The role of recasts in the interactions of native-speakers of English with Korean English language learners

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The role of recasts in the interactions of native-speakers of English with Korean English language learners

by

Hyunjung Lee

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Major: Teaching English as a Second Language/Applied Linguistics

Program of Study Committee:
Roberta J. Vann, Major Professor
Volker Hegelheimer
Donna Niday

Iowa State University
Ames, Iowa
2008

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ABSTRACT

This study partially replicates that of Braidi (2002). Like the original, it investigates occurrences and use of recasts, that is, reformulations of incorrect utterances, in relation to the number of grammatical errors in conversations of NSEs (Native Speakers of English) and NNSEs (Nonnative Speakers of English) and examines whether different types of tasks can affect the occurrences and use of recasts. In contrast to many previous studies, I examine here the occurrences of recasts in non-instructional interactions between NSEs and NNSEs.

Five dyads of American teaching assistants and Korean graduate students at Iowa State University participated in performing two different types of tasks, a picture description and a spot-the-difference task. Their performances were audio/video recorded and transcribed with Transana 2.0, a transcription software program.

For data analysis, frequency of recasts was counted and NNSE responses to recasts were also counted, according to the classification of Braidi (2002) and a chi-square test and a Fisher’s exact test were used to find statistical significance. The results showed similarities to those of Braidi’s (2002) study in that recasts occurred less than non-recasts in the frequencies of recasts predicted by the level of grammaticality. However, in contrast to Braidi’s result showing a significant relationship between the level of grammaticality and occurrences of recasts, this study showed non-significant relationship between them. Furthermore, it appears that task types did not affect the occurrence of recasts. However, the study reveals considerable variation between dyads regarding both the occurrences of recasts and NNSE responses to recasts.
CHAPTER 1. INTRODUCTION

In this thesis, I report on an investigation on the extent to which recasts, that is a reformulation of incorrect utterances, naturally occur in the interactions of dyads of Korean ESL students and native-speakers of English. I also examine how different types of tasks as well as number of errors in utterances produced by these Korean learners affect the occurrences of recasts of the English interlocutors.

I became interested in the topic of recasts when I attended a presentation given by Roy Lyster (2007) entitled: “Interactional feedback in second language communicative classrooms”. Lyster noted that a variety of different feedback occurred in response to the discourse of NNSEs (Nonnative Speakers of English) in a classroom situation. This caused me to wonder whether or not recasts as a type of feedback given in classrooms might also occur in non-classroom conversations between NSEs (Native speakers of English) and NNSEs (Nonnative speakers of English) when the purpose is not solely to learn English but rather to simply communicate.

Although there has been much research on recasts in classroom situations and experimental studies (Ammar & Spada, 2006; Bigelow, Delmas, & Hansen, 2006; Han, 2002; Leeman, 2003; Loewen & Philp, 2006; Lyster, 1998a, 2004; Lyster & Mori, 2006; Lyster & Ranta, 1997; McDonough & Mackey, 2006), there have been few studies about whether or not recasts naturally occur in communications between NSEs and NNSEs and how NNSEs respond to NSEs recasts (Braidi, 2002; Mackey, Oliver, & Leeman, 2003; Oliver, 1995) in second language research. Hence, in this study I will examine those two aspects of
occurrences of NSE recasts and NNSE responses to them in natural interactions between NSEs and NNSEs.

**Background**

One of the major second language acquisition (SLA) theories, the interaction hypothesis (M. Long, 1985), emphasizes interaction between the learners and their peers, teachers and other interlocutors based on the notion that language learning is facilitated through social interaction. This idea has been supported by many L2 language researchers (Gass & Varonis, 1989; M. Long, 1985; T. Pica & Doughty, 1985; T. Pica, Young, & Doughty, 1987) who argued that language learners can best learn a language through negotiating meaning or forms with their interlocutors when communication breakdowns occur in their interactions. Negotiation is viewed here as “communication in which participants’ attention is focused on resolving a communication problem as opposed to communication in which there is a free-flowing exchange of information” (Gass, 1997). It is important to note that negotiated communication encompasses both negotiation of form and negotiation of meaning—areas that, as Gass (1997) points out, are not necessarily easily teased apart. A key component of all negotiated interactions is input in that the kind of input given to language learners might affect the extent to which negotiation occurs.

Specifically in conversations between NNSEs and NSEs, NSEs might provide NNSE interlocutors with positive evidence, that is, “models of what is grammatical and acceptable”, according to Long (1996, p. 413). Gass (1997) defined positive evidence as the input which is made up of the set of well-formed
sentences to which learners are exposed. Whereas positive evidence is correct utterances of input, negative evidence provides the learner with information about the incorrectness of an utterance (Gass, 1997). This provides negative feedback, which indicates to learners that a form they produced is ungrammatical. According to Long and Robinson (1998), negative evidence is divided into two types: preemptive (i.e. explanation of grammar before an actual use) and reactive type (i.e. feedback) and this reactive type is classified into explicit (overt error correction) and implicit feedback. Long and Robinson consider recasts, that is, reformulations of incorrect utterances, to be a type of implicit negative feedback which might lead to raising learners’ consciousness of grammatical errors or improve their ability to notice those errors and thus result in facilitating language learning.

In this thesis, I will study the occurrence of NSE recasts and NNSE responses to them in conversations between dyads of a NSE and a NNSE, specifically an adult Korean ESL student and an adult teaching assistant NSE from North America. This provides a useful complement to Braidi’s (2002) study in which the participants were made up of ten dyads of Japanese ESL learners in an intensive English program interacting with American undergraduate students. One of the reasons I worked with Korean learners was that previous research on recasts has included a variety of participants, but very little of this has been conducted using Koreans exclusively. Also, I wondered whether or not results might differ if participants were Koreans, not Japanese, even though it seems that they show similar pattern of interaction in Asian culture.

Studies on recasts have included many which observed classroom situations (Loewen & Philp, 2006; Lyster, 1998a, 1998b; Lyster & Mori, 2006;
Lyster & Ranta, 1997; Ohta, 2000; Panova & Lyster, 2002) and experimental studies (Ammar & Spada, 2006; Bigelow et al., 2006; Carpenter, Jeon, MacGregor, & Mackey, 2006; Egi, 2007; Han, 2002; Leeman, 2003; MacKey & Philp, 1998; Philp, 2003). In classroom observation studies, natural occurrences of recasts and effectiveness as feedback were examined while in experimental studies, planned recasts were provided to examine whether recasts are effective in learning grammatical elements of foreign languages. On the other hand, there have been few studies which examined whether or not recasts also may occur in L2 interactions which were not specifically designed to elicit planned recasts. Therefore, it is necessary to examine how recasts occur depending on the level of grammaticality in non-classroom NSE/NNSE interactions and how NNSEs respond to NSE recasts.

**Purpose of this Study**

This thesis is a partial replication of Braidi’s (2002) study on recasts. Braidi (2002, p. 20) defines a response as a recast if it incorporates the content words of the immediately preceding incorrect NNSE utterance and also changes or corrects the utterance in some way.

The purpose of Braidi’s (2002) study was to investigate the circumstances in which recasts occur in NSE/NNSE adult interactions, according to different levels of NNSE utterance grammaticality (i.e. single error vs. multiple errors) and in different types of negotiation. She used three different negotiation types (non-negotiated interactions, one-signal negotiated interactions and extended negotiated interactions) determined by the number of turns and length of
negotiation. She also examined how adult NNSEs responded to NSE recasts. In other words, she focused on the occurrences of recasts, depending on the degree of grammaticality, the environments and conditions under which NNSEs reacted to NSE recasts.

