D: Recycled prior phrase with a replaced word), which was the only example in the data that involved recycling back to its governing constituent\(^{16}\).

7.2.1.2. Summary: SISR.

When the focal participants repaired their own production, they were least constrained in terms of the syntactic places where they could initiate repair and the kinds of repair pattern they could employ.

The participants engaged in SISR most frequently in the repair of the direct object noun phrases. Additionally, repair in some syntactic sites employed more patterns of repair than in others. For instance, the participants employed six repair patterns (out of seven repair patterns) for the repair initiated after construction of the verb and during prepositional phrases while the repair initiated during formulation of the subject noun phrase, and the verb manifested only two types of pattern.

Further, some repair patterns were more commonly used by the participants than other repair patterns. While *recycling of the repairable word* was used in all eight syntactic sites, *recycling of the repairable within a modified syntactic frame* occurred only in repair initiated after construction of the verb. *Table 40* provides a summary of the possible places where L2 SISR took place in this study along with their syntactic patterns.
Table 40 Summary of syntactic constituents of repair initiation and repair patterns in SISR

<table>
<thead>
<tr>
<th>Syntactic constituents/Repair pattern</th>
<th>Type A Recycle word</th>
<th>Type B Replace word</th>
<th>Type C recycle prior phrase including word</th>
<th>Type D recycle prior phrase, replace word</th>
<th>Type E recycle word/phrase with additional element(s)</th>
<th>Type F abort</th>
<th>Type G recycle of the repairable but placed within a modified syntactic frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. during the subject NP</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. after the subject NP</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>3. during construction of the verb</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. after the verb</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>5. after the copula</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>6. during a direct object NP</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>7. during prepositional phrases</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>8. during a predicate nominal/adjective</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Key: O-found/ X-non existent
7.2.2. Types of syntactic constituents and repair patterns in L2 OISR.

The syntactic sites of repair initiation and completion, and the respective features of syntactic patterns of repair in OISR were coded separately in order to distinguish the repair done by the focal participants from other speakers. In this study, there were two subtypes of other-initiated self-repair: OISR A and OISR B. OISR A refers to the repair sequence in which the trouble source belongs to the focal participant, the repair is initiated by the other speaker and completed by the focal participant. OISR B refers to the repair sequences in which the trouble source belongs to the speakers other than the focal participant, the repair is initiated by the focal participant (hence ‘other’-repair) and completed by the speaker of the trouble source. In order to investigate the syntactic properties of the focal participants’ repair, the repair initiations in OISR B sequences and the repair completions in OISR A were examined in this section.

7.2.2.1. Types of syntactic constituents and repair patterns of repair initiations in OISR.

A total number of 70 instances of repair initiations were found in OISR B sequences. After excluding the types of repair initiations that did not involve some form of syntactic modification as explained in the previous section, 40 instances of repair initiations became available for the final analysis. The majority of the repair initiations excluded from the analysis involved simple clarification requests such as *Pardon? Huh?* (22 out of 30 instances). The rest of excluded repair involved non-verbal means of repair initiations such as prolonged pauses, frowning, and tilting of one’s head to one side with confused facial demeanour.

Figure 17 is a list of the syntactic constituents at which repair was initiated, and Figure 18 shows the types of repair initiation patterns. Since the recipient of the trouble source initiated the repair, it was more appropriate that the categories of syntactic constituents reflect the syntactic constituents which the recipient recognized as repairable (as indicated in his/her turn). For example, in the excerpt below (5.52), Speaker B initiates other-repair in line 04 on the previous turn by Speaker A. Speaker B replaces the repairable with *yesterday* and *whole day*. Looking at the linguistic property of this repair initiation, we can see that the repair was initiated on the adjunct in the trouble source turn—*Sunday* (line 02). Accordingly, in the following turn (05), Speaker A, completes the repair on the adjunct by replacing the trouble source with ‘*whole day’ and then again with ‘*afternoon’*. Thus, the analysis is done from the perspectives of the participants in the talk-in-interaction. In sum, the other-repair initiation in line 04 demonstrates the following: the previous turn has been
recognized as a trouble source by the recipient; the repair is initiated on the adjunct; the repair is completed on the adjunct; the syntactic pattern of the repair initiation and repair completion involves a replacement of the trouble source.

Example 3.51

01 A I went to city to cut my hair in Saturday, and dated my
02 home stay aunt? (0.4) in cafe. um in Sunday I. just.
03 B flay the game here.hh
04 A yesterday whole day?
05 B yeah. a. whole day no.er:a afternoon?
06 A yeah from afternoon and to (0.4) dinner here wid my
07 new ESOL Korean friend.

The following are the categories of syntactic constituents at which the focal participants initiated other-repair:

(1) Repair could be initiated on the subject noun phrase. The subject noun phrase could both be at the turn-initial position and non-turn initial position

(2) Repair could be initiated on the verb. This includes repair on the main verb and verb complex including auxiliary and main verb combinations

(3) Repair could be initiated on the copula

(4) Repair could be initiated on the direct object noun phrase

(5) Repair could be initiated on prepositional phrases

(6) Repair could be initiated on predicate nominal/adjectives

(7) Repair could be initiated on the adjunct

(8) Repair could be initiated on the entire TCU.

Other-repair initiation was considered to be initiated on the entire TCU when the syntactic constituent on which the repair was initiated was indistinguishable on the transcript. The majority of this particular type of repair initiation involved use of a simple clarification request such as “pardon?”, “what?”. These were excluded from the analysis. There were also cases in which the repair initiations involved repeating the whole TCU or changing the syntactic form of the repairable entirely without recycling any part of the trouble source as in Example 3.52. These were included in the analysis.

Example 3.52

L1 I can eh always do it.
The syntactic patterns of repair initiation were identified as:

**Repair initiation involving recycling**

(A) Repair initiation by the recipient could be in a form of recycling of the repairable itself. The recipient could repeat the repairable, which could be a word or a phrase, or an entire TCU;

(D) Repair initiation could recycle the repairable, and an additional element (including a word or a phrase) is added preceding or following the recycled repairable

(F) Repair initiation could be a request for confirmation plus a recycle of the repairable (referred to as X) such as ‘you mean X?’, ‘what is X?’;

**Repair initiation involving replacing**

(B) Repair initiation could be a replacement of the repairable

(G) Repairable could be replaced with an alternative (referred to as Y) together with a request for confirmation such as ‘Y, yeah?’, ‘you mean Y?’;

**Repair initiation involving both recycling and replacing**

(C) Repair initiation could recycle some parts of the turn leading up to the repairable or including the repairable, and replace the repairable

**Other**

(E) the TCU including the repairable can be aborted and the repair initiation starts as a new TCU. This repair pattern was found to be typically employed with repair initiations involving changes to the syntactic form of an entire TCU;

(H) Repair initiation could involve use of meta-language such as spelling-out aloud the repairable word

**Figure 17 Repair initiations in different syntactic constituents for L2 OISR**

1. Repair initiation on the subject noun phrase
2. Repair initiation on the verb
3. Repair initiation on the direct object noun phrase
4. Repair initiation on prepositional phrases
5. Repair initiation on predicate nominal/adjectives
6. Repair initiation on adjuncts
7. Repair initiation on the entire TCU

Figure 18 Types of repair initiation patterns in L2 OISR

Type A: recycled the repairable
Type B: replaced the repairable
Type C: Some part of the turn leading up to/in the repairable is recycled, and repairable is replaced
Type D: repairable is recycled with an addition of new element(s)
Type E: abort
Type F: confirmation plus a recycle of the repairable
Type G: confirmation plus a replacement of the repairable.
Type H: metalanguage (e.g. spelling out the repairable, providing definition(s) as a means of repair)

In the following, I will present the types of syntactic constituents where the focal participants initiated other-repair and the syntactic patterns identified with the repair initiation. As was the case of SISR, the syntactic constituents where the repair was initiated and completed did not have all of the repair patterns presented in Figure 18.

(1) Repair initiation on the subject noun phrase

Type B: replaced the repairable

Example 3.53

01 A Nobody was there.
02 B⇒So only you?

In this syntactic position, there were only three instances of repair initiated and the speakers employed only one type of repair pattern: replacement of the repairable.

(2) Repair initiation on the verb

Type C: Some part of the turn leading up to/in the repairable is recycled, and repairable is replaced

Example 3.54

N you haven’t said
P⇒?You haven't what?
N You haven't said

Type F: confirmation plus a recycle of the repairable

Example 3.55

J okay try next one uh why were
possums brought to New Zealand?
P→ brought? what?
J brought. uh brought means uh take something from one place to another place

**Type H: metalanguage**

Example 3.56

P→ Sorry. What is the word? S-T-O-E?

Example 3.57

T3 like >cartoon< in the newspaper to amuse and inform. alright?
P→ so what does it mean amuse?
T3 amuse, to make y’ laugh

When the focal participants initiated repair on the verb in the previous turn, it was to resolve their understanding problems. The most frequently used repair pattern in this syntactic position was the use of metalanguage (Type H). As the examples show the speakers also tended to recycle some parts in the TCU, including the repairable, and replace the repairable with ‘what’ to indicate their understanding problem (3.54). Or they would simply recycle the repairable and add confirmation requests (3.55).

**3. Repair initiation on the direct object noun phrase**

**Type A: recycled the repairable**

Example 3.58

K just put one opinion
P→ one opinion?
K yeah summary and opinion

Example 3.59

D ha high school English teacher and eu he he also also teach marth
P → ma?:
D marth
P math [ah

Example 3.60

T1 It needs the same thing. Example, explanation, example, comment
P→ same?
same. it's just different word
ahh-thank you.

Type F: confirmation plus a recycle of the repairable

Example 3.61
T2 use some
P what. what is some
T2 some. S-O-M-E
P S-O-M- ((as writing it down)) ah yeah
T2 yeah yeah. not all=

In the data collected, repair initiation on the direct object noun phrase was most frequent. The most often-employed repair pattern was recycle of the repairable (nine instances out of 11). The focal participants also recycled a phrase (Example 3.58), or a part of the phrase (e.g. adjective in Example 3.60), or some parts of the repairable up to the point where the participant could no longer understand (Example 3.59). They also recycled the trouble source in a question as in Example 3.61.

(4) Repair initiation on prepositional phrases

Type A: recycled the repairable

Example 3.62
T4 about social:
P social?

Type B: replaced the repairable

Example 3.63
T1 ah you know like may be your experience of learning
   English here:
   =um
T1 and how that
P [in New Zealand]?

All of these repairs at the prepositional phrases were initiated to confirm the message (i.e. content) of the previous turn rather than the language (i.e. linguistic composition) itself. An interesting point to note is that when the focal participants recycled in their repair initiation a part from the prepositional phrase (from the trouble source), it was always the noun, not the preposition.

(5) Repair initiation on predicate nominal/adjectives
**Type A: recycled the repairable**

Example 3.64

O In the future, I want to be to be the fashion presenter?
P presenter?

**Type B: replaced the repairable**

Example 3.65

P I come from korea_ K Is it sewer?
P um? K sewer P seoul? K seoul P Yeah

**Type D: repairable could be recycled with an addition of new elements**

Example 3.66

P what do you think the best teacher for you
M my chemistry teacher
P no no no I mean. the (0.4) best teacher for you. in your imagine
M oh. my imagination is (0.4) similar to my chemistry teacher.

**Type F: confirmation plus a recycle of the repairable**

Example 3.67

F my name is Kaimo Fantan
P Kaimo Fantan Is it-
F it's my last name
F ah hh

Example 3.68

T2 do you know how many syllables are in there?
P sy-what?
T2 syllables

Repair initiation on the predicate nominal/ adjectives employed more various patterns of repair in comparison to the repair initiation in other syntactic sites (4 types). There were eight instances of repair initiation at this particular syntactic position. The focal participants most often recycled the problematic word (Type A, three instances), or replaced it (Type B, two instances). To make it clear to the speaker of the trouble source, the repairable could
also be placed in a question (Type F, two instances) or additional elements could be added to it (Type D, one instance).

(6) Repair initiation on the adjunct

Type A: recycled the repairable

Example 3.69
M um (0.2) not really? but my host sister likes Korean drama. She like wasing Korean drama all night?
P -> gonigh? 'gonigh?
M No like all night all night she washing
P ah all night

Type B: replaced the repairable

Example 3.70
T4 twelve. and what time did you wake up?
P -> today?
T4 (nods)
P 8'o cock

There were five instances of repair initiation on the adjunct. Repair on this syntactic constituent shared a similar trait to that of the repair initiation on direct object noun phrases, prepositional phrases, and predicate nominal/ adjectives. The participants most often recycled the problematic word (Type A). More interestingly, they used an adjunct in their repair initiation to guess what the speaker could have meant in the previous turn. This was categorized as Type B-replacement of repairable as the adjunct in the repair initiation ‘replaces’ to the ‘empty slot’ in the trouble source (Example 3.70).

7. Repair initiation on the entire TCU

Type E: abort

Example 3.71
D I am seventeen years old. eum where are you live in now?
P -> um so what's my-my address?
D yeah yeah

Example 3.72
L I just uh (0.4) I just I just want to go somewhere. um yeah
P -> You want to go oversea?
L yeah yeah like spain
There were four instances in which the focal participants initiated repair by starting a new TCU. The focal participants’ other-repair initiation on the entire TCU involved changing the syntactic form of the trouble source turn whilst maintaining the message as in Example 3.71. This was a way of delivering what the focal participants understood the previous turn by their interlocutor to be. An interesting point to note is that when the previous turn was a question, the repair initiation was also in a form of a question (Example 3.71) and when the repairable was a statement, the repair initiation was also in a form of a statement (Example 3.72).

7.2.2.2. Types of syntactic constituents and repair patterns of repair completion in L2 OISR.

Initially there were 57 repair completions provided by the focal participants in OISR sequences. Repair completions, which did not involve any form of syntactic modifications, were excluded from the analysis. The majority of these included simple confirmation such as ‘yes’ and ‘no’ (Example 3.73). In the end, 38 repair completions became available for the final analysis.

Example 3.73

\[
P \text{tk. I think she doesn't wanna live in like that situation now} \\
T4 \text{ she wants to leave?} \\
P \rightarrow \text{ yeah} \\
T4 \text{ leave the situation? (writes it down “leave the situation” on the board)} \\
P \rightarrow \text{ yeah}
\]

Firstly, the repair completions were analyzed in terms of which syntactic constituents they repaired with regard to the trouble source and these were found in the following syntactic sites (Figure 19):

(1) Repaired segment could be the subject noun phrase. The subject noun phrase could both be in the turn-initial position and non-turn initial position;
(2) Repaired segment could be the verb complex;
(3) Repaired segment could be the direct object noun phrase;
(4) Repaired segment could be prepositional phrases;
(5) Repaired segment could be predicate nominal/adjectives;
(6) Repaired segment could be an adjunct.
The syntactic patterns of the repair completion were (Figure OISR-4)\textsuperscript{xlvii}:

**Repair completion involving recycle**

(A) Repair completion could be a recycle of the repairable;

(D) Repaired segment could be a recycle of the repairable with an addition of element(s), which could be a word, or phrase(s), or clause(s) preceding or following the repairable;

(E) Repair completion could be in a form of confirmation with the repairable recycled (referred to as X). For example, ‘yes X’, ‘no, X’;

**Repair completion involving replacement**

(B) Repaired segment could be a replacement of the repairable;

(F) Repair completion could be in a form of confirmation with the repairable replaced (referred to as Y). For example, ‘yeah, I mean Y’, ‘no, Y’;

**Repair completion involving both recycle and replacement**

(C) Repaired segment could involve recycling of some parts of the turn which can include the repairable and replacement of the repairable;

**Other**

(G) Repair completion is a word or a phrase which completes the Designedly Incomplete Unit in the repair initiation\textsuperscript{xlviii};

(H) Repair completion involves use of meta-language such as spelling-out the repairable and providing definitions of the repairable in L2.

**Figure 19 Repair completion in different syntactic constituents in L2 OISR**

1. Repair completion on the subject noun phrase
2. Repair completion on the verb
3. Repair completion on the direct object noun phrase
4. Repair completion on the prepositional phrase
5. Repair completion on the predicate nominal/adjective
6. Repair completion on the adjunct

Figure 20 Types of repair completion patterns in L2 OISR

Type A: recycled the repairable
Type B: some part of the turn leading up to the repairable is *recycled*, and repairable is *replaced*
Type C: repairable could be *recycled* with addition of new element(s)
Type D: confirmation plus a recycle of the repairable
Type E: confirmation plus a replacement of the repairable.
Type F: repair as a single item (to complete DIU)
Type G: meta-language (e.g. spelling out the repairable, providing definition(s) as a means of repair).