I follow Braidi’s working definition of recasts and examine the occurrences of recasts and the responses of NNSE adults to them while dyads of NSE/NNSE perform two different types of communication tasks (a one-way information gap task and a two-way information gap task). A one-way information gap task is an activity in which one interlocutor is a conveyer of information to the other orally and the other interlocutor who does not have any information is a receiver of information who identifies the missing information in detail. That is to say, information to be delivered flows in one direction from one interlocutor to the other in a one-way information gap task. However, a two-way information gap task is an activity in which each interlocutor becomes a receiver and a conveyer of information at the same time. Interlocutors in each dyad are given different information, so they need to exchange information and obtain the missing information from their partners.

One limitation of Braidi’s (2002) study is that she did not examine to what extent recasts may differ depending on the task types. Many studies examining recasts in interactions between NSEs and NNSEs have used these kinds of information gap tasks as a data-collecting tool, but they did not address how those two types of tasks might affect recasts. Hence, it seems valuable to study to what extent recasts may differ depending on the task types. In this study, I investigated whether or not those two types of communication tasks (a one-way information
gap task and a two-way information gap task) might influence the frequencies of recasts, especially in response to grammatical errors.

In order to obtain individual background information about participants, to find to what extent Korean ESL learners were aware of NSE corrections, and to determine participants’ preference for tasks, questionnaires for NSEs (see Appendix D) and NNSEs (see Appendix E) were given. Transana 2.20, a transcription software program was used to transcribe the conversation of participants and those transcriptions were analyzed; utterances in each turn were analyzed by lexical errors, phonological errors, and the degree of grammaticality, specifically whether they had one single error or multiple errors. Then, I checked if either recasts or non-recasts occurred following Braidi’s (2002) study and when recasts occurred, I looked at how NNSEs responded to NSE recasts and classified them into the categories, again following Braidi’s (2002) procedures.

Research Questions

In Braidi’s (2002) study, she asks the following questions:

RQ 1. Under which circumstances do recasts occur in NS-NNS adult interaction?
   a. Do recasts occur in all negotiation types (i.e., non-negotiated, one-signal negotiations, and extended negotiations?)
   b. Do recasts occur in response to different levels of utterance grammaticality (i.e., single error vs. multiple error?)

RQ 2. How and under which conditions do adult NNSs respond to NS recasts?

In her study, Braidi focused on occurrences of recasts depending on negotiation types and level of utterance grammaticality in research question 1 and she investigated adult NNSE responses to NSE recasts in research question 2.
This current study similarly investigated occurrences of recasts in response to level of grammaticality (single error vs. multiple errors in NNSE utterance), but it covered occurrences of recasts in response to lexical or phonological errors as well. Another similarity was that I also examined NNSE responses to NSE recasts in the same way Braidi (2002) presented, but added one more question about NNSE and NSE perception of corrective feedback. In addition, I investigated another question about whether or not different types of tasks affected the occurrences of recasts she had not examined in her study. Therefore, this study investigated 1) the occurrences and frequencies of recasts and 2) the responses of NNSEs to NSE recasts and the extent to which NNSEs successfully incorporate NSE recasts.

Occurrences of recasts were examined in terms of types of errors and communicative tasks, specifically:

1. (a) To what extent do recasts occur in response to lexical, phonological, and grammatical errors?

   (b) Do recasts differ in response to the number of grammatical errors (i.e. single error vs. multiple errors) in the original NNSE utterances? If so, in what ways?

2. (a) Does task predict recasts? If so, in what type of task (i.e. a one-way information gap activity vs. a two-way information gap activity), do recasts in response to grammatical errors occur the more frequently?

   (b) Does task type appear to affect grammatical recasts in other ways?

With regard to the responses of NNSEs to recasts,

3. How do adult Korean graduate students at an intermediate speaking/listening proficiency in English react to NSE grammatical
recasts? To what extent are the NNSEs in this study unconsciously aware of the corrective feedback given by NSEs?

**Thesis Organization**

In this chapter, I have provided a brief introduction and background of the topic of this research as well as the research questions of this study. In Chapter 2, I review relevant literature in two sections in general. The first section provides a definition of recasts according to researchers, and studies on planned recasts and unplanned recasts, which occurred in classroom or experimental studies. In addition, in this chapter I address the necessity of examining occurrences, uses, and incorporation of recasts in non-classroom situations. The second section provides a review of the characteristics of tasks, which were used as a tool for collecting data.

In Chapter 3, I present a detailed description of the methods and procedures used to conduct the research, including a description of participants, tasks and questionnaires. In addition, I describe the ways conversations were recorded with audio/video recording tools, transcribed with a software program, Transana 2.20 as a transcribing tool and how decisions about recasts and grammaticality were made. I also describe the ways the data were tabulated, following Braidi’s (2002) categories and the use of statistical analysis of a chi-square test and a Fisher’s exact test in order to find significance of recasts in relation to the degree of grammaticality and different types of tasks used in this study.
In Chapter 4, I provide the results with tables, discuss the findings according to the research questions and compare the results with those of Braidi’s (2002) study. Finally, in Chapter 5, I summarize the results, discuss implications and limitations of the research, and present suggestions for future research in this area. The findings suggest that recasts occur in settings beyond the classroom and thus may influence NNSE English learning.
CHAPTER 2. LITERATURE REVIEW

Overview of the Chapter

This chapter presents how researchers in L1 and L2 defined recasts as well as the role and effectiveness of recasts. It also reviews the characteristics of two information gap tasks, that is, a one-way information gap task, and a two-way information gap task, which were used to prompt the conversation for collecting data.

Research on Recasts

Definition of recasts

Recasts have been regarded as a kind of implicit negative feedback in that they do not indicate errors to learners explicitly, but provide corrected forms without overt instruction. The example below shows how recasts occurred in conversation between a NNSE and a NSE in this study and an arrow represents a recast which occurred in this conversation.

NSE: What are they doing?

NNSE: Two dogs seems like to fight.

NSE: Two dogs are fighting? →

In this example, a NNSE used verb and to-infinitive incorrectly and a NSE provided a recast, a corrected utterance without indicating directly to a NNSE that she said a wrong sentence.

The term recasts originated from L1 acquisition research in mostly environments of talk between children and mothers or caregivers (Bohannon, Padgett, Nelson, & Mark, 1996; Demetras, Post, & Snow, 1986; Farrar, 1990; K.
E. Nelson, Carskaddon, G., & Bonvillian, J.D., 1973; K. E. Nelson, Denninger, Bonvillian, Kaplan, & Baker, 1983). In L1 research, Nelson et al. (1973) defined recasts to have both error correction and provision of alternative patterns or missing information in children’s utterances. Bohannon et al. (1996) extended the definition as follows: “Growth recasts are a broad set that includes all recasts that display relations between an initial child utterance and a recast that expands, deletes, permutes, or otherwise changes the platform while maintaining significant overlap in meaning” (p.551).

Compared to treating recasts as a broad concept in L1 research, L2 researchers have focused mainly on feedback as an error correction in different classroom and experimental situations. Long (1996, p.434) adapted the definition of recasts in L1 research to L2 research and referred to recasts as utterances that change one or more components (subject, verb, object) while still referring to its central meaning. But he updated the concept of recasts with a notion that a corrective recast may be defined as a reformulation of all or part of a learner’s immediately preceding utterance in which one or more non-target-like (lexical, grammatical, etc) items is/are replaced by the corresponding target language form(s), and where, throughout the exchange, the focus of the interlocutors is on meaning, not language as object (2006, p. 77).

The characteristic of recast as a corrective feedback in definition of Long is aligned with that of Lyster and Ranta (1997) in classroom circumstances. Lyster and Ranta (1997, p. 46) suggested that “…recasts involve the teacher’s reformulation of all or part of a student’s utterance minus the error” in his study of French immersion classes which focused on content-based learning. In another classroom situation, Sheen (2006) stated that “a recast consists of the teacher’s
reformulation of all or part of students’ utterance that contains at least one error within the context of a communicative activity in the classroom” (p. 365). So the definition of recasts in her study was also similar to that of Lyster and Ranta (1997), emphasizing a role of feedback to correct errors in utterances of students.

Recasts have also been studied in non-instructional settings with Braidi (2002) as a prime example. In this setting she noted that “a response was coded as a recast if it incorporated the content words of the immediately preceding incorrect NNS utterance and also changed and corrected the utterance in some way (e.g. phonological, syntactic, morphological, or lexical)” (p.20). In her study, she also emphasized a recast as a type of corrective feedback of certain linguistic features.

In this thesis, because I am replicating Braidi’s work in a non-classroom setting between NNSEs and NSE, I have adopted Braidi (2002) definition of recasts.

The role and effectiveness of recasts

Table 1 provides a summary of recent L2 studies on recasts. Recasts can differ in a number of ways. First, a recast might occur either consciously and purposefully (planned recasts) or unconsciously or naturally (unplanned recasts) on the part of the speaker and the recasts might be given in a number of different situations: experimental situations or classroom settings.

A survey of the literature indicates that planned recasts are generally given by NSE participants who were asked to provide recasts on errors in NNSE utterances. Such situations are typically experimental or laboratory studies (Ammar & Spada, 2006; Egi, 2007; Han, 2002; Leeman, 2003; Mackey, Gass,
McDonough, 2000; MacKey & Philp, 1998; McDonough & Mackey, 2006). In contrast, unplanned recasts usually occur in classroom observation studies, which investigate how teachers give corrective feedback (Loewen & Philp, 2006; Lyster, 1998a, 1998b; Lyster & Ranta, 1997; Panova & Lyster, 2002; Sheen, 2006). However, there have been very few studies on recasts which occurred in natural interactions of NNSEs and NSEs, except for some studies of negative feedback as a general concept without especially focusing on recasts in L2 research (Mackey et al., 2003; Oliver, 1995). Therefore, issues here are the question of possibility of occurrences of recasts and the degree of incorporation by learners to examine the effectiveness in natural interactions of NNSEs and NSEs.
Recasts were used by teachers with the greatest proportion of feedback, followed by prompts, and explicit correction in both settings. The greatest proportion of uptake and repair in Japanese immersion (JI) setting followed recasts, while prompts were the greatest proportion of uptake and repair in French immersion (FI). The difference of the rate of uptake between JI and FI came from the teaching style that repetition and accurate oral production was emphasized in JI.

Lyster & Mori (2006) found that recasts (55%) were used by teachers, followed by other types of feedback such as elicitation, clarification request, etc. Recast led to the least incorporation, and elicitation the most incorporation. Elicitation and metalinguistic feedback (comments or information indicating there is an error somewhere) resulted in the most successful student-generated repair.

Students in four sections of grade 4 and two sections of grade 6 in immersion classes.

What is the distribution of different types of interactional feedback in French and Japanese immersion classrooms?
What is the distribution of uptake following different types of interactional feedback?
What factors contribute to similarities and differences in the occurrences of feedback, uptake, and repair across these two instructional settings?

Findings:
The recasts (55%) were used by teachers, followed by other types of feedback such as elicitation, clarification request, etc. Recast led to the least incorporation, and elicitation the most incorporation. Elicitation and metalinguistic feedback (comments or information indicating there is an error somewhere) resulted in the most successful student-generated repair.

French immersion classes: three grade 4 sections and one split 4th & 5th grade section
Japanese immersion classes: two 4th grade sections & one 5th grade section

Recasts were used by teachers with the greatest proportion of feedback, followed by prompts, and explicit correction in both settings. The greatest proportion of uptake and repair in Japanese immersion (JI) setting followed recasts, while prompts were the greatest proportion of uptake and repair in French immersion (FI). The difference of the rate of uptake between JI and FI came from the teaching style that repetition and accurate oral production was emphasized in JI.

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Table 1. Summary of recent studies on recasts in classroom observational and experimental settings

<table>
<thead>
<tr>
<th>Classroom observation studies</th>
<th>Research Questions</th>
<th>Participants</th>
<th>Findings</th>
</tr>
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<tbody>
<tr>
<td>Lyster &amp; Ranta (1997)</td>
<td>What are the different types of corrective feedback and their distribution in communicatively oriented classroom? What is the distribution of uptake following different types of corrective feedback? What combinations of corrective feedback and learner uptake constitute the negotiation of form?</td>
<td>Students in four sections of grade 4 and two sections of grade 6 in immersion classes</td>
<td>The recasts (55%) were used by teachers, followed by other types of feedback such as elicitation, clarification request, etc. Recast led to the least incorporation, and elicitation the most incorporation. Elicitation and metalinguistic feedback (comments or information indicating there is an error somewhere) resulted in the most successful student-generated repair.</td>
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<td>Experimental studies</td>
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<td>Findings</td>
</tr>
<tr>
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<tr>
<td>Han (2002)</td>
<td>Is the ability to recall a recast related to the literacy level of the learner?</td>
<td>Eight adult ESL female learners were divided into two groups; recast vs. non-recast group.</td>
<td>A recast group performed much better than non-recast group in control over tense consistency on two posttests.</td>
</tr>
<tr>
<td></td>
<td>Is the ability to recall a recast related to the length of the recast? Do learners at higher literacy levels have better recall of longer recasts than learners at lower literacy levels?</td>
<td>8 adolescent and young adult Somali learners of English were divided into higher and lower literacy level, depending on the mean scores of L1 and L2.</td>
<td>The awareness of tense consistency of recast group was much higher than that of non-recast group by showing much more frequent self-corrections of tenses.</td>
</tr>
<tr>
<td>Bigelow et al. (2006)</td>
<td>Is the ability to recall a recast related to the number of changes made by the recast? Do learners at higher literacy levels have better recall of recasts with more changes than learners at lower literacy levels?</td>
<td></td>
<td>The literacy level was significantly related to the ability to recall recasts; The more literate group recalled in correct or modified form than the less literate group. With regard to relationships of recall ability to the length of recasts and number of changes made by recasts, significant differences were not shown in both length of recasts and number of changes.</td>
</tr>
</tbody>
</table>
Recasts and primed production (a learners' use of the question form provided in the recast to ask a new question) were considerably correlated with improving question forms whereas repetition of recasts was not.

Recast group: 39 EFL learners at university in Thailand vs. no feedback group: 19 EFL learners

What is the relationship between recasts, learners' responses to recasts (primed production vs. repetition), and their development of ESL question forms?

McDonough & Mackey (2006)

Table 1. (continued)

<table>
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Natural occurrences of recasts in classroom observation studies

One of the major findings concerning recasts in classroom observation studies, is that of all potential types of feedback, recasts occurred more than 50% proportion, but the rate of recast incorporation by the student was low, compared to the other types of feedback (Loewen & Philp, 2006; Lyster, 1998a, 1998b; Lyster & Mori, 2006; Lyster & Ranta, 1997; Ohta, 2000; Philp, 2003).

In terms of recasts in response to types of errors, Lyster (1998a) investigated what type of feedback was given by teachers depending on the error types, that is, grammatical, lexical, phonological errors and unsolicited uses of L1 in French immersion classes. He transcribed and analyzed 18.3 hours of lessons and found that grammatical and phonological errors and unsolicited use of the L1 were all likely to provoke corrective feedback. For example, grammatical errors elicited recasts 72% of the time, phonological errors 64 % of the time, and unsolicited uses of L1 50% of the time. With regard to repairs made by the language learner following recasts per error type, only one-third of all the grammatical repairs made followed recasts; instead, most repairs followed negotiation of form, even though teachers used recasting as the most frequent form of corrective feedback. However, phonological errors showed the highest number of repairs following recasts. Similar results indicating that recasts were incorporated at a low rate into the corrections made by language learners also was shown in other studies by Lyster (1998b) and Lyster and Ranta (1997).