In the following, I will present the syntactic constituents in which the self-repair completion took place in response to the other-initiated repair and the respective repair patterns identified. Not all types of repair patterns were found in every syntactic constituent.

1. Repair completion on the subject NP

**Type A: recycled the repairable**

Example 3.74

P  oh! hhhsubtitle
T1  pardon?
P→  subtitle

**Type B: Some part of the turn leading up to the repairable is *recycled*, and repairable is *replaced***

Example 3.75

P some of them is from my school
T1 pardon? they came t[o-
P1→ [one]–one of them is from my school
T1 oh! fun! do they sometimes comeback to your school?

When the focal participants repaired their own production following other-repair initiation, they either recycled, or replaced only the word they thought was causing trouble.

2. Repair completion on the verb

**Type D repairable could be recycled with an addition of new element(s)**
Example 3.76
01 P do we finish the singing song?
02 T1 today?
03 P→ um just finish
04 T1 no no no we will practice again next week

**Type F repair as a single item**

Example 3.77
T1 so he was lazy?
P sad? hh
T1 and he:
P→ drinking?

Example 3.76 is a typical instance in which the syntactic constituents on which the repair initiation occurred is different from the syntactic constituents where the repair was completed. In this particular example, the teacher uses an adjunct (02) to clarify what the learner has said in the previous turn (cf. repair initiation on the adjunct in OISR). The learner in the subsequent turn completes the repair by recycling the verb from the repairable with an additional element ‘just’. On the other hand, when the repair initiation involved use of a Designedly Incomplete Unit (DIU), the repair completion was provided as a word or phrase, that was needed to complete the ‘incomplete’ slot in the DIU (Type F).

3. Repair completion on the direct object noun phrase

**Type A: recycle of the repairable**

Example 3.78
P are you doing music in Japan? music?
M music?
P→ music

**Type C: repairable could be recycled with addition of a new element**

Example 3.79
P may be use bombs hhh
A bombs?
P→ bombs (0.2) nuclear

**Type F: repair as a single item**

Example 3.80
P yeah and we need to reduce
T3 okay? can we just reduce:
food crime

Okay so want to reduce crime

Repair on the direct object noun phrase was most frequent. The most common repair pattern (four out of ten repairs) was Type A (recycle of the repairable). The participants also recycled the repairable and added an additional element (Type C) in order to clarify what they meant in the TCU including the repairable. The participants never recycled the trouble source on a phrase level (determiner/article+noun) regardless of the types of repair initiation, including the repair initiations that did not specify the trouble source (e.g. huh? Pardon?).

4. Repair completion on prepositional phrases

Type A: recycled the repairable

Example 3.81

01 P  I-I ask you. yeah What do you thinku about humans acting?
02 B  humans or-
03 P→ humans acting

Type F: repair as a single item

Example 3.82

P  problem
T2  okay so is it one problem or one of the:
P →  problems
T2  so that's your fi[rst-

The commonest pattern of repair found was Type F. There was only one instance of Type A repair completion on this syntactic constituent (Example 3.81). In this particular case, the repair involved recycle of the repairable but the recycle did not go back to the preposition; but only to the noun. It was thought to be due to the fact that the repair initiation in line 02 does not recycle the whole phrase (e.g. about humans-), but just the part of the noun (e.g. humans or-). However, at this stage, there were no other examples of the same type of repair for a comparison.

5. Repair completion on predicate nominal/adjectives

Type D: confirmation plus a recycle of the repairable

Example 3.83

P  I have a question. what is your second learning style?
Type G: metalanguage

Example 3.84

01 P I have a question. what is your second learning style?
02 K second?
03 P yeah second
04 K second sorry?
05 P→ second. the first is the most you use.
06 K ah!
07 P the second what is it?

Type F: repair as a single item

Example 3.85

P→ ah three thousand seven hundred fifty teachers=
T4 =ah is it? because it is:
P→ because this eh is found the almost half of the teachers=
T4 =almost half of the teachers

There were repair instances on a predicate nominal; but no examples of repair completion on a predicate adjective. Example 3.85 was the only repair instance that involved a Designedly Incomplete Utterance (DIU) in this particular syntactic position. What is interesting about this example is that instead of simply providing a predicate nominal to complete the DIU in the previous turn, the participant recycles ‘because it is’ [because+subject noun+copular] in the repair initiation. Such was a peculiar example of repair completion in response to DIU in comparison to the other DIU completions found in the study.

6. Repair completion on an adjunct

Type D: confirmation plus a recycle of the repairable

Example 3.86

P→ don't know. I think we are doing the performance next term
B next time
P→ yes next term?
B [oh

It was found that when the repair initiation included what was expected to be produced or needed to be produced in the repair completion, this made a simple confirmation (e.g. yes, no) in the next turn highly relevant. On the other hand, when the repair initiation did not
include what could have been said in the repair completion or not what the speaker of the repairable intended (Example 3.86), this made recycling of the repairable in the repair completion highly relevant.

7.2.2.3. Summary: OISR.
When the focal participants initiated other-repair in OISR sequences, replacement of the repairable was the most common type of repair initiation employed. Repair initiation on predicate nominal/adjectives was the least constrained, employing four types of repair patterns (out of eight), while repair initiation on the subject noun phrase and the entire TCU was highly constrained, involving only one type of repair pattern-replacement of the repairable and abort respectively.

In contrast, the focal participants rarely employed the following patterns of repair when initiating other-repair: recycling the repairable with an addition, aborting, confirmation plus a replacement of the repairable, and use of metalanguage.

Repair completion provided by the focal participants in OISR sequences showed that repair as a single item to complete DIU was the most common pattern of repair. This pattern was employed in the repair of all syntactic constituents with the exception of the subject noun phrase. With regard to the syntactic site of repair and the corresponding repair patterns, the types of repair patterns employed were limited.

The table below shows the types of syntactic constituents where the other repair was initiated (Table 41) and completed (Table 42), and the corresponding types of repair pattern employed.
Table 41  Summary of the syntactic constituents at which the repair was initiated and the corresponding repair patterns in OISR

<table>
<thead>
<tr>
<th>Syntactic constituents/Types of repair patterns</th>
<th>A recycle of the repairable</th>
<th>B replacement of the repairable</th>
<th>C some part of the turn leading up to/in the repairable is recycled, and repairable is replaced</th>
<th>D repairable could be recycled with an addition of new element(s)</th>
<th>E abort</th>
<th>F confirmation plus a recycle of the repairable</th>
<th>G confirmation plus a replacement of the repairable</th>
<th>H metalanguage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subject</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Verb</td>
<td>x</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>o</td>
<td>x</td>
</tr>
<tr>
<td>3. Direct noun phrase</td>
<td>o</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4. Prepositional phrase</td>
<td>o</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5. Predicate nominal/adjective</td>
<td>o</td>
<td>o</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6. Adjunct</td>
<td>o</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>7. Entire TCU</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Key: o-found, x-omitted
Table 42 Summary of the syntactic constituents at which the repair was completed and the corresponding repair patterns in OISR

<table>
<thead>
<tr>
<th>Syntactic constituents/ Types of repair patterns</th>
<th>A recycle of the repairable</th>
<th>B Some part of the turn leading up to the repairable is recycled, and repairable is replaced</th>
<th>C repairable could be recycled with an addition of new element(s)</th>
<th>D simple confirmation (e.g. yes or no)</th>
<th>E confirmation plus a recycle of the repairable</th>
<th>F completion of DIU</th>
<th>G Metalanguage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subject</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Verb</td>
<td>x</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>o</td>
</tr>
<tr>
<td>3. Direct noun phrase</td>
<td>o</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>o</td>
</tr>
<tr>
<td>4. Prepositional phrase</td>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>o</td>
<td>x</td>
</tr>
<tr>
<td>5 Predicate nominal/adjective</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>o</td>
<td>x</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>6. Adjunct</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>x</td>
</tr>
</tbody>
</table>

Key: o-found, x-omitted
7.2.3. Types of syntactic constituents and repair patterns in L2 SIOR.

SIOR involves self-repair initiation by the speaker of the trouble source and repair completion by the recipient of the trouble source, hence ‘other’-repair. In order to differentiate the speaker of the trouble source and the recipient, two subtypes of SIOR were distinguished in this study: SIOR A and SIOR B. In SIOR A, the repairable belongs to one of the focal participants, and the repair is initiated by the focal participant and completed by the interlocutor (the ‘other’ repair). In SIOR B, a speaker other than the focal participants is the source of the repairable and repair initiator: the focal participant, who is the ‘other’ speaker, then completes the repair. Therefore, in this analysis, the self repair-initiation in the SIOR A sequences and the repair completion in the SIOR B sequences were the foci of the analysis. As was the case in the analysis of OISR sequences, the syntactic constituents in which the repair was initiated and completed and the respective features of syntactic patterns of repair were coded separately.

7.2.3.1. Types of syntactic constituents and repair patterns of repair initiation in L2 SIOR.

The self-initiation of repair in SIOR sequences occurred in the following syntactic sites (Figure 21):

(1) Repair could be initiated during the subject noun phrase. The subject noun phrase could both be at a turn-initial position and a non-turn-initial position;
(2) Repair could be initiated during the construction of the verb. This includes repair during the formulation of the verb complex including auxiliary verbs and main verb combinations;
(3) Repair could be initiated after the verb. In this case, the verb (or verb complex) is complete and the repair is initiated before a required object noun or locative phrase (i.e. within what has been traditionally called the verb phrase);
(4) Repair could be initiated within a direct object noun phrase, after the verb complex is completed;
(5) Repair could be initiated in a prepositional phrase, usually following the direct object or coming immediately after the verb complex;
(6) Repair could be initiated in predicate nominal/adjectives. If the verb is a copula, then it is followed by a predicate nominal or predicate adjective.
The syntactic patterns of self-initiated repair that made other-completion in the next turn relevant had the following distinctive characteristics:

(A) The repair was initiated at a word and that word or part of that word was recycled within the same turn as the trouble source but left incomplete.

Example 3.87

P  What dissis do possums carry? Why is this bad for for pa fa:
T1 farmers

Example 3.88

P  because explain to how to um uh
T4 it can help you explain

(B) The repair was initiated at a word and the repairing segment was in a question format (e.g. with a rising intonation as a question/listed alternatives).

Example 3.89

P  possums eat leaves, berrious?.
SJ berries
P berries and fruits

Example 3.90

P  ahh possums can spread disease for bovin? bovine?
K bovine

Example 3.91

P  I know. that. that means but I don't know I don't know about similar word.? synonym? synonym?
T synonym?

(C) The repair could be initiated at a word or phrase. The turn constructional unit (TCU) including the repairable word or phrase produced so far can be abandoned, and the speaker initiates repair in L1 (Korean) or asks for help in L2.

Example 3.92

P our spending so we can eh more exercise, break eh a lot of brek time? uh as using .technology? before eh.
→ more than be. before? eh mwo ra hae ya doe ji?
   ((tr.: what should I say))
S mwo ra go ha go sip eun de?
   ((tr.: what is it that you want to say?))
D ye joen bo da deo
((tr.:more than before))
S more than before maj ja
((tr.:(is) correct))

Example 3.93
P ➔eh farmers eh suffer eh eh (0.4) tubu-tur eh ((pointing at his handout)) how do you say?
T tuberculosis
P tuber.culo.sis

**Figure 21 Initiator pattern in different syntactic constituents in L2 SIOR**

1. Repair initiated during the subject noun phrase
2. Repair initiated during construction of the verb
3. Repair initiated after the verb
4. Repair initiated during a direct object noun phrase
5. Repair initiated during a prepositional phrase
6. Repair initiated during a predicate nominal/adjective

**Figure 22 Types of repair initiator pattern in SIOR**

(A) The repair was initiated at a word and that word or part of that word was recycled within the same turn as the trouble source but left incomplete
(B) The repair was initiated at a word and that word was recycled and the repairing segment ended as a question (e.g. with a rising intonation), and/or was inaccurate/incorrect/listed alternative(s)
(C) The repair could be initiated at a word or phrase. The turn constructional unit (TCU) including the word or phrase produced so far can be abandoned, and the speaker initiates repair in L1 (Korean) or asks for help in L2

There were initially 39 instances of self-repairs, which lead to other-completion. After excluding the ambiguous cases, 24 sequences were available for the final analysis. It was found that the focal participants employed Type A repair most frequently (ten instances), followed by Type B and Type C (seven instances each). As with the previous repair organizations, in each of the syntactic constituents where the focal participants initiated repair, not all the types of repair patterns were employed. For instance, in the repair initiated within the subject noun phrase, the participants employed only one type of repair pattern (Type A). On the other hand, in the repair initiation within the direct object noun phrase, the participants used all three patterns (Type A, B, and C).

The following examples illustrate the syntactic constituents in which the self-repair in the SIOR sequences was initiated and the corresponding repair patterns:
1. Repair initiated during the subject NP

Type A The self-repair was initiated at a word and that word or part of that word was recycled within the same turn as the trouble source but left incomplete.

Example 3.94

P→ synom.synom eh:
T2 synonym
P ah synonym is eh concise

The self-initiated repair during the subject noun phrase which led to other completion was found only with Type A as its repair pattern (three instances).

2. Repair initiated during construction of the verb

Type A The self-repair was initiated at a word and that word or part of that word was recycled within the same turn as the trouble source but left incomplete.

Example 3.95

P→ because explain to.how to.um uh
T4 it can help you explain
P yeah. Explain

As was the case in the repair initiated during the subject noun phrase, self-repair during the verb phrase occurred only with Type A repair pattern (two instances).

3. Repair initiated after the verb

Type B The self-repair was initiated at a word and the repairing segment was in a question format (e.g. with a rising intonation/listed alternatives)

Example 3.96

P→ so teachers. eh leport?
T4 yes report to the teachers

Self-initiation of repair after the verb occurred only with Type B repair pattern (three times).

4. Repair initiated during a direct object noun phrase

Type A The self-repair was initiated at a word and that word or part of that word was recycled within the same turn as the trouble source but left incomplete.

Example 3.97

P→ get eh tue:
A tu[boculosis
**Type B** The self-repair was initiated at a word and the repairing segment was in a question format (e.g. with a rising intonation/listed alternatives)

Example 3.98

P→  possums eat leaves, berrious?.
SJ  berries
P  berries and fruits

**Type C** The repair could be initiated at a word or phrase. The turn constructional unit (TCU) including the word or phrase so far can be abandoned, and the speaker initiates repair in L1 (Korean) or asks for help in L2

Example 3.99

P→  she drugs. when the pill and the. what's that?
T4  'ooze
P  booze has eaten the word.

Repair initiation during formation of the direct object noun phrase was most frequent (eight instances). Repair at this syntactic constituent employed all three types of pattern.

5. Repair initiated during a prepositional phrase

**Type B** The self-repair was initiated at a word and the repairing segment was in a question format (e.g. with a rising intonation/listed alternatives)

Example 4.1

P→  ahh possums can spread disease for bovin? bovine?
W  bovine

**Type C** The repair could be initiated at a word or phrase. The turn constructional unit (TCU) including the word or phrase so far can be abandoned, and the speaker initiates repair in L1 (Korean) or asks for help in L2

Example 4.2

P → about cyber? I don't think so--I am not sure
T4  about social:

6. Repair initiated during a predicate nominal/adjective

**Type A** The self-repair was initiated at a word and that word or part of that word was recycled within the same turn as the trouble source but left incomplete
Example 4.3
P→ it’s pau:
T2 poverty
P poverty

Example 4.4
P→ and she can espcape the reality that she is. diseh:
T4 de-satisfied
P disssssastifaid.

*Type C The repair could be initiated at a word or phrase. The turn constructional unit (TCU) including the word or phrase so far can be abandoned, and the speaker initiates repair in L1 (Korean) or asks for help in L2.*

Example 4.5
P→ eh-it is eh-di: eh- myeong ye hoe son joe gamwo ji yeong eo ro?
   ((tr.: what is the crime of reputational damage in English?))
   neo mu eo ryeo un ga? myeong ye ga mwo ji?
   ((tr.: is it too difficult? what is reputation?))
   Honor honor.glory? honor?
S Honor nun aniya
   ((tr.: it is not))

7.2.3.2 *Types of syntactic constituents and repair patterns of repair completion in L2 SIOR.*

The other-completion of repair provided by the focal participants was highly constrained both in the types of syntactic constituents at which they occurred and in the syntactic patterns they exhibited. The following is the description of the syntactic constituents at which the other-completion of self-initiated repair occurred (Figure 23). The other completion by the focal participants occurred only on the verb, the direct object noun phrases and the predicate nominal/adjective phrases, and it was found with only one type of repair pattern: *the repairing segment is a word.* Further, all of these completions were preceded by only one type of repair initiation by the interlocutor - Type A repair (*the self-repair was initiated at a word and that word or part of that word was recycled within the same turn as the trouble source but left incomplete*). In short, the other speakers initiated self-repair and made the other completion necessary by leaving the TCU incomplete. Then, the focal participants completed the repair by providing an appropriate L2 word.
Figure 23 Repair completion in different syntactic constituents in L2 SIOR
1. Repair initiated on the verb complex
2. Repair initiated on the direct object noun phrase
3. Repair initiated on the predicate nominal/adjective

Figure 24 Types of repair initiator pattern in L2 SIOR
Type A Repairing segment is a word

The following are examples of other-completion of repair in SIOR sequences in the three syntactic constituents. Of the nine instances, five were available for the syntactic analysis. Two were found in the repair on the verb complex, three on the direct object noun phrase, and one on the predicate nominal/adjective phrases.

1. Repair initiated on the verb complex
Example 4.6
Y tries to uh
P→ escape
Y escape her=

2. Repair initiated on the direct object noun phrase
Example 4.7
J okay first ((unintelligible)) eight ((unintelligible))
e.e.imagination to to to discuss the tru tru
P→ truth=

3. Repair initiated on a predicate nominal/adjective
Example 4.8
S her dream world where she is not sick and um=
P→ secure

7.2.3.3. Summary: SIOR.
Self-initiated repair involving other completion was tightly constrained in terms of the types of repair patterns the participants employed. There were only three types of repair initiation patterns which made other completion in the next turn necessary: incomplete TCU, recycling the repairable plus an invitation or request for other-completion, and abandoning the current TCU and using L1 or L2 to explicitly request assistance.
The repair completion provided by the focal participants in SIOR sequences had even more constraints in that there was only one pattern of repair: *repair completion is a word*. Further, this pattern of repair was always preceded by repair (self-) initiation involving an incomplete TCU. In addition, this type of completion was found in only three syntactic constituents: the verb, the direct object noun phrase and the predicate nominal/adjective.

The table below shows the types of syntactic constituents in which self-initiated repair made other-completion necessary (Table 43), the repair completion made by the focal participants following the ‘self’-initiated repair made by their interlocutors (Table 44) and the corresponding repair types.
Table 43 Summary of syntactic constituents at which the self-initiated repair in SIOR was initiated and the corresponding repair patterns

<table>
<thead>
<tr>
<th>Syntactic constituents/Repair pattern</th>
<th>Type A: repair initiated at a word and recycle the part of a word within the same turn as the trouble source and left incomplete.</th>
<th>Type B: repair was initiated at a word and recycle word and ends the repairing segment as a question, and/or was inaccurate/incorrect/listed alternative(s)</th>
<th>Type C: repair initiated at a word or phrase. The turn constructional unit (TCU) including the word or phrase so far can be abandoned, and initiates repair in L1 (Korean) or asks for help in L2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. during subject</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. during verb</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. after verb</td>
<td>X</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>4. direct noun phrase</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>5. predicate nominal/adjective</td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
</tbody>
</table>

Key: O-found, X-omitted

Table 44 Summary of the syntactic constituents at which the repair was completed in SIOR and the corresponding repair patterns

<table>
<thead>
<tr>
<th>Syntactic constituents/Repair pattern</th>
<th>Repairing segment is a word</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the verb</td>
<td>O</td>
</tr>
<tr>
<td>2. the direct object noun</td>
<td>O</td>
</tr>
<tr>
<td>3. predicate nominal/adjectives</td>
<td>O</td>
</tr>
</tbody>
</table>

Key: O-found,
7.2.4. Types of syntactic constituents and repair patterns of L2 OIOR.

In OIOR sequences, while the same speaker initiates and completes repair as in SISR, the trouble source belongs to the interlocutor (i.e. the speaker other than the repair initiator). In essence, OIOR is other-correction. In this study, to differentiate the speaker of the repairable, two subtypes of OIOR were introduced. In OIOR A, the speaker of the repairable was the focal participant and the speakers other than the focal participant provided the correction. In OIOR B, the repairable belonged to an interlocutor and it was the focal participant who provided the correction. Therefore, in this particular analysis, only the OIOR B sequences are reported. To suit the purpose of the current analysis, the syntactic constituents in OIOR reflect the types of syntactic constituents of the trouble source, which the repair targeted to resolve. The OIOR was initiated on only limited syntactic sites: (1) the direct object noun phrase; (2) prepositional phrases; (3) predicate nominal/adjectives (Figure 25).

**Figure 25 Types of syntactic constituents in L2 OIOR**

1. Repair initiated on the direct object noun phrase
2. Repair initiated on prepositional phrases
3. Repair initiated on predicate nominal/adjectives

There were two syntactic patterns of OIOR found in this study: (A) The repairable is replaced as a single item (e.g. a L2 word); (B) Part of the turn including the repairable is recycled, and the repairable is replaced (Figure 26).

**Figure 26 Types of repair pattern in L2 OIOR**

Type A: replacement of the repairable
Type B: some part of the turn leading up to the repairable is recycled, and repairable is replaced

The following provides examples of the repair pattern in each of the syntactic sites. The focal participants initiated OIOR always after the previous turn was complete. There were in total ten instances of OIOR B available for the analysis.

**1. Repair initiated on the direct object noun phrase**

**Type A: replacement of the repairable**

Example 4.9

D uhm (0.4) possums like to eat native eggs, and chickens
P→ chicks
Type B: some part of the turn leading up to the repairable is recycled, and repairable is replaced

Example 4.10
A hhhh he wants to kill every person
D ➔ every people

When the correction was provided for the direct object noun phrase, the focal participants either replaced the problematic word (Type A-3 instances) or recycled the phrase and replaced the problematic word (Type B-2 instances). Correction on the direct object noun phrase was the only syntactic site, in which the focal participants employed all two types of repair pattern.

2. Repair initiated on prepositional phrases

Type B: Some part of the turn leading up to the repairable is recycled, and repairable is replaced

Example 4.11
D wow
C wow
D one by one
P ➔ one on one

In the case of a prepositional phrase (two instances), the whole phrase was recycled with replacement of the problematic preposition (Type B).

3. Repair initiated on predicate nominal/adjectives

Type A: replacement of the repairable

Example 4.12
C eh there were sixty teachers
P ➔ Sixteen

On the other hand, to correct a trouble source containing a predicate nominal/adjective (3 instances), the focal participants replaced the repairable with a single word (Type A) rather than recycling back to the verb or the beginning of the whole predicate nominal phrase.
7.2.4.1. Summary: OIOR.

The focal participants provided correction in two patterns of OIOR sequences: *replacement of the repairable*, and *recycling some part of the turn leading up to the repairable and replacement of the repairable*. These OIOR sequences were found only in the direct noun phrase, prepositional phrases, and predicate nominal/adjectives (Table 45).

Table 45 Summary of the syntactic constituents at which OIOR was found and the corresponding repair patterns

<table>
<thead>
<tr>
<th>Syntactic constituents/Repair pattern</th>
<th>Type A: replace repairable</th>
<th>Type B: recycle of some part of the turn leading up to/in the repairable and replace repairable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Direct noun phrase</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2. Prepositional Phrase</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>3. Predicate nominal/adjective</td>
<td>O</td>
<td>X</td>
</tr>
</tbody>
</table>

Key: O-found, X-omitted

7.3 Results: Research Question 4 –II

This section addresses the second part of Research Question 4, which deals with changes in the syntactic properties of the focal participants’ SISR sequences over time. The data collection period was divided into three phases: initial, mid, and end. The changes were investigated as a means of tracing the available syntax the focal participants used in their classroom interactions.

Each focal participant’s SISR sequences were analyzed with respect to where in the syntactic constituents SISR sequences were initiated and what syntactic patterns of repair they displayed, and whether there were any observable changes to them over time. As Participant 1 and Participant 7 were involved in the stimulated recall interviews, their comments were used as a reference in the analysis. Their comments were in Korean and they have been translated into English and marked by “ “ in this chapter.

Table 46 shows the number of SISR sequences found in each participant’s data in each of the classroom recording sessions. There were a total number of 210 SISR instances in the data and the 148 which involved some form of syntactic alteration were analyzed.
(4.11.1.1)xlix. The ordinal numbers in the table refer to the frequency of SISR and the numbers in the brackets indicate percentages.

Table 46 Frequency of SISR by each participant in each recording session

<table>
<thead>
<tr>
<th>Focal participant/Recording Sessions</th>
<th>Participant 1</th>
<th>Participant 3</th>
<th>Participant 5</th>
<th>Participant 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>16</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(0.95%)</td>
<td>(7.61%)</td>
<td>(4.76%)</td>
<td>(1.42%)</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>11</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>(5.23%)</td>
<td>(1.42%)</td>
<td>(12.85%)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>-</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>(0.95%)</td>
<td>(4.28%)</td>
<td>(8.09%)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>13</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(1.42%)</td>
<td>(6.19%)</td>
<td>(7.14%)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(0.47%)</td>
<td>(0.95%)</td>
<td>(3.80%)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>26</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(12.38%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>13</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(2.38%)</td>
<td>(6.19%)</td>
<td>(5.71%)</td>
<td>(0.47%)</td>
</tr>
<tr>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>81</td>
<td>45</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>(6.19%)</td>
<td>(38.57%)</td>
<td>(21.42%)</td>
<td>(33.80%)</td>
</tr>
</tbody>
</table>

7.3.1. Participant 1.

Participant 1 initiated the fewest SISR’s among the four focal participants. While she initiated repair at various syntactic constituents such as the subject noun phrase, verb complex, object noun phrase and prepositional phrases, only a few instances of SISR were available for analysis after excluding cases that did not involve some form of syntactic modification. The data showed that the turn-initial subject noun phrase was the only syntactic site at which the repair was initiated consistently throughout the data collection, thus it was the only syntactic site allowing for comparison across time.

Initial- Mid phase

From the initial stage to mid-data collection point (i.e. Sessions 1 to 4), the repair was initiated after the subject noun in the turn initial position was hearably complete (i.e. after its production). During this period, the participant employed only one type of syntactic pattern of repair: *recycling a prior phrase and replacing the repairable* as in the following examples (Example 4.13, Example 4.14).
Example 4.13

P1 [the woman*]. the the grandmother helped Moheta?

Example 4.14

P1 err: (sigh) (1.0) [the father*] eh: he took care of eh: her?

At this stage, a full noun phrase subject (e.g. the woman) would be replaced with another full noun phrase subject (e.g. the grandmother) or a full noun phrase subject (e.g. the father) would be replaced with a pronoun (e.g. he). However, the recycling and replacement never appeared in reverse order (i.e. from pronoun subject to full noun phrase subject as in [she-*] this girl).

The participant’s comments from the stimulated recall interview may help us understand this phenomenon. In the interview, when asked why she said the father initially and then he in Example 4.14, Participant 1 commented that she wanted to emphasize that it was the father whom she was talking about, and he “is not specific enough” to let her audience know “which male person [she is] referring to”. In other words, by saying the father first then he, she was saying ‘it is the father and he is the person who took care of her’. She also felt that saying the father and then he would make the sentence clearer and avoid “confusing” her interlocutor rather than only saying he (as the subject of the sentence). The participant also pointed out that “he, the father took care of her does not sound so right” and she does not (usually) speak like that. My guess is that the participant’s L1 (Korean) might have been a contributing factor to this repair pattern: the Korean language does not require the use of pronouns. For Participant 1, specifying the subject’s identity by using a full noun subject first then using the third person gender specific pronoun might have been a way of compensating for the differences in her L1 and L2.

End phase

Repair at the turn-initial subject noun towards the end of data collection period (sessions 5-7) differed from the earlier period in that it was initiated during, not after production of the subject noun phrase. The syntactic pattern of repair now involved recycling a word (Example 4.16) and recycling a prior phrase (Example 4.17), rather than recycling the prior phrase with replacement of the repairable as earlier.

Example 4.16
P1 and [wa-]* what have you been doing in the last weekend?

Example 4.17
P1 um..[my fa*]. my favourite colour is um pastel tone (10).

The same repair pattern was employed for SISR in other syntactic positions. For example, repair during the prepositional phrase and the verb complex involved recycling a word. However, the repair sequences at these syntactic positions did not appear frequently enough in different phases of the research period for comparison.

7.3.2. Participant 3.

Initial phase
For Participant 3, the subject noun phrase, verb complex, and direct object noun phrase were the syntactic constituents at which SISR was consistently initiated throughout the data collection period. The majority of SISR sequences involved repair of the subject noun phrase after its production and the direct object noun phrase during its formulation. The repair at the former syntactic site involved a) recycling a prior phrase and replacement of the repairable (Example 4.18), and b) recycling of the repairable. The repair at the latter syntactic constituent involved recycling a word (Example 4.19). These two patterns of repair appeared consistently throughout the data.

Mid-End Phase
The examples collected towards the middle and end of the collection period indicated that repair sequences at the subject noun phrase tended to occur during its production rather than after the production and the repair pattern was changed to simply recycling a prior phrase (Example 4.20). The SISR initiated at the direct object noun phrase towards the mid and end phase of the data collection period on the other hand were still initiated during formulation of the direct object noun phase and also after the production (Example 4.21) with the pattern of repair remaining the same (i.e. recycling of word).

Example 4.18
[this actions*]. this stuff grow hardly.

Example 4.19
possums were brought to new zealand to start a [indi*]. industry.
Example 4.20
And [your*]. your hobbies? this*] this paragraph?

Example 4.21
take [luggage*] eh yeah luggage

As for the SISR initiated at the verb complex, in the first half of the data collection period (Sessions 1, 2, 4), Participant 3 initiated repair both during formulation of the verb complex and after the verb complex was hearably complete. At these two syntactic positions, the repair involved recycling the verb in [auxiliary+main verb] combination (Example 4.22, 4.23).

Examples 4.22
The government should tell them this behavior can. [cor*]. corrupt; social.

Example 4.23
We should [take*] take education?

On the other hand, the SISR sequences with these syntactic constituents at the end stage of the data collection (Sessions 6-7) showed that the repairs were initiated after formulation of the main verb and involved recycling the prior phrase (Example 4.24) and recycling the prior phrase with an addition (Example 4.25). In addition, when the verb was in a [auxiliary + verb] complex combination, the repair was initiated at the auxiliary verb by recycling it, whereas in the first half of the data collection, it was only the main verb that got repaired (Example 46, c.f., Example 4.22 and Example 4.23).

It should be noted that while the syntactic patterns of repair found in the later stage of data collection were not found in the data collected in the initial stage, the patterns found in the initial stage of data collection were still present although they were no longer the dominant patterns.

Example 4.24
of course [I have*]. I will be angry.
Example 4.25
so we have*. we can have a lot of break time

Example 4.26
So I think....[I may*] I may leport? cyber-uh teachers or police because that..uh..what is..

7.3.3. Participant 5.
Initial-Mid phase
In Participant 5’s SISR sequences, repair initiation during the formulation of a syntactic constituent was very rare. For instance, repair within the verb complex as in Example 4.27 (Type A: recycle of word) was found only once in each of the following three syntactic constituents: the verb complex, prepositional phrase and direct object noun phrase.

Example 4.27
and she can [ex*]. escape

Since these repair sequences only involved repair of a word and as the participant produced the correct L2 word at the end of the repair, it was assumed that for this participant these instances of repair during formulation of a syntactic constituent were due to a ‘slip of the tongue’ or pronunciation difficulties rather than formulation issues relating to syntax or syntactic construction of the target constituents. On the other hand, when this participant lacked the ability to produce a particular L2 word, he would leave the turn incomplete for his interlocutor to complete (Example 4.28).

Example 4.28
P5 she is. [disa*]:
T4 dissatisfied
P5 dissatisfied. So she will think about other things.

Throughout the data collection period, the most common type of repair entailed recycling a word after the turn-initial subject noun phrase. This particular type of repair sequence seemed to be initiated to secure the ‘speech floor’ in order to complete his TCU.