Another study had similar results. Loewen and Philp (2006) examined the provision and successful incorporation of recasts in interactions between teachers and students throughout 17 hours of adult ESL classes at intermediate and upper
intermediate level of proficiency. Loewen and Philp also, similar to Lyster (1998a, 1998b) found that recasts consisted of 50% in classroom situations, followed by inform (providing inform) and elicitation (eliciting a response from the learners) but that elicitations led to higher rates of successful incorporation than recasts.

In another study focusing on recast incorporation of individual students, this time with adult foreign language learners of Japanese studying academic English at an advanced level, Ohta (2000) analyzed the teacher’s corrective feedback in classroom instruction in which the main focus was on linguistic forms. The interesting point in her study was that she examined the private speech, that is, oral speech directed by the student to himself/herself by putting microphones on individual students when the teacher gave corrective feedback. The results showed that other learners acting as listeners were more likely to respond to a recast in their own private speech than was the individual learner who had made the error that was directly addressed by a teacher when a recast was given. Also, somewhat surprisingly there was little rate of incorporation of recasts by learners who themselves had made the error the teacher was targeting.

**Planned recasts in experimental studies**

In natural settings, research suggests that recasts are widely used by teachers in classrooms even though students infrequently incorporate recasts. Experimental studies have been another setting in which the effectiveness of preplanned recasts have been examined. When recasts as feedback have been compared with non-recasts, or another type of feedback, recasts have been shown to be effective for
students in learning grammatical features in some experimental or laboratory studies (Doughty & Varela, 1998; Han, 2002; Leeman, 2003; M. Long & Robinson, 1998; McDonough & Mackey, 2006). However, it was not clear that recasts which occur in natural interactions would be effective in repairing grammatical errors.

The issue of effectiveness was taken up by Doughty and Valera (1998) who examined the effects of recasts on learning past-tense by ESL learners. Results showed that recast group improved in learning past-tense over the control group. Similarly, Han (2002) examined effectiveness of recasts on tense consistency in L2 written and oral narratives between two groups – recasts groups and non-recasts groups at an upper intermediate level of an intensive English course over 11 sessions. The posttest results indicated that recast groups performed better than the non-recast group in using tense consistently as sessions progressed and that recast groups showed more frequent self-corrections of tenses. This suggests that the recast group was more aware of tense consistency than non-recast group. Leeman (2003) in her study of acquiring number and gender agreement with low-proficiency of L2 learners of Spanish also found that a group receiving recasts showed significant improvement over the control group.

Similarly, Bigelow et al. (2006) studied the recall ability of recasts (the participants’ repetitions of the recasts) between two different literacy levels of L1 and L2 – higher literacy and a lower literacy level and found that the higher literacy group showed higher recall ability in correct or modified form than the less literate group. Consequently, high level learners showed a higher recall ability than the lower level. Similar results were found in a study of Philp (2003). Philp studied the
relationship between recall ability and different proficiency groups of NNSEs in noticing NSE recasts on grammatical errors in question formation in dyadic interactions of NNSE and NSE. The results showed that the high and intermediate groups performed considerably much more accurate recall of recasts than the low group and that recasts can be used effectively on question formation development of ESL learners.

In summary, in classroom situations, researchers studied natural occurrences of recasts and the effectiveness of recasts in relation to the rate of incorporation by learners, compared to other feedback, which occurred. In experimental studies, researchers investigated the effectiveness of planned recasts compared to non-recasts or other type of feedback and also examined recasts in relation to learners’ incorporation and proficiency level, etc. But current research shows few studies have been done on unplanned natural recasts regarding their effectiveness in interactions of dyads of adult NSEs and NNSEs in non-instructional settings. Consequently, in this study I have aimed to address this gap in the research by investigating the natural and unplanned occurrences of recasts in interactions specifically between adult Korean ESL learners and NNSEs in a non-instructional setting.

Research on Information Gap Tasks

Many researchers in Second Language Acquisition have implemented information gap tasks as a tool for gathering data in order to answer questions related to input and interaction. Research on recasts usually has used these tasks to collect frequency data on feedback NNSEs received from NSEs or teachers (Braidi, 2002;
Mackey, 1999; Mackey et al., 2003; Oliver, 1995, 2000), but researchers did not investigate how different types of task might affect directly occurrences of recasts as a type of feedback. Therefore, it is necessary to study whether or not one-way/two-way information gap tasks with different task features affect the production of the learners as well as feedback on it. In this section, I will describe two types of information gap tasks widely used in recast research.

“Information gap” refers to a lack of information among participants working on a common problem (Doughty & Pica, 1986, p. 307). Information gap tasks are classified into two types determined by the flow of information: a one-way information gap task and a two-way information gap task. One-way information gap tasks are defined as tasks in which one interlocutor has all the information to convey and the other has no information at all and has to fill that gap in order to complete a task. A picture-description task (Appendix B) is a good example of a one-way information gap task in which one person as a picture holder needs to describe the picture and the other as the listener needs to draw it on a given blank paper. Consequently, the information one person has is transferred in one way to the other who is required to identify what the information is.

On the other hand, two-way information gap tasks are defined as tasks that require the obligatory exchange of information among all the participants because each of the participants has different information to convey and needs to solve the problem by matching the different information each person has through interaction. That is to say, sharing the information between the interlocutors is required. The information, therefore, is transferred bilaterally. One of the examples of two-way
information gap tasks is a spot-the-difference task (Appendix C) which uses identical pictures except for modified differences. This task asks all participants to exchange the information each person has and figure out what the differences are in the pictures.

**Characteristics of information gap activities**

According to Doughty & Pica (1986), an information-gap task provides learners with a great number of opportunities to produce the target language, and it results in increased feedback from NSEs and increased modification of interaction, which they define as “interaction which is altered in some way (either linguistically or conversationally) to facilitate comprehension of the intended message meaning” (p. 306). Characteristics of information-gap tasks can indicate why those tasks produce many opportunities to produce the target language, leading to a large chance of getting feedback and modified interaction.

Pica et al. (1993, pp. 14-15) presented the task features of activity and goal, specifying them into four categories as seen in Table 2 and one-way and two-way information gap tasks meet those categories in slightly different ways. If we apply the features of tasks to a picture-description task as a one-way information gap activity in this study, it might belong to 1b, 2b, 3a, and 4a in Table 2; one person as an information holder has all the information of a picture given and is required to supply its description as the other interactant requests (1b, 2b). When it comes to goal orientation and outcome options, all interactants have the same goal to complete the
task of describing and drawing the picture, and all interactants should have the same picture as an outcome in the end.

Table 2. Task relationships, requirements, goals, and outcomes and their impact on opportunities for L2 learners’ comprehension of input, feedback on production and modification of interlanguage (T. Pica, Kanagy, R., & Falodun, J., 1993, pp. 14-15)

<table>
<thead>
<tr>
<th>Task activities and goals</th>
<th>Impact on opportunities for learner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Comprehension of input</td>
</tr>
</tbody>
</table>

A. Interactional activity
1. Interactant relationship of request and suppliance activities, based on which interactants holding, requesting, or supplying information directed toward task interaction and outcomes:
   a. Each interaction holds a different portion of information and supplies and requests this information as needed to complete the task.
   b. One interactant holds all information and supplies it as other(s) request it.
   c. Each interactant has access to information and supplies it if other(s) request it.
2. Interaction requirement for activity of request-compliance is directed toward task outcomes:
   a. Each interaction is required to request and supply information.
   b. One interactant is required to request, the other(s) required to supply information.
   c. Each interactant is expected to request and supply information, but not required to do so.