Example 4.29
[He*] he was only trying to help.
End phase

Towards the end of the data collection period, the participant was repeatedly found to initiate repair at the end of a TCU as an addition. He would recycle the word with an addition at a turn transitional place. The recycled element was almost always a gerund and the additional element preceded the recycled repairable in the repairing segment (Example 4.30, Example 4.31).

Example 4.30

I know Eastside is too strict but that is way too strict to him. [driving*]. **only driving**

Example 4.31

P5 he would hit me
T4 hit you?=
P5 =yeah. or[chopsticks*]† **using chopsticks†**

7.3.4. Participant 7.

Initial phase

One of the distinctive features of SISR in the initial phase (the first two recording sessions) of data collection for Participant 7 was that there was no recycling of a word. Instead, the SISR sequences involved recycling a prior phrase. This pattern of repair was typically found in the repair initiated during formulation of the verb complex, after the verb complex, during prepositional phrases and during the direct object noun phrase.

In the repair during and after the verb complex, recycling of the verb went back to the subject noun in a TCU initial position (Example 4.32), as well as in non-initial positions (Example 4.33) regardless of the type of verb and whether the verb was complex.

Example 4.32

she find **she find**. for me.

Example 4.33

uh the best of knowing my learning style is [I can*] **I can** study (0.4) I can study with the best de.condition.

Recycling of a prior phrase was also found in the repair initiated at propositional phrases. As for how far back the recycling went, Participant 7 would normally recycle only the
prepositional phrase (Example 4.34) but in imperative sentences, the recycling went back to the beginning of the TCU (Example 4.35).

Example 4.34
what do you think [about that?*] yeah about that?

Example 4.35
[helful to you*].helful for you

Recycling of a prior phrase was also the typical pattern of repair during the object noun phrase. As with the repair of prepositional phrases, the repair during the object noun phrase would involve recycling of the prior phrase (Example 4.36) as well as recycling which went back to the beginning of the TCU (Example 4.37).

Example 4.36
he gave to him [di:*] di answer.

Example 4.37
[what is the*].what is the benefit to knowing.

Mid Phase
During the mid-phase of the data collection period (sessions 3-4), Participant 7 continued to initiate repair by recycling a prior phrase, and the recycling would go back to the beginning of the TCU. However, this particular repair pattern was found only in the repair initiated after construction of the verb complex (Example 4.38, Example 4.39). For instance, repair during the prepositional phrase at this stage would involve replacement of a word (Example 4.40). Also, repair during the direct object noun phrase involved recycle of a word (Example 4.41) rather than a prior phrase.

Example 4.38
yeah. [How do you feel]. How did you feel about that?

Example 4.39
I I I hh[I ask*] ask I ask him

Example 4.40
yeah. I can get the good result [of*].[to*]. from the.
yeah.something

Example 4.41
uh can you give me some [ex*].examples?

End phase
This repair pattern found in the mid-phase continued into the final phase of data collection (sessions 5, 7). Repair initiated during and after construction of the verb still involved recycling of a prior phrase all the way back to the subject noun phrase in the turn-initial position (Example 4.42, 4.43), and repair at the prepositional phrase involved recycling of a word (Example 4.44). However, no examples of repair at the direct object noun phrases were available for comparison at this stage.

Example 4.42
[I feel*]. I feel sad.

Example 4.43
[did you-]* did you see the human makes the boots with the snake?

Example 4.44
7 peofle do ewei.eh drill into the see uh ((unintelliglble))
chemical [for*] for get the fish

7.3.5. Summary.
This section reported changes in each of the four focal participants’ SISRs over time in terms of the repair and the syntactic patterns of repair. Ideally, in order to examine any changes in the syntactic constituents where repair was initiated, the syntactic constituent under investigation needed to be observable throughout the data collection period. However, not all syntactic constituents identified in Section 6.3 appeared in all three phases of the data collection. Therefore, the analysis focused on the syntactic sites where SISR was initiated consistently throughout the collection period. Table 47 is a summary of SISR behaviour of each focal participant in each of the three research phases (i.e. initial, mid, end).
A particular characteristic of repair involving a specific phase was identified when it was the dominant feature of that phase. The analysis showed that each research phase displayed a dominant repair behaviour that was characteristic of that phase. A certain repair characteristic in a particular phase though was not limited to that particular phase alone but could also be found in different phases at times (e.g. Participant 5). This meant that the characteristics of syntactic constituents and patterns of repair found in the earlier stage of the data collection were not completely absent in the later stages of data collection (i.e. they appeared a few times in the data but were not a dominant feature of the phase) and vice versa.

As Table 47 shows, some change was observable in the syntactic constituent at which the repair was initiated. For instance, for Participant 1, repair at the subject noun phrase took place after its formulation in the initial to mid phase but during its formulation in the last phase of data collection. Similarly, for Participant 3, SISR at the subject noun phase was initiated after its formulation in the initial stage but during formulation towards the mid- and end-phases of data collection.

For Participant 7, while the repair at the verb complex in the initial to mid-phase involved repair during and after its formulation, the repair in the end-phase of data collection predominantly occurred after formulation of the verb complex. On the other hand, repair at the prepositional phrase and the direct object noun phrase was initiated almost always during formulation.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Syntactic constituent</th>
<th>Initial-phase</th>
<th>Mid-phase</th>
<th>End-phase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Repair pattern</td>
<td>Syntactic constituent</td>
<td>Repair pattern</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P1</td>
<td>Subject noun phrase</td>
<td>-After formulation</td>
<td>-During formulation</td>
<td>-After formulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Recycle prior phrase and replacement of the repairable.</td>
<td>-Recycle prior phrase</td>
<td>-Recycle prior phrase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. turn-initial position subject noun phrases</td>
<td></td>
<td>1. in an [auxiliary+verb] combination, the repair was initiated at the auxiliary verb by recycling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. replacement from a full subject noun phrase to a full subject noun phrase or a pronoun only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3</td>
<td>Subject noun phrase</td>
<td>-After formulation</td>
<td>-During formulation</td>
<td>-After formulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Recycle prior phrase</td>
<td>-Recycle prior phrase</td>
<td>-Recycle prior phrase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Recycle word</td>
<td></td>
<td>-Recycle word</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note:</td>
<td></td>
<td>Note:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. turn-initial position subject noun phrases</td>
<td></td>
<td>1. Repair was initiated at the end of a TCU as a form of an addition</td>
</tr>
<tr>
<td></td>
<td>Direct object noun phrase</td>
<td>-During formulation</td>
<td>-After formulation</td>
<td>-Recycle word</td>
</tr>
<tr>
<td></td>
<td>Verb complex</td>
<td>-During formulation</td>
<td>-After formulation</td>
<td>-Recycle word</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: in an [auxiliary+verb] combination the verb following an auxiliary was recycled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P5</td>
<td>Subject noun phrase</td>
<td>-After formulation</td>
<td>-During formulation</td>
<td>-After formulation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Recycle word</td>
<td>-Recycle prior phrase</td>
<td>-Recycle prior phrase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note:</td>
<td></td>
<td>Note:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. turn-initial position subjects</td>
<td></td>
<td>1. Repair was initiated at the end of a TCU as a form of an addition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. repair during production at any syntactic constituents was very rare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb complex</td>
<td>After formulation</td>
<td>After formulation</td>
<td>Note: Recycling would go back to the beginning of the TCU.</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>------------------</td>
<td>------------------</td>
<td>--------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>During formulation</td>
<td>-Recycle prior phrase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycle prior phrase</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Propositional phrase</th>
<th>During formulation</th>
<th>During formulation</th>
<th>During formulation</th>
<th>Recycle word</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Recycle prior phrase</td>
<td></td>
<td></td>
<td>Replace word</td>
<td></td>
</tr>
</tbody>
</table>

Note: recycle of verb went back to the TCU initial subject noun

Note: Recycling would go back to the beginning of the TCU

<table>
<thead>
<tr>
<th>Object noun phrase</th>
<th>During formulation</th>
<th>During formulation</th>
<th>Recycle word</th>
<th>Not available for comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Recycle prior phrase</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: recycle involved recycling back to the beginning of the TCU

7.4 Discussion

*Research Question 4-I*

**7.4.1. Syntactic properties of L2 repair organization: Syntactic constraints.**

The details of syntactic constituents in which the repair was initiated and completed as well as the patterns of repair deployed by the participants in SISR, OISR, SIOR, and OIOR sequences were dealt with at length in the Results section. In this section, I will discuss the major characteristics of the syntactic properties of repair and the differences between the
different types of repair organization and also propose possible explanations for these phenomena.

The results in this study revealed that apart from SISR, the syntactic constituents at which the learners initiated and completed L2 repair and the types of repair patterns employed by the learners were overall limited and highly constrained. Among the four types of repair organization, SISR had the least syntactic constraints (i.e. the speakers initiated SISR sequences in a wide variety of syntactic sites) and the speakers deployed them through the most variable repair patterns. In fact, all the syntactic constituents found in Fox and Jasperson’s (1995) L1 study also appeared in the L2 SISR in this study. On the other hand, OISR, SIOR and OIOR were limited in the syntactic sites in which the repair initiation and completion appeared and the patterns of repair the speakers employed were also limited in their kind.

7.4.1.1. Syntactic constraints: sequential implicativeness of turn.

The fact that there were more constraints in OISR, SIOR, and OIOR than in SISR can be attributed to the nature of the turn taking system. In OISR, SIOR, and OIOR sequences, the syntactic constituents of repair initiation and completion are contingent on the turn provided by the previous interlocutor. That is, the previous turn projects a range of possibilities for the next turn, termed ‘sequential implicativeness of a turn’ (Schegloff, 1979). This ‘sequential implicativeness of turn’ is likely to have played a major role in projecting only a limited set of syntactic constituents and the patterns of repair for these repair sequences. For instance, the other-initiation of repair in OISR is contingent on the previous turn produced by the interlocutor (i.e. the trouble source), and this other-initiation of repair in turn projects what is appropriate in the next turn self-completion. On the other hand, SISR is repair on one’s own turn and thus can be initiated within the turn or retrospectively in the turn transition relevant place irrespective of the previous turn by his/her the interlocutor.

7.4.1.2. Syntactic constraints: nature of trouble source and participatory structure.

In this line of argument, self-initiation of repair in SIOR sequences could be expected to be less constrained than other-initiation of repair in OISR, since the repair is initiated on one’s own turn. On the contrary, it was found that the syntactic sites and patterns of repair initiation and completion in SIOR were more limited than the ones found in OISR.
sequences. The findings indicated that the limitations in the syntactic sites of repair initiation and completion and the corresponding repair types in L2 classroom contexts were imposed not only by the sequential implicativeness of turn but also by other factors in L2 interaction. These were the nature of the trouble source - namely the production problem and understanding problem, and the speaker who initiates and completes the repair. In the following paragraphs I will offer an explanation for this phenomenon.

In SIOR, the repair was initiated in five syntactic places with only three patterns through which the speaker of the trouble source initiated self-repair in order to involve the recipient in the repair completion. On the other hand, when the focal participants provided other-completion of repair in SIOR, they employed only one type of repair pattern in three syntactic places.

Now turning to OISR, other-initiated repair that made self-repair completion relevant was more frequent and appeared in more various syntactic constituents and patterns than the SIOR sequences. The other-initiation of repair was found in seven syntactic sites with eight repair patterns and the completion was found in six different syntactic sites with seven repair patterns. While the differences in the number of syntactic sites in which the repair was initiated in SIOR and OISR may seem insignificant, when we look at the number of repair patterns used in the repair initiation and the syntactic characteristics of repair completion, the difference becomes less inconspicuous. Explanations as to why there is a bigger difference in the repair patterns for repair initiation and an even greater difference in the repair completion are provided below.

Given that these two types of repair organization are both influenced by the sequential implicativeness of a turn, the reason for differences in the number of syntactic sites and patterns may be found in the nature of trouble source and the recipient of the repair initiation. In SIOR, the repair was initiated to resolve only (the speaker’s own) production problems, and the repair initiation needed to be designed in such a way that it made the recipient not only simply provide the next turn but also complete what was left incomplete (or requested to be completed) in the repair initiation. Consequently, the speaker of the trouble source needed to clearly signal both the need for the recipient to provide a repair completion as well as what syntactic elements s/he was having difficulty with. This very specific agenda leaves the speakers with a very narrow window of projection for the repair
initiation and completion. That is, the repair initiation projects only one purpose for the repair completion in the next turn: to complete the empty ‘slot’ in the repair initiation. Therefore, the repair completion becomes highly restricted in the syntactic place and the pattern it can employ. On the other hand, OISR sequences were initiated to resolve both production problems and understanding problems by the repair initiator. Further, the repair initiations in OISR were not designed to specifically require the speaker of the trouble source to provide a specific L2 word or form or complete the repair by ‘filling the gap’ in the repair initiation as it did in SIOR. These differences may have allowed more flexibility in the patterns of repair and the syntactic sites in which the speakers initiated other-repair and in turn projected more possibilities for the repair completion.

This observation was further supported in the analysis of OIOR sequences. In essence, OIOR is correction of the interlocutor’s previous turn, and in this study, OIOR were always initiated to resolve the interlocutor’s production problem in the previous turn. In this sense, OIOR sequences had a very specific purpose and were subject to both the sequential implicativeness of turn and the nature of trouble source as well as the speaker of the trouble source. Accordingly, among four repair organizations, OIOR had the most restrictions both in the syntactic sites where it occurred and the patterns it employed. The repair sequence took place in three syntactic places by employing only one repair pattern—replacing the problematic word or phrase only and only when the phrase involved the verb and the direct noun phrase. This suggests that that the focal participants corrected their interlocutors’ previous turn only for the post-verbal L2 words or phrases. It is unclear at this stage why the corrections took place only for post-verbal L2 words and phrases.

Lastly, with regard to the patterns of repair found in this study, the speakers’ repairing segment contained as few syntactic elements as possible. The speakers (both in repair initiation and completion) opted for recycling or replacing the repairable word as the most common type of repair regardless of the syntactic class of the trouble source (i.e. which syntactic constituent that problematic word/item belonged to). This ‘simple’ pattern of repair may have been to avoid or minimize any potential confusion for their interlocutors as to what part of speech they were trying to repair. By choosing only the problematic L2 word (e.g. book), rather than a constituent (e.g. the book) or the whole turn (e.g. Give me the book), the repairable was easily heard by the recipient and the repair initiator could achieve the purpose of repair with minimal effort with maximum chance of being
successful.

7.4.1.3. Summary of Discussion for Research Question Four I.
Overall, the findings suggest that in L2 classroom conversation, the syntactic sites in which the repair is initiated and completed as well as the patterns of repair employed are restricted by not only what is known as the sequential implicativess of a turn (Schegloff, 1979) but also by the nature of the trouble source and who initiates the repair and completes it. The repair sequences resolving production problems was in general more restricted than the repair resolving understanding problems. The exception to this phenomenon was the SISR sequence. The reason for this could be found in the sequential environment in which SISR occurred and its purpose. Schegloff (1979, p. 282) claims that repair is organized by local environment, and as the local environment in which they are organized differs, the purpose of repair may also differ. For instance, SISR dealt with one’s own production problem as self-initiated repair in SIOR did but they were different from each other in that the former was relatively free from the turn projection imposed by the sequential implicativess of a turn and was not specifically designed to require the next speaker to complete what was left out in the repair initiation. Such differences were likely to have permitted the speakers to be more experimental with their L2 in SISR and initiate repair in a greater variety of syntactic constituents and employ different types of repair pattern than in other repair sequences.

Research Question 4-II
7.4.2. SISR: Syntactic characteristics and changes overtime.
In order to gain a better understanding of the available linguistic and syntactic resources the L2 learners had at the time of interaction (Fox & Jasperson, 1995, 1998) and whether there were any changes in them, the focal participants’ SISR sequences were investigated in depth in term of the syntactic properties and repair patterns overtime with cross reference to the stimulated recall comments. The stimulated recall interviews were conducted because when specific instances of SISR were classified on the basis of their surface structure, without the knowledge of the intentions of the speaker, the results of the study may have prove inaccurate, especially in L2 repair research (Kormos 1998).

The discussion focuses on repair of the noun phrases and then repair of the verb phrases as the repair on these syntactic places reveal the distinct characteristics of L2 learner syntax
7.4.2.1. How far they go back: recycling and replacing.

The commonest pattern of repair in SISR was *recycle* and *replacement* of the repairable. Therefore, the discussion in this section focuses on the major features of these two patterns of repair in depth. As to what determines how far back in the turn the speaker decided to go in the TCU, there was no clear conclusion based on the examples of repair found alone. On the other hand, the comments collected in the stimulated recall interview questions regarding repair of the different syntactic constituents may allow us to gain a better understanding of the phenomenon.