B. Communication goal:
3. Goal orientation in using information requested and supplied:
   a. Interactants have same or convergent goals.
   b. Interactants have related, but divergent goals.
4. Outcome options in attempting to meet goals:
   a. Only one acceptable outcome is possible.
   b. More than one outcome is possible.
However, a spot-the-difference task used as a two-way information gap activity in this study has somewhat different task features in respect to interactional activity that this task belongs to 1a, 2a in Table 2 that each interlocutor has different portion of information to exchange and share. With regard to goal orientation and outcome options, it has the same communication goals of finding the differences in pictures and only one outcome is acceptable like a one-way information gap task. While performing a spot-the-difference task, each participant has the different portion of information about the given picture and each person is required to request and supply the information.

Pica et al. (1993) addressed that information gap tasks “promotes the greatest opportunities for learners to experience comprehension of input, feedback on production and interlanguage modification if the task meets the criteria in the ‘a’ categories for the four categories”, that is, interactant relationship, interaction requirement, goal orientation and outcome option. The two-way information gap activity in this study meets all criteria whereas a one-way information gap activity meets the half of criteria.

To summarize, research on recasts found that recasts naturally occur and that they were widely used by teachers as a type of feedback in most classroom situations, though students did not often incorporate recasts. In contrast, in experimental studies which offered planned recasts by NSEs, there was a higher incorporation of recasts. However, due to the few studies on recasts in natural interactions of NSEs and NNSEs, it might be valuable to find the extent to which recasts and incorporation of recasts can occur in that setting.
In addition, even though information-gap tasks have been commonly used by researchers, few studies have investigated how different information-gap tasks influenced the descriptive and frequency data on recasts in the area of feedback. Hence, I will examine if the task types might affect specifically the frequency of grammatical recasts in this thesis.
CHAPTER 3. METHODS

Overview

This chapter includes a description of approach, participants, data collection, the tasks and procedures implemented for collecting data and presents the method of data analysis in detail.

The purpose of the study was to determine 1) whether recasts occur in particular task-related interactions between NSEs and NNSEs, and 2) to what extent these are related to tasks or the grammaticality of particular utterances. The study involved five pairs, each with a NSE and a NNSE, who performed two different types of tasks, a picture description task, and a spot-the-difference task. Participant conversations were audio/video recorded with the permission of the participants. Participant discourse was transcribed using Transana 2.20, qualitative analysis software for video and audio data. Transcribed data were analyzed to examine occurrences of NSE recasts, according to the grammaticality of utterances produced by NNSE, and NNSE reactions to NSE recasts. When participants had completed their tasks, they were asked to answer a questionnaire concerning their backgrounds.

In order to determine whether or not NNSEs were aware of corrective feedback, they were asked how they felt about performing each task.

Approach

One might conceive of two primary approaches to a study of this type. One possibility would be to collect completely natural data without any attempt to control
or elicit it. The data might be collected in a variety of settings over a long period of
time on single or various learners. Another approach would be to control and
systematize the data collected. Each approach has advantages and disadvantages. The
methodology used in this study follows the second approach, a familiar one in
research of this type such as Braidi’s (2002) study.

Controlled communicative tasks were used to elicit data. An underlying
assumption is that it is possible to obtain data via this procedure that is akin to
“natural” data; that is, the assumption I am making in this study is that the
circumstances were not substantially different from those that might occur in real
conversation outside the study. Other “quantitative elements” appear in the study:
(e.g.) there was an attempt to measure accuracy of coding via an inter-rater reliability
rating. In the interpretation of results, quantitative methods can be seen in calculating
frequencies and percentages of NSE recasts or non-recasts as well as NNSE
responses. Likewise, the methodological approach of this study allows possible
replications to be made later in the future, another classic feature of quantitative
research.

Nevertheless, the study is not free of subjectivity. For example, interactions of
participants were transcribed and NSE responses to grammatical errors and NNSE
reactions to those responses were coded on the basis of standards, but subjective
judgments were unavoidable such as determining certain decisions regarding turn
taking, etc.
Participants

Recruitment of participants

I recruited participants by sending emails to Korean graduate students and NSE teaching assistants whom I knew to ask if they might be interested in participating in this study. In my email I included a detailed description of the purpose of study, procedures to be used, and rights of participants. Then, I set up a date and a time for each person and matched him/her with a partner who might be available at that time.

Information of participants

Ten persons were interested in participating. The participants were randomly assigned to five NSE-NNSE dyads, with four mixed-gender (female-male, male-female) and one same-gender group (female-female) as shown in Table 3. NNSEs were five adult Korean graduate students and NSEs were (three females, two males) and five American teaching assistants (three females, two males) in the TESL/English department at Iowa State University (ISU). No member of a dyad had met his/her partner before experiments; that is, all were communicating with relative strangers.

As shown in Table 3, Korean participants ranged from 28 to 35 years of age and had been in the United States for one year and five months to two and a half years and were usually studying in fields of science and engineering. The targeted English level of Koreans was the intermediate speaking/listening level as in Braidi’s
(2000) study. I chose participants at the intermediate level in order to obtain a sufficiently high level for conversation, but one low enough to insure that some errors would occur. I assumed that their proficiency might allow them to notice their errors and corrections given by NSEs. We have evidence that their English levels were aligned with the targeted level because their TOEFL scores indicate that they passed the cutoff score required by Iowa State University (ISU) to be qualified to get admissions to be graduate students, which means they had sufficient English skills to take academic classes at ISU.

Table 3. Background information of participants

<table>
<thead>
<tr>
<th>Pairs</th>
<th>N=10</th>
<th>ID</th>
<th>Gender</th>
<th>First language</th>
<th>Age</th>
<th>Major</th>
<th>Student status</th>
<th>Length of residence in States</th>
<th>English level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1</strong></td>
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</tr>
<tr>
<td>A</td>
<td>Male</td>
<td>Korean</td>
<td>35</td>
<td>Civil Engineering</td>
<td>Graduate</td>
<td>1 year, 5 months</td>
<td>CBT 257</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Female</td>
<td>English</td>
<td>32</td>
<td>TESL/AL</td>
<td>1st year MA/TA</td>
<td>N/A</td>
<td>CBT 263, Speak/Teach level 3</td>
<td></td>
<td></td>
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<tr>
<td><strong>Group 2</strong></td>
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</tr>
<tr>
<td>C</td>
<td>Female</td>
<td>Korean</td>
<td>29</td>
<td>Computer Science</td>
<td>Graduate</td>
<td>1 year, 5 months</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Male</td>
<td>English</td>
<td>45</td>
<td>TESL/AL</td>
<td>1st year Ph.D./TA</td>
<td>N/A</td>
<td>CBT 237</td>
<td></td>
<td></td>
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<tr>
<td><strong>Group 3</strong></td>
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<tr>
<td>E</td>
<td>Male</td>
<td>Korean</td>
<td>28</td>
<td>Aerospace Engineering</td>
<td>Graduate</td>
<td>1 year, 7 months</td>
<td>N/A</td>
<td>CBK 260, Speak/Teach level 3</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Female</td>
<td>English</td>
<td>43</td>
<td>TESL/AL</td>
<td>2nd year MA/TA</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
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<tr>
<td><strong>Group 4</strong></td>
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<tr>
<td>G</td>
<td>Female</td>
<td>Korean</td>
<td>34</td>
<td>Computer Science</td>
<td>Graduate</td>
<td>2 years, 6 months</td>
<td>N/A</td>
<td>CBT 250, Speak/Teach level 2</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Male</td>
<td>English</td>
<td>38</td>
<td>TESL/AL</td>
<td>2nd year Ph.D./TA</td>
<td>N/A</td>
<td>N/A</td>
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<td></td>
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<tr>
<td><strong>Group 5</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>I</td>
<td>Female</td>
<td>Korean</td>
<td>28</td>
<td>Physics</td>
<td>Graduate</td>
<td>1 year, 6 months</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Female</td>
<td>English</td>
<td>31</td>
<td>TESL/AL</td>
<td>1st year Ph.D./TA</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Three of the Korean participants took the Speak/Teach test, developed by Iowa State University to evaluate oral proficiency of international graduate students who might be possible teaching assistants in their departments. The results showed that they could be at the intermediate level of oral proficiency because according to the evaluating standards of the Speak/Teach test, Level 3 can be given to students who have adequate listening ability and express opinions freely, but sometimes they have communication problems such as mispronunciation, or lack of vocabulary. In addition, all of them had already taken ESL writing and listening classes for graduate students because they were required to take those classes when they failed the English placement test done by Iowa State University.