**i) Noun phrases**

In the same syntactic environment, the learners could recycle just the problematic word (i.e. single word), or recycle back to the beginning of a relevant constituent boundary, or recycle all the way back to the beginning of the whole TCU. The comments collected in the stimulated recall interview questions (in “”) relating to the repair of the subject noun phrases, the direct object noun phrases, and predicate nominal/adjectives phrases suggested that the learners in general:

- recycled only the problematic word when they were in search of an appropriate lexical item
  
  “I repeated it because I was looking for a better word”
  “I was just trying to come up with an English word”

- recycled back to the beginning of the constituent or the TCU:
  
  a) when they knew what to say but did not know how to say the expression and/or sentence in L2
  “I knew what to say in Korean but could not put those words into English”
  “I wanted to say […] but I didn’t know how to say it in English”

  b) when they questioned the correctness/appropriateness of the L2 expression and/or sentence under formulation
  “I was all of sudden was not sure whether it was correct or not”
“I was confused and I was not sure whether it was how you say in English”
c) when they wanted ‘a fresh start’
“I just wanted to start again”
“I just wanted to say it again from the beginning”

The learners’ stimulated recall comments and the examples of the analysis of the data suggested that for both pre-verbal and post-verbal noun phrases, L2 learners in this study started producing L2 utterance before they made a syntactic or lexical decision. When the problem was a lexical one, they recycled only the relevant word. On the other hand, a production problem involving syntactic planning often resulted in recycling all the way back to the beginning of the constituent or TCU.

With regard to replacing, the L2 learners
● replaced only the problematic word or recycled the prior phrase and replaced the problematic word when they realized that they “wanted to use a different word”.

It was not clear whether there was difference between just replacing a word and recycling of a prior phrase and then replacing the repairable word, or why they used both patterns for the same purpose.

ii) Verb phrases
The speakers’ answers to the stimulated recall interview questions on the repair of verb phrase and copular verb indicated that:
● they recycled only the problematic verb/copular:
  a) when they were ‘unsure of the choice of the word’ (e.g. pronunciation, appropriateness of the lexical item, etc) especially during formulation
  “I was not sure whether I was correct in choosing that word”
  “I was not sure how to pronounce it”
  b) when they were unsure of “what do say next”
  “I was kind of unsure of what to say next”
  “I forgot what I was going to say after”

On the other hand,
they replaced only the verb or copular verb:
when they ‘realized the tense/person agreement was wrong’, after saying it.
“I realized that I needed use were because the subject was they. More than one person”
“It is a past tense so I knew I should have said did. But I made a mistake”

For repair of the verb, recycling and replacing the problematic word served similar yet different purposes. Recycling of the trouble source, which meant that the trouble source was left ‘unchanged’ in the repairing segment, reflected the learners’ lack of confidence in L2 knowledge (i.e. ‘unsure’) while replacing the trouble source suggested that the speakers knew (whether ‘correctly’ or ‘incorrectly’) the L2 form they were using was inappropriate. Recycling when being unsure of a particular lexical item as opposed to replacing it could also be attributed to the fact that there is a vast number of L2 lexicon items while the speakers need to know only a limited number of L2 syntactic rules.

In addition,

the focal participants recycled back to the beginning of the TCU or the whole turn:
a) when they knew what to say (i.e. contents) but were not sure of the L2 grammar structure of what they wanted to say next
“I didn’t know how to say what I want to say in English”
“I began to think that my grammar was wrong”
b) when they wanted a new beginning
“I wanted to start the sentence again because I got it wrong”
“I am not sure but I just started the whole thing again”

As was the case with noun phrases, the speakers recycled back to the beginning of the TCU or the whole turn when the problem lay in how to deliver the message they had in L2 or simply when they wanted to restart the turn.

On closer inspection, there also seems to be a difference in the repair on the verb depending on its distance from the subject noun phrase in the turn initial position – namely, whether the verb was preceded by an auxiliary verb or stood by itself or whether it was a copular verb (for example, Government & Binding Theory). When the repair was initiated on the infinitive verb preceded by an auxiliary verb, the learners recycled only the infinitive verb
as in Example 4.45 and 4.46. Note that the verbs being recycled are preceded by the auxiliary verb can and have.

Example 4.45
The government should tell them this behavior can. [cor*.]corrupt↑ social.

Example 4.46
um I have [li-*] live in Seoul which is my hometown

On the other hand, when the verb being repaired was closer to the subject noun phrase, as was the case in the repair of an auxiliary verb (Example 4.47), and the finite verb, which was not preceded by an auxiliary (Example 4.48), the repair went back to the beginning of the TCU.

Example 4.47
[I can-*] I can do that

Example 4.48
[I feel*] I feel sad

The examples of repair of the copular verbs were less uniform in their pattern (see Example 4.49 below). There was insufficient evidence in this study to suggest that the speakers treated copula verbs differently to the main verb or auxiliary verb. Further, as no separate question were asked for the learners’ treatment of auxiliary verb and the main verb in the stimulated recall interviews, this behaviour needs to be investigated in a future study.

Example 4.49
a. [she is not*] she is not good explain
b. What [are*].were possums braut to new zealand
c. That [is*] is similar other eh say me to use. bad languages. abuse

In addition, there is a noteworthy point with regard to the repair of post-verbal noun phrases in relation to the verb. Generally, the repair almost always did not involve recycling back to the verb. That is, recycling was restricted to the local constituent (e.g. the noun phrase). More interestingly, in these noun phrases, the repairing segments were in most cases, not a
constituent as defined in linguistic literature (i.e. a word or a group of words functioning as a single unit within a hierarchical structure such as a noun phrase). For example, in a typical instance of repair on the noun phrase, the repairing segment started with a noun without the determiner, which was in a way ‘left’ in the repaired segment. That is, the noun in the repairing segment relied on the determiner, which was produced in the repaired segment and was not repeated in the repairing segment. In each case, the syntax of repairing segment could be understood with regard to the preceding utterance (repaired segment), yet it was not a constituent by itself (Example 4.50, 4.51).

Example 4.50
give to me [the print*].eh.\textit{handout}.

Example 4.51
some stuff. they don't know what's wrong so they think it's [the right thing*]. \textit{right thing}

In both of these examples, the repairing segment (in bold) does not repeat the determiner in the repaired segment (square brackets) but relies on it. We, the recipients, could decide that the repair in 4.50 should be \textit{give me the handout} and the repair in 4.51 should be \textit{it's the right thing}, although they do not repeat the determiner in the repairing segment.

However, as the majority of examples found in this study were direct object nouns and predicate nominal phrases (i.e. post-verbal) in the repairing segment that relied on the determiners and articles in the repaired segment, whether there are other kinds of dependencies and what constraints there might be on them awaits further research. For example, recycling of subject noun phrases in the turn-initial position usually, but not always, involved going back to the determiner when there was one.

The fact that the repairing segments were rarely a constituent, and post-verbal recycling did not involve going back to the verb, may indicate the following.

a) First, while it is possible that a category of syntactic constituents and phrases could be significant for some syntactic processes, the L2 speakers in this study did not orient to them in L2 self-repair.

b) Second, the category of verb phrase may not have much cognitive-interactional
significance for conversationalists, at least with regard to L2 repair (Fox & Jasperson, 1995, p.113).

The exact relationship between the more traditional notions of syntax and syntax-in-L2 repair for other constituents have yet to be established.

7.4.2.2. SISR: Changes over time.

To investigate any changes in the L2 syntax available to learners over time, the data collection period was divided into three phases: initial, mid, and end. Each instance of repair was categorized as being initiated either during or after formulation of the target L2 constituent. The focus was on the repair of subject noun phrases, verb complexes, direct object noun phrases, and prepositional phrases as these syntactic constituents were repaired consistently throughout the data collection period, thus enabling a comparison.

The learners’ stimulated recall comments suggest that, in general, the focal participants committed before they made lexical or syntactic decisions in repairs made during formulation.

“I was little bit confused as to what I wanted to say”
“I was not sure what I wanted to say next”
“What I wanted to say was not really organized in my head”
“I just started to say it but I was not sure what I should say next”
“I didn’t know the word in English”
“I could not think of the word in my head”

On the other hand, the participants’ stimulated recall comments about repair initiated after formulation of a constituent indicate that they consciously monitored the accuracy of their production retrospectively.

“I didn’t know the verb form”
“I knew that I said something incorrect”
“It was not what I wanted to say”
“I wanted to say that in a longer sentence”
“I wanted to change the tense”
“I lost confidence in the sentence structure I was using”
“I wanted to use this phrasal verb I learned earlier but I really couldn’t remember it accurately”

Subject noun phrases were usually repaired after formulation in the initial stage. This suggests that the speaker may have been more aware of and monitored their L2 early in their turn in the initial stage of the data collection. In the later stage of data collection, the speakers tended to initiate repair during formulation, indicating that they committed to their turn before they completed their plan as to what to say in L2.

The opposite phenomenon was found in the construction of verb complexes. In the initial stage, the participants committed before they made a decision (i.e. repair during formulation). In the later stage, they repaired retrospectively, which meant that they monitored the grammatical accuracy of the turn more than before.

On the other hand, the focal participants repaired the direct object noun phrases and the prepositional phrases, which occurred post-verbally during construction throughout the data collection period. The missing determiners in direct object noun phrases and incorrect prepositional phrases, which were, in most cases left unrepaired, may suggest that the L2 learners did not orient to the grammatical accuracy of these constituents as much as they did for other L2 constituents (i.e. verb complex).

7.4.2.3. Summary of discussion for Research Question Four II.
A number of SLA and CA studies have associated changes in repair behaviour with changes in learner L2 competency or communicative skills (Brouwer & Wanger, 2004; Fincher, 2006; Hellermann, 2009, 2011; Kapser, 2006; Liebscher & Dailey O’Cain, 2003; O’ Conner, 1988; Rylander, 2004; Temple, 1992; van Hest, 1996). These studies investigated repair at a level of sentence or turn construction unit.

In this study, SISR and its change was examined at the level of syntactic constituents within a turn with the support of the stimulated recall comments. The repair patterns found in the different syntactic constituents and the changes in the dominant features of repair over time in this study suggest that:
1. The L2 learners employed different repair tactics/patterns for different syntactic constituents in a turn and the patterns could change (e.g. subject noun phrases, verb phrases) or remain consistent (e.g. direct object noun phrases, prepositional phrases) over time depending on the constituent type.

2. The L2 learners could repair a syntactic constituent either during or after formulation of it, and the patterns could change with time. These changes may or may not be related to learner proficiency or L2 communication skills.

3. There were some individual differences in the ways in which the L2 learners repaired a certain L2 syntactic constituent.

4. Whether the repair of one type of constituent within a turn affected the repair pattern of another was not clear at this stage.
Chapter 8. Conclusion

This chapter summarizes the major findings and presents the theoretical and pedagogical implications of the study. Limitations and suggestions for future research are also provided.

8.1 Summary of major findings

The present study examined whether the different types of organization of L2 repair according to pedagogic contexts proposed by Seedhouse (2004) were also evident in the interactions involving Korean learners in English as a Second Language (ESL) classrooms in New Zealand high schools. The study also investigated repair longitudinally to see whether there was any change in the topic, sequential organization, and the syntax of L2 repair over time in L2 pedagogic contexts.

The study adopted Conversation Analysis (CA) as its theoretical and methodological base and employed a micro-analytic approach to L2 spoken data collected longitudinally. In a departure from traditional CA studies, however, it also utilized frequency analysis to examine the relationship between L2 repair organization and L2 contexts and syntactic analysis of repair sequences and stimulated recall interview to assess changes over time. The major findings of the study are summarized as follows.

(1) The L2 classroom repair found in this study supported Seedhouse’s finding (2004) that L2 repair is sequenced differently in pedagogic contexts that differ in accordance with the pedagogic goals set by the teacher. More importantly, this thesis also adds to Seedhouse in that the speakers were found to orientate to different aspects of the L2, especially L2 accuracy, regardless of the pedagogic aim initially set by the teacher, by employing different types of repair sequences. The speakers also demonstrated that the same repair trajectory could be utilized for different pedagogic purposes depending on what they recognized as the trouble source (i.e. production problem or understanding problem), to whom the trouble source belongs (i.e. the participatory structure), and the communicative purpose of the interaction (e.g. to provide linguistic correction or to request clarification) at the time of repair.
While there was no change in what the speakers recognized as repairable in SISR, SIOR, OISR, and OIOR sequences over time, the longitudinal investigation of what the learners oriented to as repairable in each type of repair sequence also demonstrated the importance of analyzing L2 classroom repair in terms of the nature of trouble source, participatory structure, types of classroom interaction, and the pedagogic contexts. In the following, I will focus on the most distinctive of each of these factors in relation to the repair organization found in this study.

a) Nature of the trouble source
The data indicated that only the production problems belonging to the speaker of the trouble source were resolved through SISR, irrespective of the participatory structure, types of classroom interaction and pedagogic contexts.

b) Participatory structure
The focal participants were more likely to designate their teachers rather than their peers to complete the repair in the following turn when they were dealing with their own production problems that could not be resolved through self-repair (i.e. SIOR).

c) Types of classroom interaction
While the OISR sequences were employed by the speakers to resolve both production and understanding problems, all in all, the teachers initiated more other-repair to resolve the learner’s production problems than did the learner’s peers. The majority of examples of repair on production problems were found in teacher-fronted classroom interaction and individual tasks.

d) Pedagogic contexts
Both the teachers and the learners, though rarely, participated in OIOR, which were essentially linguistic corrections. All instances of OIOR were found during teacher-fronted classroom interaction in meaning-and-fluency contexts.

The first part of research question three, which dealt with the quantitative and qualitative analysis of the types of repair sequences, indicated that there was no notable change in the frequency of different repair types employed by the L2 speakers over time. Rather, the speakers consistently sequenced their turns in repair in a particular way in order
to achieve specific pedagogic and communicative objectives throughout the research period. In this study, the speakers employed:

- SISR and SIOR to resolve their own linguistic problems
- OISR and SIOR to resolve the linguistic problems belonging to their interlocutor
- OISR to resolve understanding problems arising from their interlocutor’s previous turn
- OIOR to provide linguistic corrections for their interlocutor.

The second part of the research question, which dealt with the quantitative changes in the sequential organization of repair initiation and completion over time in this study showed that throughout the research period, L2 speakers initiated repair as soon as they recognized the trouble source (i.e. within the same turn as the trouble source in the case of self-initiated repair and in the second turn position for other-initiated repair) and that the repair was completed almost always within the same turn as the repair initiation (SISR, OIOR) or the turn immediately following the repair initiation (SIOR, OISR). Further, the course of interaction prior to the repair was almost always instantaneously resumed.

(4) The syntactic constituents of repair and the repair patterns of the classroom learners’ SISR, SIOR, OIOR and OIOR suggested that, with the exception of SISR, the syntactic sites in which the repair was initiated and completed as well as the patterns of repair the speakers employed were by and large more restricted when the repair resolved production problems than when the repair resolved understanding problems. This phenomenon was attributed to what is termed in CA the sequential implicativeness of a turn (Schegloff, 1979) along with other factors such as the participatory structure and the trouble source (i.e. who initiated and completed repair for what purpose). In addition, throughout the research period, the repairing segment employed by the speakers in all four types of repair organization was not a constituent on its own (e.g. a noun without the determiner or an article) and therefore not grammatical in the strictest sense. Moreover, in most cases, the speakers, both the learners and the teachers used only minimal L2 (e.g. problematic L2 word or phrase rather than a full sentence) in their repair initiation and completion.

(5) The longitudinal observation of the focal participants’ SISR over time and the analysis of stimulated recall interview comments suggested that the repair made during and after articulation of a syntactic constituent demonstrated how the L2 speakers in this study
monitored their L2 production during classroom interaction. The L2 repair made during articulation of a syntactic constituent (i.e. articulation of the syntactic constituent is not yet complete) generally indicated that the speakers started their turn before they completed ‘planning’ the content of their utterance (Ellis, 2003). The syntactic constituent in the turn during which the repair was initiated did not necessarily have to be what the speakers targeted to repair. In other words, the speakers could initiate repair anywhere in the turn simply to ‘restart’ their utterance produced so far, and such decisions or the monitoring processes were reflected in the stimulated recall interview comments regarding the repair made during articulation of a syntactic constituent. On the other hand, repair initiated after the syntactic constituent was completely articulated indicated the L2 learners monitored the grammatical accuracy of that particular syntactic constituent under repair retrospectively.