Native speakers of English participants, all of whom were North Americans, ranged in age from 31 to 45. As shown in Table 4, collectively, they had taught English in many different EFL and ESL situations for periods ranging from 2 to 11 years. Two of these participants were in the process of teaching ESL classes at the point that they participated in this study. Their extensive teaching experience suggests that they had considerable exposure to NNSEs’ English from different countries.

Table 4. Background information of NSEs on their English teaching experience

<table>
<thead>
<tr>
<th>ID</th>
<th>Gender</th>
<th>Age</th>
<th>Length and place of English teaching experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Female</td>
<td>32</td>
<td>Taught for 5 years &amp; 6 months in Chile (EFL) and 1 year as a TA</td>
</tr>
<tr>
<td>D</td>
<td>Male</td>
<td>45</td>
<td>Taught for 11 years in high school, universities at Korea, Thailand, and Vietnam (EFL) and 1 year as a TA</td>
</tr>
<tr>
<td>F</td>
<td>Female</td>
<td>43</td>
<td>6 months as a TA</td>
</tr>
<tr>
<td>H</td>
<td>Male</td>
<td>38</td>
<td>2 years as a TA at American university and university in China (EFL)</td>
</tr>
<tr>
<td>J</td>
<td>Female</td>
<td>31</td>
<td>4 years as a TA in American universities (ESL program)</td>
</tr>
</tbody>
</table>
Tasks

Participants were given two different tasks, that is, a picture description task and a spot-the-difference task. To select two tasks, I followed the guidelines of Gass & Mackey (2007, pp.115-116) in choosing them and the guidelines are as follows:

• Find pictures containing items that are easy to describe, but also vocabulary that is likely to cause some lack of understanding (and, hence, some negotiation). This might also involve eliciting language regarding the placement of objects (e.g., above, on top of).

• Ensure that the locations of items in the pictures are appropriate for the desired level of difficulty. For example, a picture with a car placed on top of a house would add another element of difficulty to the task.

• Separate the participants with a barrier or at least ensure that partners cannot see each other’s pictures.

For picture-description tasks:
Make sure the participants understand that the person who is drawing should not see the picture being described until the task is completed.

For spot-the difference tasks:
Make sure that the participants do not show their pictures to each other. Inform them about the number of differences if necessary.

Based on the guidelines of choosing picture description and spot-the-difference tasks, I chose the two tasks (Appendix B & C), both of which required somewhat challenging vocabulary describing location of items, appearances of people and some technical terms such as kinds of flowers, trees and chairs. My goal was to match student oral proficiency with the level of the non-native participants so that learners would be challenged, but would still be able to perform the task without frustration. I assumed that NNSE participants in low or mid-intermediate speaking/listening level could adequately perform the two tasks because these tasks did not require the
participants to utilize too many difficult vocabulary or expressions. Even if Korean participants might have difficulties describing some technical terms such as referring to kinds of trees and flowers, they could do so through circumlocutions or negotiations with their partner. Therefore, I believe the task types were appropriate for the level of the participants.

Tasks were selected based on Gass & Mackey (2007), that is, aiming for tasks that had been previously shown to be “a highly efficient means of manipulating the kinds of interactions that learners are involved in, as well as the kinds of feedback they receive, and examining the characteristics of the output that learners produce” (p. 111). In this study, in order to perform a picture-description task (Appendix B) as a one-way information gap task, a NNSE, a Korean ESL learner in a dyad was given a family to describe and a NSE was given a blank paper to draw a picture with a pencil. On the other hand, a spot-the-difference task (Appendix C) as a two-way information gap task usually involves two participants in exchanging information and in this task each of them was given an identical picture of a park with people in different ages, animals, and some background, except for ten differences. Each participant needs to request and supply information he/she has in order to find the differences in similar pictures. In this study, participants were told the number of differences they should figure out.
Procedures

Setting

The experiments were conducted at times mutually agreed upon for all five pairs to participate in three days (February 18, 2008, for Group 1 and 2; February 22, 2008, for Group 3 and 4; February 23, 2008, for Group 5) in Ross 412, a quiet classroom which contained chairs and desks. As shown in Figure 1, each participant in a dyad sat across from the partner on a designated chair in front of a big desk. A yellow file folder with a hard cover measuring 12 X 9 inches was placed in the middle of the desk as a barrier to keep the information of each paper given to participants from being revealed to the partners. A camera was placed in the left side of the room to videotape interactions of participants and a MP3 player as a supplementary recording device was set up for audiorecording on the left corner of a desk. A video camera and a MP 3 player kept recording conversations of each dyad all the way through completing the two tasks.

![Figure 1. Arrangements of desk, camera, and seats of participants](image-url)
Sequences of procedures

Data were collected from the days of February 18, 22, and 23, with one pair participating at a time. When the pair was seated in the setting shown in Figure 1, I gave each participant an informed consent document (Appendix A) which included the purpose of study, description of procedures, benefits and risks, participant rights, confidentiality, etc., and explained it briefly. They had about five minutes to read through the document and sign it when they felt that they were willing to participate.

After getting their permission to participate in this study, I provided participants with task sheets (Appendix B and C), emphasizing that they should not show their given papers to their partner because this might reveal answers to their partner. Then, they were asked to read directions carefully and silently. The first task was a picture-description task in which a NSE was assigned to draw it on a given blank paper as a NNSE had to describe a given picture in random order. After being told to look at the picture carefully for about one or two minutes, the NNSE was asked to initiate the conversation. While performing the task, the NSE was told to ask questions about the picture and the descriptions his/her partner gave. Until a NSE thought she/he finished drawing the picture, she/he was not permitted to show how she/he drew a picture to her/his partner.

For the second task, a spot-the-difference task, each participant was provided an identical picture with ten differences. As a NNSE initiated the conversation in the first task, a NNSE had to start the conversation and participants were allowed to make some notes or mark with pencils on given papers to help them count the
number of differences. Since the study was designed to be as natural as possible, directions to the participants did not prohibit the use of gestures.

The two tasks were conducted orally in face-to-face communication without time limitation with the expectation that they would be completed within approximately 30 minutes. Participants were notified that once they felt that they had finished completing the tasks, they could just stop performing. This procedure was designed to minimize stress which might have occurred had there been time limits for tasks.

Once the participants completed each task, they were instructed to show their materials to their partners to check the answers together. Then, all ten participants were given a questionnaire (see Appendix D and E), one version for NNSEs and a slightly different one for NSEs. Those versions have a similar general format, consisting of two parts – general background information and reactions to completion of the tasks, but with slightly different questions. The reasons the questionnaire for both NNSEs and NSEs were different was that I needed different background information from both groups: Information about English learning experience and test scores for NNSEs was necessary to prove their proficiency is intermediate level. Information on English teaching experience for NSEs was necessary to prove that they had experience teaching international students. In order to figure out the awareness of corrective feedback, NNSEs had two questions of being corrected and using the correction and NSEs had one question about awareness of giving corrective feedback on grammatical errors. Those questions were answered on a standard 5-point Likert scale with 1 indicating “strongly agree” and 5 indicating “strongly
disagree” in order to gain a more refined assessment of participant opinion than a simple yes/no questionnaire would have provided.

**Recording experiments**

For the purposes of coding, I recorded all participant conversations with a MP3 player to obtain a digital voice recording and with a video camera, Canon ZR 40. The MP3 player was a supplementary device in case there were unexpected technical problems with the camera. I set the camera to start recording when I gave task sheets and participants read the directions on the task sheets.

**Pilot study**

A pilot study was conducted on January 11, 2008, two weeks before the actual experiments to test equipment and procedures and determine whether any modifications or revisions should be made before conducting the study. A NSE (female) who was a teaching assistant in the English department at Iowa State University and a NNSE, adult Korean ESL learner (male) who was a graduate student in computer science participated as a dyad in this pilot project, and they were asked to perform the two information gap tasks which were the same ones used in the actual study. I audio-recorded the interactions using two devices of voice-recording software installed in my laptop and with a MP3 player. I did not give participants time limitations about completing tasks and it took 30 minutes in total to complete the two tasks, but it took longer to finish the picture-description task than the spot-the-difference task. So I decided not to make time limitations on each task in actual
studies because each group might show variations on the time of completing tasks. Upon completion of tasks, the pilot-study participants also answered a questionnaire asking about their personal background information. The data and results gathered from the pilot study were not used in the actual study.

This pilot study was useful because it suggested revisions regarding the actual study. One revision concerned the recording-system. The voice quality of the MP3 player was much clearer and less noisy than the computer software program. Consequently, I decided to use a MP3 player for audio-recording. In addition, I found that recasts occurred with lexical and phonological gaps as well as with grammatical errors. Hence, I decided to examine the extent to which other types of recasts following lexical, phonological and grammatical errors occurred and the reactions to NNSE recasts in the results.

**Transcription**

Audio and video recorded files were converted from a video camera to a folder of a computer by using a program, Windows Movie Maker in Windows XP in order to use a transcribing software program. For transcribing, I used Transana 2.20, a program which was developed at the University of Wisconsin-Madison Center for Education Research to allow researchers to transcribe and analyze a large amount of audio- or video- recorded data. An advantage of this program is that it makes it easier to access to the video file and transcript at the same time under the same folder and to go ten seconds backward with a shortcut key.
I transcribed all the video-recorded interactions of the participants in Standard English orthography prior to data analysis. I repeatedly listened to some segments that were difficult to understand until I could identify and transcribe the words. If I could not totally understand an utterance such as mumbling, I marked it as (U) for “unintelligible” and those unintelligible utterances were removed from the analysis. Only ten words out of the total number of words, 8259 were unintelligible, which was approximately 0.01%. The final transcription included hesitations, false starts, repetitions, insertions of interjections, laughter marked as (laughing), and gestures marked as (G) in transcription but interactions of small talk between participants and investigator were excluded since this study focuses on task-related interactions by participants of NNSEs and NSEs. An excerpt from a sample transcription of one pair of participants is seen below.

NNSE: The boy has a little short cut. Her hair, his hair is not that long. It's like a usual boy.
NSE: Uh-uh..
NNSE: Yeah..and she.he is wearing a T-shirt and he's just a little short sleeve, not short sleeve like medium. Like here (G) this length.
NSE: (U) Oh..Down to his elbows. Can you tell me about the cake?
NNSE: Cake? Cake has a round shape and this is just very simple cake, round and it's like it's Not yeah. Just round shape.

After transcribing, I checked the transcription one more time to confirm while watching video clips. To insure the reliability of transcription, a second person, a NSE who was a graduate student in TESL/AL at Iowa State University, double-checked 12 percent of the transcription, that is, 985 words out of 8259, the total number of words. There was an agreement of 97% between the two raters. When there was a disagreement over the transcripts, we listened to them together many
times until we reached an agreement. For example, when the NSE thought she heard a word “ball”, which I considered it “girl”, I explained the reason that the shape of lips looked like pronouncing “girl” instead of “ball”, and she checked the video more than two times, and we finally reached an agreement that the participant pronounced it as “girl”. Data analysis was not conducted until the two raters resolved disagreements over the transcription and reached agreements.

Data Analysis

Coding

The data collected from the experiments were analyzed to answer the research questions. The interactions were coded following procedures from Braidi’s (2002) study and divided into three parts: NNSE turns, NSE responses, NNSE reactions to NSE recasts.

Analysis of NNSE turns

NNSE turns were analyzed to identify the type of errors – grammatical, lexical and phonological errors. Grammatical errors in utterances refer to incorrect usages of grammatical elements such as subject-verb agreement, wrong verb tense, aspect marker, and wrong word order, etc., in sentences or phrases. The level of grammaticality was classified into single error or multiple errors in each turn, depending on the number of grammatical errors, even though an error type is the same. Examples from the data of utterances with a single error and multiple errors
are shown below with the relevant errors italicized and boldfaced. The analyst’s explanation of the error appears after the arrow.

1) Grammatical errors

An example of a single error

NNSE: and her arms –her two arms on the table.
→ Omission of “be” verb between arms and on
NSE: Ok.

An example of multiple errors

NNSE: In my picture, the-the woman read a newspaper. She sit on the bench.
→ two grammatical errors on verbs (agreement in number)
NSE: A bench, a bench or a chair?
NNSE: Bench

A single error means that there was only one grammatical error (e.g. omission of “be” verb between noun, “arms” and preposition, “on” in NNSE utterances and multiple errors means that there were more than two errors (e.g., two uses of incorrect verb agreement in number) in NNSE utterances.

Lexical errors include uses of inappropriate lexical items, or a request from a NSE for clarification or clues. The following example was gathered from the data in this study. In this example, a NNSE could not come up with a word “squirrel” as marked with an arrow and mentioned that she was not sure that she knew this word.

Then a NSE provided a recast, exactly saying the word referring to the animal.

2) Lexical errors

NNSE: Yeap. In my picture there are three animals, two dogs and one, I don’t know what this mean..squ..→
NSE: Squirrel..Squirrel..Ok. First of all, uh..tell me about the dogs.
NNSE: Hm..
**Phonological errors** refer to non-English-like pronunciations of words, which trigger more interaction and feedback to clarify. The following example is also from the data gathered in this study.

3) Phonological errors

NNSE: If you- if you can play the guitar \([\text{gira}]\), the some, ah, the guitar is the sometimes is guitar \([\text{gira}]\) is as the, the. \(\Rightarrow\)
NSE: Is it a guitar or a violin?
NNSE: No No No. I mean the guitar \([\text{gitar}]\) has the line to hang on, hang on the body.

In this example, a NNSE pronounced guitar in a non-target-like way by putting a wrong stress marked with boldface on the first syllable instead of the second syllable, and substituting [t] sound with [r]. As a response to the non-English-like pronunciation, the NSE pronounced it correctly in a sentence and finally the NNSE incorporated the recast by putting the stress on the right syllable and pronouncing [t] sound clearly.

**Analysis of NSE response**

NSE responses were coded as recasts or non-recasts and Table 5 shows an example of each category. As I mentioned in the literature review, I followed Braidi’s (2002) definition of recasts, that is, “a response which incorporated the content words of the immediately preceding incorrect NNSE utterance, and also changed and corrected the utterance in some way (e.g., phonological, syntactic, morphological or lexical)” (p. 20). In terms of non-recasts, they were divided into topic continuation and negotiations, following Braidi’s (2002) classification on non-
recasts. Negotiation was classified into three elements: (a) clarification requests marked as CR, (b) confirmation checks marked as CF, (c) statement indicating lack of comprehension marked as LC.