(6) The analysis of repair made during and after articulation of the subject noun phrases, verb complexes, direct object noun phrases, and prepositional phrases over time in this study suggested that the L2 learners monitored their L2 production in a particular way during different stages of data collection.

a) Subject noun phrases
Initially, the L2 learners in this study typically repaired the subject noun phrases after articulation was complete. In the later stage, they repaired the subject noun phrases during articulation.

b) Verb complexes
Initially, the speakers repaired them during articulation and then started to repair them after articulation towards the later stage of data collection.

c) Direct object noun phrases and Prepositional phrases
Throughout the data collection period, the focal participants repaired the direct object noun phrases and the prepositional phrases (i.e. post-verbal production) during articulation.

8.2 Theoretical implications
Seedhouse (1999, 2004), in his analysis of L2 classroom repair based on data extracts from a variety of different classroom contexts, argued that the pedagogical foci projected by the teacher distinguished different pedagogical contexts (i.e. form-and-accuracy, meaning-and-
fluency, and task-oriented) and that the repair practice in these contexts is organized accordingly. The L2 repair sequences in the three pedagogic contexts distinguished by Seedhouse (2004) were also consistently evident in the longitudinal data collected in this study. Thus, the findings of my study provide further support for the reflexive relationship between the organization of repair and pedagogic focus. However, the analyses I have reported indicate a need to look beyond the pedagogic aim to also consider L2 repair in terms of the types of trouble source (i.e. production problem, understanding problem), the speaker of the trouble source, and who initiates and completes the repair. Furthermore, while the organization of repair sequences (i.e SISR, OISR, SIOR, OIOR) proposed by Schegloff, Jefferson, and Sacks (1977) is still applicable to L2 classroom contexts, the frequency analysis of the repair types suggests that the preferred type of repair organization depends on who the speakers involved in the repair are, what the speakers orient to as the repairable, and what (pedagogic) purpose the repair served.

The present study, in addition, addresses issues regarding the ‘measuring’ and ‘tracing’ of L2 learning or change in previous Conversation Analysis (CA) studies. Previous CA studies investigated a specific linguistic item (e.g. a L2 lexical item in Markee, 2008) or interactional competency (e.g. L2 repair in Hellermann, 2009, 2011) to examine how change in learner language takes place. The major problem with the former is that selecting a particular linguistic item as the analytic focus goes against the CA principle of unmotivated looking. The major problem with the latter is the difficulty in distinguishing changes in aspects of learners’ interactional competence from the changes in the contexts in which the interactions took place over time. Furthermore, these previous studies base their analysis on exogenous L2 learning frameworks (i.e. Second Language Acquisition and Situated Learning Theory, respectively), thus moving the analysis away from established CA practice. In an attempt to overcome these limitations of previous CA for SLA studies, the present study traced changes in the learners’ L2 syntax in repair sequences longitudinally. This afforded a list of possible and unlikely syntactic places in which the L2 learners initiated and completed repair in a turn and the syntactic features of repair patterns over time. The findings revealed how the speakers used their available L2 syntax to signal the need for repair (repair initiation) and solve a production problem (repair proper) and how their practices changed over time.

In addition to this, as a departure from traditional CA studies, the present study also
collected learner comments in stimulated recall interviews as a way of examining the speakers’ intentions when participating in repair work to complement the detailed CA analyses. The stimulated comments collected in this study provided support for the claim that the participants were engaging in the noticing and monitoring, which SLA researchers have suggested are important for L2 acquisition (Schmidt, 1990, 1995). What this study offers is detailed information about how the repair sequences the learners participated in provided contexts for noticing and monitoring, what aspects of their L2 the learners oriented to in repair, the syntactic constituents at which the repair was initiated and completed, and the repair patterns they employed overtime.

8.3 Pedagogical implications
This study was not intended to investigate ‘best practice’ in classroom repair work but only to identify the patterns of repair that occurred in specific L2 classroom contexts. However, there are some general implications for ESL classrooms that can be drawn from the findings of the study.

(1) The speakers in this study tended to produce very minimal repair initiations and completions. That is, when the L2 learners initiated self- and other-repair, they produced only the minimal L2 necessary, for instance a single word, which was not, in most cases, a constituent. The repair patterns employed by the interlocutors (the peers as well as the teachers) also rarely required the L2 learners to use full L2 constituents, or phrases, or sentences, or reformulate the previous turn at a sentence level in the repair completion. For instance, most of the teachers’ other-initiated repairs involved recycling or replacing only a single word in the trouble source turn or reformulating it, which in turn allowed the learner to complete with a simple yes/no confirmation. In addition, repair initiators such as clarification requests, which were frequently used by the teachers, typically resulted in learner-completion by recycling the problematic turn without the required modification.

While a full/complete sentence is not necessary in ordinary conversation, it may be more beneficial for the L2 learners to gain the ability to produce complete L2 utterances more regularly. Therefore, it could be argued that a conscious effort is needed on both the part of the teacher and the learner to use full/complete L2 constituents and L2 sentences where possible during repair. One way of achieving this is by allowing the students more speaking time (i.e. allowing them to hold the current speech floor) so that they have plenty of
opportunities to express themselves fully. Teacher-initiated learner-completed repair (OISR) may provide the learners with such occasions. Another way is to encourage the learners to engage in more SISR. In this study, the learners initiated repair on different syntactic sites using different kinds of repair patterns and used more complex and longer L2 utterance during SISR than they did in the other types of repair organizations.

(2) Other-repair in pedagogic contexts, that offers linguistic feedback, is a necessary part of language learning (Ellis, 2007, Ellis, Loewen, & Erlam, 2006; Iwashita, 2003; Nobuyoshi & Ellis, 2003). In the literature, explicit feedback during conversational interaction has often been criticized for interrupting the flow of conversation (Lynch, 1989; Truscott, 1999). To this end, other-repair, which is a more discrete and indirect form of repair, can be seen as more helpful and appropriate for classroom language teaching as it allows the speakers to monitor their production and at the same time avoids breaking topic continuity, for example by showing acceptance of the previous utterance to maintain the interaction while mentioning the correct L2 form as a secondary consideration. Examples of this kind of repair were indeed found during the teacher-initiated repair and teacher-completed repair in meaning-and-fluency contexts in this study.

However, in general, the speakers quickly resumed their previous conversation after a repair was complete in all three pedagogic contexts irrespective of whether the repair was explicit and implicit. The transition between the repair to achieve L2 accuracy and resuming back to their original course of conversation was carried out without any notable difficulty in terms of the sequential organization of the turn. This suggests that the disturbance caused by feedback or correction may not affect the continuity of conversation in classrooms as much as has been suggested in previous studies. Furthermore, the analysis of SIOR sequences in this study demonstrated that the L2 learners actively brought the interaction to a halt and initiated repair in order to seek their interlocutors’ assistance in completing the turn under construction. Repair completion almost always took place in the following turn and the conversation always resumed immediately after the repair sequence was completed. For L2 learners, initiating repair in orientation to L2 accuracy seems to be a natural part of L2 classroom interaction.

Other-initiated other-repair (or correction) was rare and occurred only in limited syntactic places using very limited types of repair patterns. This suggests that it may not always be
possible to teach or draw learners’ attention to all the syntactic and morphological aspects of L2 in conversational interaction through other-repair. For intermediate level L2 learners in high school, it may be necessary to address their L2 linguistic problems directly during other types of classroom activity (e.g. through explicit instruction).

(3) A further consideration relates to participatory structure and what makes a trouble source a repairable. Repair between peers, regardless of the pedagogic focus, was mostly motivated by the need to resolve an understanding problem through negotiation of meaning (Gass & Varonis, 1994; Long, 1996; Pica, 1996). We already know from previous studies that L2 learners can learn from each other in terms of L2 grammar (Adams, 2004, 2007; McDonough 2004, 2007; Nassaji, 2011; Varonis & Gass, 1985). To further benefit from interaction with specific regard to L2 accuracy (i.e. negotiation of form, for example see Lyster, 2001), L2 learners may need to be trained to pay closer attention to linguistic aspects of L2 in their own production as well as in their peers’ and how to resolve them through L2 repair.

On the other hand, the participatory structure involving the teacher was more likely to motivate repair on linguistic problems. The teachers, for obvious reasons, are more likely to recognize the presence of linguistic problems in learners’ previous turns than their peers. However, in this study, it was more often the learners who made resolving their linguistic issues the focal concern rather than the teachers. Accordingly, repair on the learners’ production problems was solved mostly through SISR and SIOR. In the light of this, the teachers may need to address learners’ orientation to L2 accuracy during conversational activities more often and in various pedagogic contexts by utilizing different repair sequences and patterns to assist the learners.

8.4 Limitations of the study and suggestions for future research

The present study has several limitations. First, as the study focused on ESL classroom contexts with limited proficiency learners, the findings cannot be generalized to other instructional contexts (e.g. other academic subjects taught in English as L2 such as science, mathematics and so on) although given that the findings of this study mirrored those reported by Seedhouse (2004) it would seem that they may be generally applicable.

Second, the teachers in this study tended to opt for meaning-and-fluency focused lessons
over form-and-accuracy focused lessons. Consequently, the sequential and syntactic characteristics of repair organization investigated in this study were largely representative of repair practice in meaning-and-fluency contexts. Furthermore, only very few examples of repair sequences were found during task-oriented contexts. Therefore, it would be worth investigating repair practice in each of these pedagogic contexts with comparable frequency in order to fully compare the repair behavior in different pedagogic contexts.

Third, being a longitudinal study, it was not feasible to investigate a large number of participants, which makes it somewhat difficult to generalize the findings of the present study. Future studies thus need to be carried out with a large number of participants in order to validate the results of the present study.

Fourth, the focal participants’ L1 and L2 repair behaviours were not compared, as the present study mainly focused on the sequential organization and syntactic characteristics of L2 repair behavior in ESL classroom contexts. In addition, the individual difference factors - for instance, language aptitude, motivation, cognitive capabilities, and memory - were not taken into account. However, these are variables that could influence the learners’ production ability (Lennon, 1990, 1994; Seliger, 1980). Future studies may need to further investigate the mediating role of individual differences in ESL learners’ repair ability.

The final limitation concerns the stimulated recall comments. In this study, the focal participants were asked to comment only on the occasions they were involved in a repair sequence. Therefore, there was no access to the information regarding why the L2 speakers did not initiate or complete repair on some occasions.

With these limitations, the study is important in that it demonstrated what L2 speakers orient to during conversation in different L2 pedagogic contexts, and how they sequence their turns in repair to maintain intersubjectivity, achieve their pedagogic focus, and shift their orientation according to their interactional purpose. Furthermore, the present study was among the first to investigate the sequential and syntactic aspects of L2 repair and the changes over time implementing both qualitative and quantitative methods.
References


Appendix A: Transcript conventions

(Adapted from Ochs, Schegloff, & Thompson, 1996, pp. 461-465)

1. TEMPORAL AND SEQUENTIAL RELATIONSHIPS

[ ] a point of overlap onset

[ ] a point at which two overlapping utterances both end

= If the two lines connected by the equal signs are: (1) by the same speaker, a single, continuous utterance is broken up to accommodate the placement of overlapping talk; (2) if they are by different speakers, the second follows the first with no discernible silence between them (i.e., “latched” to it).

(0.5) silence represented in tenths of a second.

(.) micropause

2. ASPECTS OF SPEECH DELIVERY

. falling, or final intonation, not necessarily the end of a sentence

? rising intonation, not necessarily a question

. “continuing” intonation, not necessarily a clause boundary

:: the prolongation or stretching of the sound just preceding them.

- a cut-off or self-interruption

_underlining_ underlining indicates some form of stress or emphasis, either by increased loudness or higher pitch

** upper case indicates especially loud talk

++ The talk between the two degree signs is markedly softer than the talk around it

↑ sharper rises in pitch than would be indicated by combinations or colons and underlining

°hhh hearable inbreath

hhh hearable aspiration. It may represent breathing, laughter, etc. (hhh) laughter occurring inside the boundaries of a word.

3. OTHER MARKINGS

(( ))) transcribers’ descriptions of events

(word) uncertainty on the transcribers’ part
Appendix B: Ethics forms

PARTICIPANT INFORMATION SHEET I
(Participants)

Project title: Learner repair organization in L2 classroom contexts and L2 development

About the project
My name is Ha Rim Lee, and I am a doctoral student at The University of Auckland. The aim of my project is to explore how Korean students deal with problems (i.e. repair) when they are communicating in English. I am interested in how they use English to deal with these problems and how this may help them to learn English over time.

Why are you being invited?
You are invited to take part in this research project as a Korean student who is enrolled in an ESL (English as a Second language classes) class in your school. Your participation is completely voluntary and the Principal and your teacher have given assurance that whether you participate or not will have no relation whatsoever to your class grade. You also have the right to withdraw your participation in the study at any time without having to give any reasons. Neither your real name nor the school will be identified at any time in any publications/reports of the project.

What will happen in the project?
Once every three weeks, you will be asked to voice-record your classroom interaction with other students who agreed to participate and the teacher during one of your ESL classes. You will be given a digital voice recorder and it is up to you to choose which class to record. In addition, you will have an interview with the researcher after each classroom recording. Some parts of the recording will be played back to you and you will be asked to comment on them. This will take less than an hour. You can also decline to answer, or terminate the interview at any time. In total, there will be 10 classroom recordings and 10 interviews over the course of two semesters. You will be paid NZ$20 for each classroom recording and interview (i.e. a total of $200 for the 10 sessions).

What will happen after?
All your recorded interactions and interview comments will be transcribed by the researcher and a small portion by another researcher who will not be present during the recordings. You can choose to receive a copy of any audio recording and transcript. You can request that any transcript be returned to you at any time and not used in the project. On completion of the study, you can choose to receive a summary of major
findings. The findings of the project will be published for research and education purposes.

Any risk or benefits?
Participating in this project will not interfere with your school work. If you experience any difficulty with the recordings or interviews you are free to discuss these with the researcher at any time. Participating in the project will add to your understanding of how you learn English. Also the research will provide information about how Korean students in New Zealand learn English. Your privacy and confidentiality will be protected at all times during the project and after it is completed. You will remain anonymous in all reporting. All research data will be stored by the researcher in a secure place at the University of Auckland and destroyed after the period of six years.

If you wish to participate in the project
If you would like to take part in this research, please look through the Consent Form and sign it for us. If you have any questions or would like more information about this research project please contact:

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If you have concerns about ethical issues in the project
The Chair
The University of Auckland Human Participants Ethics Committee
The University of Auckland, Office of the Vice Chancellor
Private Bag 92019, Auckland 1142
Tel: 64 9 373 7599 ext. 83711

Thank you for considering this invitation.
CONSENT FORM I
(Participants)

THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Learner repair organization in L2 classroom contexts and L2 development
Name(s) of Researcher(s): Ha Rim Lee

I agree to take part in this research. I have read the Participant Information Sheet, have understood the nature of the research and why I have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

• I understand that I need to record 10 sessions of classroom interaction and recall interviews.

• I am free to withdraw participation at any time, and to withdraw any data traceable to me up to the 30th November 2014.

• I (wish / do not wish) to have my tapes returned to me.

• I (wish / do not wish) to receive the summary of findings.

• I understand that a third party who has signed a confidentiality agreement may transcribe some parts of tapes.

• I understand that the researchers will protect my privacy and confidentiality at all times and that my name will not be identified throughout the production of the research or in any publication.

• I understand that data will be kept for 6 years, after which they will be destroyed.

• I understand that this Consent Form will be stored separately from any other data collected.

Name ______________________________

Signature ___________________________ Date ______________
PARTICIPANT INFORMATION SHEET II
(Other participants)

Project title: Learner repair organization in L2 classroom contexts and L2 development

About the Project
My name is Ha Rim Lee, and I am a doctoral student at The University of Auckland. The aim of my project is to explore how Korean students deal with problems (i.e., repair) when they are communicating in English. I am interested in how they use English to deal with these problems and how this may help them to learn English over time.

Why are you being invited?
You are invited to take part in this research project as a student who is enrolled in an ESL (English as a Second language) class in your school. Your participation is completely voluntary and the Principal and your teacher have given assurance that whether you participate or not will have no relation whatsoever to your class grade. You also have the right to withdraw your participation in the study at any time without having to give any reasons. Neither your real name nor the school will be identified at any time in any publications/reports of the project.

What will happen in the project?
Once every three weeks, your Korean classmates will be asked to voice-record their classroom interaction during one of ESL classes with their classmates and the teacher during class. The Korean student will record their interaction with you only if you agreed to participate. They will be given a digital voice recorder to record. In addition, they will have an interview with the researcher after each classroom recording. Some parts of the recording will be played back to them and they will be asked to comment on them. In total, there will be 10 classroom recordings and 10 interviews over the course of two semesters for these Korean students.

What will happen after?
All recorded interactions and interview comments will be transcribed by the researcher and a small portion by another researcher who will not be present during the recordings. You can choose to receive a copy of any audio recording and transcript. You can request that any transcript be returned to you at any time and not used in the project. On completion of the study, you can choose to receive a summary of major findings. The findings of the project will be published for research and education purposes.

Any risk or benefits?
Participating in this project will not interfere with your school work. If you experience any difficulty with the recordings or interviews you are free to discuss these with the researcher at any time. Participating in the project will add to your understanding of how you learn English. Also, the research will provide information about how Korean students in New Zealand learn English. Your privacy and confidentiality will be protected at all times during the project and after it is completed. You will remain anonymous in all reporting. All research data will be stored by the researcher in a secure place at the University of Auckland and destroyed after the period of six years.

If you wish to participate in the project
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The Chair
The University of Auckland Human Participants Ethics Committee
The University of Auckland, Office of the Vice Chancellor
Private Bag 92019, Auckland 1142
Tel: 64 9 373 7599 ext. 83711

Thank you for considering this invitation.
CONSENT FORM II
(Other participants)

THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Learner repair organization in L2 classroom contexts and L2 development
Name(s) of Researcher(s): Harim Lee

I agree to take part in this research. I have read the Participant Information Sheet II, have understood the nature of the research and why I have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

• I understand that my participation in classroom interaction may be recorded up to 10 sessions.

• I am free to withdraw participation at any time, and to withdraw any data traceable to me up to the 30th November 2014.

• I (wish / do not wish) to have my tapes returned to me.

• I (wish / do not wish) to receive the summary of findings.

• I understand that a third party who has signed a confidentiality agreement will transcribe some parts of tapes.

• I understand that the researchers will protect my privacy and confidentiality at all times and that my name will not be identified throughout the production of the research or in any publication.

• I understand that data will be kept for 6 years, after which they will be destroyed.

• I understand that this Consent Form will be stored separately from any other data collected

Name ____________________________

Signature __________________________ Date _______________
PARTICIPANT INFORMATION SHEET III
(School)

Project title: Learner repair organization in L2 classroom contexts and L2 development

About the Project
My name is Ha Rim Lee, and I am a doctoral student at The University of Auckland. The aim of my project is to explore how Korean students deal with problems (i.e. repair) when they are communicating in English. I am interested in how they use English to deal with these problems and how this may help them to learn English over time.

Who is invited?
I would like to invite the Korean students who are enrolled in an ESL class in your school to take part in this research project. Their participation is completely voluntary and I request your assurance that whether students participate or not, it will not have any influence on their class grade or the relationship with the school. The students also have the right to withdraw their participation in the study at any time without having to give any reasons. Neither students’ real name nor the school will be identified at any time in any publications/reports of the project.

What will happen in the project?
Once every three weeks, two of the Korean students will be asked to voice-record one hour of their classroom interaction with other students and the teacher during class. They will be given a digital voice recorder and it is up to them to choose when to record. In addition, they will have an interview with the researcher after each classroom recording. Some parts of the recording will be played back to them and they will be asked to comment on them. This will take less than an hour. The students can also decline to answer, or terminate the interview at any time. In total, there will be 10 classroom recordings and 10 interviews over the course of two semesters. They will be paid NZ$20 for each classroom recording and interview (i.e. a total of $200 for the 10 sessions).

What will happen after?
All recorded interactions and interview comments will be transcribed by the researcher and a small portion by another researcher who will not be present during the recordings. The students can choose to receive a copy of any audio recording and transcript. They can request that any transcript be returned to them at any time and not used in the project. On completion of the study, they can choose to receive a summary of major findings. The findings of the project will be published for research and education purposes.

Any risk or benefits?
Participating in this project will have no relation whatsoever to class grade and will not interfere with the students’ school work. If they experience any difficulty with the recordings or interviews they are free to discuss these with the researcher at any time. Participating in the project will add to their understanding of how they learn English. Also, the research will provide information about how Korean students in New Zealand learn English. The students’ privacy and confidentiality will be protected at all times during the project and after it is completed. They will remain anonymous in all reporting. All research data will be stored by the researcher in a secure place at the University of Auckland and destroyed after the period of six years.

**If you wish to participate in the project**

If you would like to take part in this research, please look through the Consent Form and sign it for us. If you have any questions or would like more information about this research project please contact:

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**If you have concerns about ethical issues in the project**

The Chair
The University of Auckland Human Participants Ethics Committee
The University of Auckland, Office of the Vice Chancellor
Private Bag 92019, Auckland 1142
Tel: 64 9 373 7599 ext. 83711

Thank you for considering this invitation.
CONSENT FORM III
(School)

THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Learner repair organization in L2 classroom contexts and L2 development
Name(s) of Researcher(s): Harim Lee

I agree to allow the students at ______________ (name of the institution) to take part in this research. I have read the Participant Information Sheet I and II, have understood the nature of the research and why the participants have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

• I understand that the volunteers may need to record up to 10 classroom interactions and 10 recall interviews over the course of 30 weeks.

• I understand that the researcher will be present during lesson for a non-intrusive classroom observation.

• I understand that the researcher will take observation notes and may need to make photocopies of materials used in the class.

• I give my assurance that participation or non-participation by the students will not have any influence on their class grade or the relationship with the school.

• I am free to withdraw participation of my school at any time.

• I (wish / do not wish) to receive the summary of findings.

• I understand that a third party who has signed a confidentiality agreement will transcribe some parts of tapes.

• I understand that the researchers will protect the privacy and confidentiality of all those who are involved in the research at all times and that none of the names will be identified throughout the production of the research or in any publication.

• I understand that data will be kept for 6 years, after which they will be destroyed.

• I understand that this Consent Form will be stored separately from any other data collected.

Name ________________________________

Signature ____________________________ Date ________________
PARTICIPANT INFORMATION SHEET IV
(Teacher)

Project title: Learner repair organization in L2 classroom contexts and L2 development

About the Project
My name is Ha Rim Lee, and I am a doctoral student at The University of Auckland. The aim of my project is to explore how Korean students deal with problems (i.e. repair) when they are communicating in English. I am interested in how they use English to deal with these problems and how this may help them to learn English over time.

Who is invited?
I would like to invite the Korean students who are enrolled in an ESL class in your school to take part in this research project. Their participation is completely voluntary and will not interfere with their school work. The students also have the right to withdraw their participation in the study at any time without having to give any reasons. Neither any real names nor the school will be identified at any time in any publications/reports of the project.

What will happen in the project?
Once every three weeks, Korean students in your ESL (English as a Second language) class will be asked to voice-record one hour of their classroom interaction with other students and the teacher during class. They will be given a digital voice recorder and it is up to them to choose when to record. In addition, they will have an interview with the researcher after each classroom recording. Some parts of the recording will be played back to them and they will be asked to comment on them. This will take less than an hour. The students can also decline to answer, or terminate the interview at any time. In total, there will be 10 classroom recordings and 10 interviews over the course of two semesters. They will be paid NZ$20 for each classroom recording and interview (i.e. a total of $200 for the 10 sessions).

Other students in the class can choose to agree or refuse to participate in the recordings. The participating Korean students will record interaction only with those who have agreed to participate. The other students who agree to be recorded will be paid NZ$5 for each classroom recording.

What will happen after?
All recorded interactions and interview comments will be transcribed by the researcher and a small portion by another researcher who will not be present during the recordings. The students can choose to receive a copy of any audio recording and transcript. They can request that any transcript be returned to them at any time and not used in the project. On completion of the study, they can choose to receive a
summary of major findings. The findings of the project will be published for research and education purposes.

Any risk or benefits?
Participating in this project will have no relation whatsoever to class grade and will not interfere with the students’ school work. If they experience any difficulty with the recordings or interviews they are free to discuss these with the researcher at any time. Participating in the project will add to their understanding of how they learn English. Also, the research will provide information about how Korean students in New Zealand learn English. The students’ privacy and confidentiality will be protected at all times during the project and after it is completed. They will remain anonymous in all reporting. All research data will be stored by the researcher in a secure place at the University of Auckland and destroyed after the period of six years.

If you wish to participate in the project
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Tel: 64 9 373 7599 ext. 83711

Thank you for considering this invitation.
CONSENT FORM IV  
(Teacher) 
THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Learner repair organization in L2 classroom contexts and L2 development 
Name(s) of Researcher(s): Harim Lee

I understand that the principal has agreed to allow the students at _______________(name of the institution) to take part in this research. I have read the Participant Information Sheet I and II, have understood the nature of the research and why the participants have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I understand that the volunteers may need to record up to 10 classroom interactions and 10 recall interviews over the course of 30 weeks.
- I understand that the researcher will be present during lesson for a non-intrusive classroom observation.
- I understand that the researcher will take observation notes and may need to make photocopies of materials used in the class.
- I give assurance that participating or not participating in this project will have no relation whatsoever to class grade or their relationship with the school.
- I understand that there may be cases where I need to arrange seating for the participating students to work together during the lesson.
- I am free to withdraw participation at any time, and to withdraw any data traceable up to the 30th November 2014.
- I (wish / do not wish) to receive the summary of findings.
- I understand that a third party who has signed a confidentiality agreement will transcribe some parts of tapes.
- I understand that the researchers will protect the privacy and confidentiality of all those who are involved in the research at all times and that none of the names will be identified throughout the production of the research or in any publication.
- I understand that data will be kept for 6 years, after which they will be destroyed.
- I understand that this Consent Form will be stored separately from any other data collected.

Name: __________________________  Signature: __________________________
Date: __________________________
Appendix C: Instructions for research participants
(Stimulated recall interviews)

What we're going to do now is listen to some audio clips. I’m going to play the parts where you made changes to what you said on your own and also when your partner asked. There are also parts where you made changes to what other speakers said and where other people change what you said. I am going to play each part, pause and then ask you to talk about that part of the audio. I am mainly interested in getting to know two things: firstly, what you thought was the educational aim intended by the teacher for the activity that you were engaged in. Secondly, what you were thinking at the time you repaired your or another speaker’s utterances, and what you wanted to accomplish by doing so. I can hear what you were saying, but I don't know what you were thinking or why exactly you made those changes. So, what I’d like you to do is tell me what was in your mind at that time when you made changes to what you said.

I am going to ask you questions like the following:

For pedagogic focus
What did you think the teacher wanted you to focus here/at this point/ on during this activity?
What did you think the educational aim of this task/activity was?

For trouble sources
What were you thinking here/at this point/ right then?
Can you tell me what you wanted to change at that point?
Can you remember what you were thinking when your partner said that/those words?

You can always add additional comments and ask me questions at any time.
Appendix D: Coding scheme

Participant Name:
A. Interaction recorded (time/date):
B. Recall comments recorded (time/date):
C. Recall procedure-time record
   a. Set up time:
   b. Instruction time:
   c. Q&A on the procedure:
   d. Total length of the selected excerpt:
   e. Total length of the participants' comments in the stimulated recall:
   f. Total time taken:

D. Coding Scheme

<table>
<thead>
<tr>
<th>Repair</th>
<th>Pedagogical focus identified by</th>
<th>Trouble source identified by</th>
<th>Notes:</th>
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</thead>
<tbody>
<tr>
<td>(Time) Repair indicated by →</td>
<td>Type</td>
<td>Teacher</td>
<td>Learner</td>
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Appendix E: Sample transcripts

Sample transcript of classroom interaction I

File no: YJ 1
Date: 07/04/2014

(0:03:48.6)
T alright. let's have a look at um the questions. so the first question one was What did Coral want basically((writes “What Coral wanted” on the board)). so what did he want?
YJ it had to be a boy?
T good. so a new male leader. good what else. did anyone else get anything else? what Coral wanted?
YJ and he take care of Pi? just a moment?
T umm yeah what sort of men was he?
YJ bum?
T did he have a job?
YJ (  )
T so he was lazy?
YJ sad? *hhh
T and he
YJ drinking?
T drunk a lot of beer.
Okay? NOT good (.).what did (  ) do?
YJ um Coral was not accepted Pi being a leader?
(0.2)
T =uhuh=
Y =so= Pi is eh dissapoint to him?
T so why Pi couldn't be the leader?
Y She was woman
T go::od. good. what else Paikeha do that disappointed Koro?
P (  )
T what else did Paikeha do that make Koro-that disappointed Koro?
YJ oh
((lines omitted))

Sample transcript of classroom interaction II

File no: DJ 3
Date: 30/06/2014

(0:38:48.6)
T have you ever been on a camp?
DJ °hhh hhh yearhh ten camp?
T year ten camp?
Sample transcript of stimulated recall interview

File no: MW 5
Date: 15/10/2014

((Both the researcher and the student are looking at their own copy of instruction sheet, ‘Instruction for research participants’. Researcher reads it aloud to the student))

Researcher

그럼 지금부터 수요일 날 민우학생이 교실에서 녹음한 파일 중에서 민우학생이 본인이 했던 말을 스스로 고치거나, 파트너가 물어와서 고치거나, 그리고 민우학생이 다른 학생들이 했던 말을 고치는 부분, 또 다른 사람들이 민우학생이 한 말을 고친 부분들을 다시 들어볼게요.

((tr.:What we're going to do now is listen to some audio clips from Wednesday. I'm going to play the parts where you made changes to what you said on your own and also when your partner asked. There are also parts where you made changes to what other speaker said and also the parts where other people change what you said.))

한 번에 하나씩 들어보고 오디오를 멈추고, 제가 그 부분에 대해서 질문을 할 거예요. 제가 주로 알고 싶은 건 크게 두 가지예요. 첫째, 선생님이 정한 학습목표가 뭐였다고 생각하는지; 둘째, 그렇게 자기가 한 말, 혹은 다른 사람이 한 말을 고쳤을 때 왜 그렇게 했는지, 그렇게 해서 무엇을 이루고자 했는지예요.

((tr.:I am going to play each part, pause and then ask you to talk about that part of the audio. I am mainly interested in getting to know two things: firstly, what you thought was the educational aim intended by the teacher for the activity that you were engaged in. Secondly, what you were thinking at the time you repaired your or another speaker’s utterances, and what you wanted to accomplish by doing so.))

저는 민우학생이 무슨 말을 했는지는 알겠는데 그런 말을 했을 때 무슨 생각을 하고 있었는지 그리고 정확히 왜 그렇게 말을 했는지 모르니까요. 그러니가 민우학생이 본인 말을 고치거나 다른 사람이 한 말을 고쳤을 때 무슨 생각을 했는지 말해주면 해요.

((tr.:I can hear what you were saying, but I don't know what you were thinking or why exactly you made those changes. So, what I'd like you to do is tell me what was in your mind at that time when you made changes to what you said.))

제가 할 질문들은 대략 이런 거예요.

((tr.:I am going to ask you questions like the following.))
먼저, 학습목표에 대한 건데요
(tr.:regarding pedagogic focus,)
지금 말하는 여기서/이 부분에서/ 이 활동중에 선생님이 원한 학습 목표가 뭐라고 생각했어요?
(tr.:what did you think the teacher wanted you to focus here/at this point/ on during this activity?)
이 과의/문제의 학습목표가 뭐라고 생각했어요?
(tr.:what did you think the educational aim of this task/activity was?)
다음은, 말을 바꾼 이유에 대한 건데요,
(tr.:For the reasons you repaired,)
여기서/이 부분/ 그 때 무슨 생각을 하고 있었어요?
(tr.:what were you thinking here/at this point/ right then?)
여기서 바꾸고자 했던게 원한 얘기해 줄 수 있어요?
(tr.:can you tell me what you wanted to change at that point?)
상대방이 이 말을 했을 때 본인은 무슨 생각을 하고 있었는지 기억할 수 있어요?
(tr.:can you remember what you were thinking when your partner said that/those words?)
혹시 하다가 순서에 상관없이 덧붙일 말이 있거나 질문이 있으면 언제든지 해도 됩니다.
(tr.:you can always add additional comments and ask me questions at any time.)
혹시 지금 질문 있어요?
(tr.:do you have any question now?)
Student 아니요
(tr.:no)
Researcher 그럼 시작합게요.
(tr.:then I will start)
(researcher plays the recording on the laptop)

(researching plays)
T personal personal it's your opinion. you need to include what you think about this article. Not just a summary but your own-what did I say? Your own:
MW what?
T include: your own::
(0.4)
MW ah opinion
MW how. how many paragraphs?
T just one
MW one?
T nods

(researcher stops the recording)

Researcher 여기서 선생님한테 “뭐?”이라고 하십시오 여기서 왜 그런거예요?
(tr.:you say “what?” here. Why did you say this?)
Student 아 못 들어서? 아마 잘못 들어서 그런 것 같아요.
(tr.:ah because I didn’t hear? I think may be because I didn’t hear.)
Researcher 선생님이 "유의온:" 하갈아요. 이럼면 무슨 생각들어요?
(tr.: your teacher goes "your own:". when he does that what comes to your mind?)

Student 무슨 생각이 드나고요?
(tr.: what comes to my mind?)

Researcher 네. 선생님이 이런식으로 말하면
(tr.: yes. when your teacher says something like that)

Student 음 그 다음에 올 발 하라고요.
(tr.: um I need to say what comes after it)

Researcher 아 네
(tr.: ah I see )

Researcher 왜 이렇게 말했어요?
(tr.: why did you say that?)

Student 아니 하나만 쓰라고 하는게 너무 적은데 하나만 쓰라면 좀 믿기지 않아요? 여든 좀 의심스러워요? 묻어봤어요 하[하하]
(tr.: why, he said just one, but I thought that was just too few and I couldn’t really believe it. I was like little suspicious? h[hhh])

Researcher [하하하]
(tr.: [hhhh])
(0.6)

Researcher 여기서의 학습목표는 뭐였던 것 같아요?
(tr.: what did you think the aim of this activity was?)

Student 아까 얘기했던 걸 도대로 줄여서 글 쓰는 거?. 내 의견 같은거.
(tr.: writing? a summary based on what we talked about before. Like my opinions)

Researcher 아아):
(tr.: I see)
(0.2)
음 이제 다음 거 들어볼게요.
(tr.: um I will play the next one now.)
(researcher plays the recording)

((recording plays))

MW huh?
SJ tuberculosis
MW tuh.bo.cu.iosis(1.4)tuhbocooolosis.they will get bad puss and become weak

((researcher stops the recording))

Researcher 여기서 선제량 같이 프린트 아웃 읽다가 "히? "그리고아요.

이거 왜 그런 거에요?
((tr.: here you and SJ were reading a hand-out then you go “huh?”. why?))

Student 단어 못 읽겠어요.
((tr.: because I couldn’t read the word.))

Researcher 그 다음에 “토브콜로시스” 또 “토보쿠로시스” 그러잖아요. 여기서는요?
((tr.: then you say “tuberculosis” and then again “tubacoolosis”. what about here?))

Student 잘 못 읽겠어요,
((tr.: because I couldn’t read it.))
(0.4)
음:: 그래 맞는지, 잘 모르겠어가지고.
((tr.: umm I wasn’t sure whether it was correct, or not.))

Researcher 선례는 그 단어 잘 읽은 것 같아요?
((tr.: Did you think SJ read it well?))

Student ((웃음)) 아니요.
((tr.: ((smiles)) no.))

((lines omitted))
This approach is referred to as ‘unmotivated looking’ in CA literatures. Psatha (1990) notes, “this [unmotivated looking] is, of course, a contradiction or paradox since looking is motivated or there would be no looking being done in the first place. It is a term which is intended to imply that the investigator is ‘open’ to discovering phenomena rather than searching for instances of already identified and described phenomena or for some theoretically pre-formulated conceptualization of what the phenomena should look like” (24-25, n.3).

Such principle of interaction and contextual information relates to the ethnomethodological principle of reflexivity (Heritage, 1984b).

This notion parallels with the concept of noticing in L1 and SLA theories (Schmidt, 1990, 1995).

Seedhouse considered L2 classroom interaction to be the talk produced by teachers and leaners in L2 in orientation to a pedagogical focus. He excluded in his analysis of L2 classroom interaction examples like when the teacher switched from L2 to L1 and moved from a pedagogical focus to an administrative focus. He treated such examples as the teacher “talked out of being” the identity of L2 teacher and the institutional business of L2 classroom interaction (Seedhouse, 2004, p. 201).

In a L2 classroom context, students are found to change their orientation between linguistic identities (natives as opposed to non-native speaker) and institutional identities (a student as opposed to a language expert or teacher) recurrently (Norton, 2000).

For example, in his seminal study, Drew (1992) shows how witness and opposing counsel in courtroom cross-examination use the next-turn proof procedure in relation to the legal focus (testing the validity of testimony) to analyse each other’s turns and make responsive moves in orientation to that focus.

However, in fact, in fluency contexts, side sequences involving purely linguistic correction occurs (negotiation of form, see Ellis, Basturkmen, & Loewen, 2001).

This turn-by-turn understanding displayed in each turn-in-a-sequence is not the same as the understanding objectives of lessons (e.g. learning of a grammatical form, a scientific principle, or how to make a request in a particular language), but it refers to the understanding of temporally situated practices in interaction. This emergent and coherent series of understanding displayed in the sequential organisation of talk can, however, provide evidence for how such educational goals of learning some pedagogical object is achieved.

Though Markee (2008, 2011) does not acknowledge, the ‘other-talk’ (Speech episode 2) in fact constitutes a type of stimulated recall (Gass & Markee, 2000).

Turn Constructional Units (TCUs) end with points of possible completion of unit-types, Transitional Relevant Places (TRPs) which make turn transition relevant but not necessary. This means, as Schegloff (1996, p. 55) insists, that “TCUs are potentially complete turns […] [O]n their possible completion, transition to a next speaker becomes relevant (although not necessarily accomplished)”. The TCU is thus a ‘unit’ in conversation that is defined with respect to turn-taking: a potentially complete turn. In their further discussion of TCUs, Sacks, Schegloff, and Jefferson (1974) mostly used examples of one- or multi-unit turns, in which indeed the ‘units’ were TCUs in this sense, suggesting a systematic relation between TCUs and grammatical units:

“[t]here are various unit-types with which a speaker may set out to construct a turn[…] Unit-types for English include sentential, clausal, phrasal, and lexical constructions […]. Instances of the unit-types allow a projection of the unit-type under way, and what, roughly, it will take for an instance of that unit-type to be completed (Sacks, Schegloff, and Jefferson 1974, p. 702).”
xii According to the Cambridge English Language Assessment, a student at *Cambridge English: Preliminary* Test Level B1 has “mastered the basics of English and now has practical language skills for everyday use” (Cambridge English, 2016, [http://www.cambridgeenglish.org/exams/preliminary-for-schools/](http://www.cambridgeenglish.org/exams/preliminary-for-schools/)).

xiii All recall comments were collected within the first two days of classroom interaction. However, the time (hours) gap between classroom interaction and recall for each participant varied as it depended on their school timetable and personal circumstances.

xiv Line 02 could also be seen as L’s attempt to verify ‘his’ production by the teacher as they were working on the same task; rather than offering repair on K’s production in the previous turn.

xv In the stimulated recall interview, K confirmed that he initiated self-repair to repair the verb ‘take’ and wanted the teacher to verify the appropriateness of the verb in the phrasal verb ‘take education’.

xvi Thus in fact, the interactional context in which this conversation takes place should be described as a Focal participant-Learners interaction during a group-work, but this particular repair takes place between the teacher and the focal participant.

xvii L’s stimulated recall comment reinforces the CA analysis where the stretched ‘aaa’ preceding ‘yeah’ is treated as an acknowledgement or a realization of new information (Schegloff, Jefferson, Sacks, 1977).

xviii In the stimulated recall interview, in line with the researcher’s analysis, L confirmed that she treated the teacher’s repair as a clarification request (i.e. the teacher had a problem understanding the content of L’s question in line 01).

xix The concept of task used in this literature is not the concept of task as specified in terms of task-as-workplan in the task-based language teaching literature (i.e. intended pedagogy, the plan prior to classroom implementation of what the teachers and learners will do). Task-as-workplan is always an etic specification and it has a very weak ontology (Seehouse, 2004). Although the task-as-workplan may exist in the physical shape of a lesson plan or textbook unit, the actual event is always the *task-in-process*. Here, we are dealing with interactions in which we can emically demonstrate in the details of the interaction (task-in-process) that the learners are focused on.

xx The students were to provide their own answers about their learning style. They needed to provide examples of their learning style(s) and also explain what aspects of their learning style they thought important and why.

xxi In doing so, the focal participant K and the teacher engages in repair work. In line 20, K employs SISR but leaves it incomplete, making the following turn available for a repair completion by others. Subsequently, the learner’s SISR expands to SIOR where the *other* is the teacher. The teacher provides a completion by recycling the repairable in a modified syntactic frame (21).

xxii Schegloff, Jefferson, and Sacks (1977) associates self-initiated repairs as shown in Example 2.2 with word searching.

xxiii Such repair sequences resolving non-understanding problems can be treated as an episode in the main story, which Schegloff, Jefferson, and Sacks (1977) refers to as a *side sequence* and Gass and Veronis (1985) as *vertical sequence*.

xxiv The terminology in the brackets indicate terms used by van Lier (1988)

xxv There were two instances of repair initiated by the teacher in meaning-and-fluency contexts which resolved production problem. However, no teacher-focal participant repair was found in meaning-and-fluency contexts focusing on understanding problem.

xxvi There were two occasions in which the peers initiated repair during meaning-and-fluency contexts focusing on resolving production problem.

xxvii It is also a possibility that production problems were more frequently identified in the repair work between the teacher and the focal participant because the teacher saw it as her responsibility to repair them. In contrast, the peers may have been less likely to point out the focal participant’s production error due to their limited English or to ‘save face’ (Philp, Walsh, & Basturkmen, 2010).

xxviii This one instance of repair was found in interaction between learners during pair work in a task-oriented context.
It seems that in general, there was lack of repair work in form-and-accuracy contexts for Participant 7 as the only instances of repair found in such contexts were OISR B sequences.

This one instance of repair was found in interaction between the focal participant and his peer in a task-oriented context.

In the CA literature, transitional space repair has not been treated as a fully reliable source of repair position; it is regarded as a same-turn repair (Schegloff, Jefferson, and Sacks, (1977, p. 269) footnote, Sacks, Schegloff, and Jefferson (1974, footnote 12). Transitional space repairs in this study were also categorised as same-turn repairs.

As mentioned in Methodology, not all participants were available for all eight recordings.

The focal participants’ English as a second language proficiency test scores improved over time. These tests were general tests designed by the schools, which were held at the end of each term. The tests were comprised of reading, writing, grammar, and speaking components. The relationship between the focal participants’ language proficiency and repair practice was beyond the scope of this study.

As mentioned in the results section for Research Question 2, Participant 1 employed SISR least frequently within her repair work and among all participants.

Previous to this conversation, the whole class had watched a video on how mankind is destroying the earth. In the excerpt below, Learner 1 (L1) is describing a part from the video where people slaughtered animals as a sport. Learner 2 (L2) thinks that L1 is talking about a different part of the film where people killed animals for chemical experiments. When this misunderstanding between the two learners becomes apparent (lines 01-07) to Participant 7, who has been a listener up to this point, offers to repair it (line 08) by explaining what L1 meant in line 01 (i.e. trouble source).

Example 5.37
01 L1 I think human must kill some animals( ) can't can't
02 we can't kill animals just for fun like like this people.
03 L2 ( ) purpose
04 L1 oh yea yes and eh-
05 L2 no people. human killed the animal for purpose. for the
06 chemistry. for the development of chemistry.
07 L1 eh [but but ( ) ]
08 P7 → [ah he means. did you see deh deh human killed the bear and
09 bird with gun? and deh slash the yeah bears neck[and]
10 take(increased in volume) a photo?=
11 L1 = [yes yeah he just for fun not for some purpose

Almost half of the repairs occurred during meaning-and-fluency activities and the other half during form-and-accuracy contexts in Participant 5’s data.

Except for Participant1 who engaged in more SIOR B sequences than SIOR A.

Fox and Jasperson (1995) pointed out some of the risks in choosing the syntactic categories for the analysis of repair:

Firstly, it was not possible to know at the outset of the analysis whether the phenomenon in question was indeed organized according to syntactic categories (e.g. Schegloff, 1987 as cited in Fox and Jasperson 1995, p. 85). Secondly, the categories used in the analysis, while based on the terms used by linguists, they may not be the most appropriate syntactic categories to describe repair. It was possible that repair was indeed organized through syntactic categories and could be accounted using syntactic categories but they may not be the categories typically recognized by linguists […]. Further, it was possible that a repaired utterance could have more than single interpretation. That is, it is not entirely just to prescribe single interpretation of a repair utterance (Fox & Jasperson 1995, p. 85)
The investigation of repair organization in terms of syntactic categories in Fox and Jasperson (1995) was based on the analysis of SISR in L1 English within the same TCU as the trouble source. In their description of the syntactic constituents, the authors used the term during and after to distinguish a repair instance that is produced during its construction (i.e. in the middle of its production and therefore incomplete) as opposed to the one initiated after the target syntactic constituent is possibly complete (e.g. the final syllable in the word is hearably uttered). The latter category also includes the instances where the target syntactic constituent is cut-off with a glottal stop during its production but had gone far enough to be “hearable” as a particular constituent (hence possibly completed) (Fox & Jasperson, 1999, p. 92).

The most direct discussion of repair and syntax in the literature can be found in Schegloff (1979). The discussion is specific to L1 self-repair. As explained in the analysis of Research Question 2, this alternation in the repair completion suggests that the speaker A is treating the repair initiation in the previous turn as a repair on a production problem as opposed to an understanding problem. If it were the latter, the repair completion would have been a repetition of the whole TCU without syntactic alternation.

“[…] speakers and recipients bring a great deal of (un/conscious) experience and knowledge to bear in deciding what kinds of phrases are structurally like other phrases, or in deciding what is acceptable English and what is not. Understanding a repaired utterance is thus seen, like all social activities, as essentially interpretative, not mechanistic” (Fox & Jasperson, 1995, p. 89).

The term ‘recycle’ for example, in ‘recycle word’ includes recycling of a word as in disguise.disguise, as well as parts of a word as in dis.disguise.

In Example 3.35, it can be possible that two patterns of repair were involved. First is the replacement of exercise with another noun break or possibly break time. This is a Type B repair. Then, the speaker recycles the direct object noun phrase [adjective+noun], but replaces more with a lot of (Type D).

One possible argument for this exception could be that the participant has been treating [it’s really+adjective] as a L2 chunk.

This particular repair pattern was found only with repair initiation on the entire TCU. For the types of repair completion pattern in SIOR, OISR and OIOR, the term ‘on’ was used to refer to the syntactic properties of the target constituent for which the repair proper was provided.

This pattern always followed the repair initiation in a form of a Designedly Incomplete Unit. The significance of pauses or non-verbal means of repair in L2 production is beyond the scope of this research and awaits further investigation. Pauses in L1 and L2 studies have been an indication of units of syntactic processing (Barik, 1979; Boomer, 1965; Goldman-Eisler, 1958; Tavakoli, 2010; Taylor, 1967).

In most sentences for most native Koreans, using pronouns (as well as articles) is redundant and even unnatural. For instance, the words in the brackets in the following examples can be omitted in the Korean language while this is not the case in the English language. Omission of these elements in fact makes the sentence sound more natural than when they are included.

Example 4.15
(I) bumped into someone, and (that person) spilt (the) coffee on (his/her/the/my) shirt.
So (I) went (there), but (she) wasn’t (there).

The repair in Example 4.30 can be seen as repair during the predicate nominal/adjective. Here, Participant 5 is talking about his friend who got suspended for driving a vehicle. The repaired segment [driving*] can be seen as a predicate nominal in a sentence: it is only driving; but the school has been too strict on him.

Prior to this TCU, Participant 5 had been talking about how strict his parents were with him using prepositional phrases such as about school, about grades, about cleaning my room. The repaired segment [chopsticks*] thus, could be treated as a noun in a prepositional phrase as in my father was strict about chopsticks.

It is not to suggest that SISR sequences are somewhat completely independent organisms in the sequential organization of interaction. A turn that contains SISR can always be a second utterance (i.e.
second pair part in an adjacency pair), which is functionally dependent on the first pair part, and at the same time it projects what comes in the subsequent turn. The argument is that the source of the problem is not in the previous turn produced by the interlocutor but is in one’s own ‘current’ turn.