Table 5. Data analysis of NSE responses to NNSE utterances with errors

<table>
<thead>
<tr>
<th>1. Recasts</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNSE: Middle, middle is a boy</td>
</tr>
<tr>
<td>NSE: Boy's in the middle. →</td>
</tr>
<tr>
<td>NNSE: Boy's in the middle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Non-recasts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Negotiation</td>
</tr>
<tr>
<td>Clarification requests</td>
</tr>
<tr>
<td>NNSE: Do you have uh..like..a trash cans on the left on the right side?</td>
</tr>
<tr>
<td>NSE: Like next to the tree? →</td>
</tr>
<tr>
<td>NNSE: Yeah. Next to the tree.</td>
</tr>
</tbody>
</table>

| Confirmation checks                 |
| NNSE: And the mom is playing guitar.|
| NSE: Mom is playing guitar? →       |
| NNSE: Uh-uh and the father, the dad is taking a picture. |

| Statement indicating lack of comprehension |
| NNSE: Two men is walking on the street and they're talking. |
| NSE: What? → |
| NNSE: Two men is walking on the street and they're talking. |

| 2) Topic continuation               |
| NNSE: How many do you have people in your picture? |
| NSE: There are two boys playing football. → |
| NNSE: Football?                      |

According to Doughty and Pica (1986, p. 331), clarification requests occur when one interlocutor does not entirely comprehend the meaning and asks for clarification. Confirmation checks occur when the listener believes he or she has
understood but would like to make sure. Statement indicating lack of comprehension refers to the reactions of an interlocutor indicating directly he/she could not understand (e.g., What? I didn’t understand you.). In this study, topic continuation was regarded as a NSE response which provided no negative feedback on ungrammatical utterances of a NNSE and kept the semantic meaning of conversation going on without indicating ungrammaticality of previous utterances of a NNSE.

**NNSE reactions to NSE recasts**

As Table 6 shows, NNSE reactions to recasts were divided into five categories, following the categories of Braidi (2002): (a) topic continuations, (b) negotiations, (c) agreements, (d) successful incorporation of recasts, and (e) unsuccessful incorporation of recasts. Topic continuations were responses when NNSEs continued conversation naturally, still including semantic theme without using corrected forms of a prior utterance NSEs provided. In addition, agreements were coded as responses that showed agreements on NSE utterances unlike answers to “yes” or “no” questions. Successful incorporation of recasts refers to an attempt that NNSEs tried to change their previous utterances using corrections on them given by NSEs, and unsuccessful incorporation of recasts refers to an attempt that NNSEs failed modifying their previous utterances when they were given corrections by NSEs.

It is noted that NNSE self-corrections also occurred in this current study, but they were not tabulated because this study only focused on the how NNSE reacted to
NSE recasts as a type of feedback, even though correction does not always result from native-speaker input.

Table 6. NNSE reactions to recasts

| 1. Topic continuations                  | NNSE: Because she's standing out and just playing guitar. So we can, I can see the shirt and jean. |
|                                         | NSE: Ok. So she's standing between - You can see her between the boy and the girl. |
|                                         | NNSE: No. Here is boy. In the picture, here is boy, here is mom and here's father. Boy's between mom and father, dad. |
| 2. Negotiations                        | NNSE: No. This picture is gray, gray. No color. |
| Confirmation checks/                   | NSE: The hat, the hat has the solid color? Or just the hat has the pattern? |
| Clarification requests/                | NNSE: Yeah. The hat has the pattern. You mean the pattern of the hat? |
| Statement indicating lack of comprehension |                                         |
| 3. Agreements                          | NNSE: Uh…And the mother's hair is short-cut. |
|                                         | NSE: Short hair? |
|                                         | NNSE: Uh-uh. |
| 4. Successful Incorporation of recasts  | NNSE: Middle, middle is a boy. |
|                                         | NSE: Boy's in the middle. |
|                                         | NNSE: Boy's in the middle. |
| 5. Unsuccessful incorporation of recasts | NNSE: Yeah. Cone like that |
|                                         | NSE: Right. Yeah and the mother and the father, they're wearing birthday hat, a cone birthday hat? |
|                                         | NNSE: No. No. Uh, Children |
Tabulation

First of all, I counted the length of time, the number of turns and words on each task of each group and then calculated them in total, to see if there might be any differences for each group on their performances. In order to answer research question 1 in regard to the occurrences of recast in response to errors, I identified whether errors were grammatical, lexical or phonological. Grammatical errors were also classified into single error, or multiple errors depending on the number of grammatical errors in each utterance. Then, I calculated the total number of recasts and non-recasts, following errors and tabulated it to compare the frequencies of recasts and non-recasts. To determine whether or not there is significance between the level of grammaticality (single error vs. multiple errors) and the occurrences of recasts, a chi-square test was used under the significant level of alpha = 0.05, based on the null hypothesis that the level of grammaticality is not related to recasts.

To answer research question 2 in relation of task types to the occurrences of grammatical recasts, I counted the total number of recasts and non-recasts which occurred in response to grammatical errors, depending on each type of information gap tasks. Then I calculated the percentage of recasts and non-recasts. Non-recasts were calculated and tabulated with the number of negotiation and topic continuations. To measure the significance between occurrences of recasts and different types of tasks, a chi-square test was also used under the significant level of alpha = 0.05, based on the null hypothesis that task types are not related to occurrences of recasts.
To answer research question 3 in terms of NNSE reactions to NSE recasts, based on the coding of NNSE responses to NSE recasts, following five categories, I counted the number of NNSE reactions in each category, depending on the error types, and tabulated it to see what kind of reaction occurred the most frequently. In addition, to determine that NNSE reactions to recasts are associated with the level of grammaticality, Fisher’s exact test was implemented. It is recommended that Fisher’s exact test should be used instead of a chi-square test when a cell count is below five. In addition, in order to investigate the NNSE awareness of getting corrective feedback from NSEs, answers on related questions in questionnaire were analyzed on a 5-point Likert scale. The results are reported with comparisons of Braidi (2002) and findings in Chapter 4.
CHAPTER 4. RESULTS AND DISCUSSION

Overview of the Chapter

This chapter presents the major findings for the three research questions and compares the results with those of Braidi’s (2002) study. I will begin with a summary of Braidi (2002) and the present study as shown in Table 7.

Table 7. Summary of comparison of Braidi’s (2002) and my study

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Under which circumstances do recasts occur in NS-NNS adult interaction?</td>
<td>1. (a) To what extent do recasts occur in response to lexical, phonological, grammatical errors? (b) Do recasts differ in response to the number of grammatical errors (i.e., single error vs. multiple errors) in the original NNSE utterances? If so, in what ways?</td>
<td>2. (a) Does task type predicts recasts? If so, in what type of task (i.e. a one-way information gap activity vs. a two-way information gap activity), do recasts in response to grammatical errors occur the more frequently? (b) Does task type appear to affect grammatical recasts in other ways?</td>
</tr>
<tr>
<td>A. Do recasts occur in all negotiation types (i.e., non-negotiated, one-signal negotiations, and extended negotiations)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Do recasts occur in response to different levels of utterance grammaticality (i.e., single error vs. multiple errors)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How and under which conditions do adult NNSs respond to NS recasts?</td>
<td></td>
<td>3. How do adult Korean graduate students at an intermediate speaking/listening proficiency in English react to NSE grammatical recasts? To what extent are the NNSEs in this study unconsciously aware of the corrective feedback given by NSEs?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects</th>
<th>10 dyads of adult Japanese and undergraduate NSEs</th>
<th>5 dyads of adult Korean and NSE teaching assistants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material tasks</td>
<td>2 one-way information gap tasks, 1 two-way information gap task, Related free conversation</td>
<td>1 one-way information gap task 1 two-way information gap task</td>
</tr>
</tbody>
</table>
Table 7. (continued)

<table>
<thead>
<tr>
<th>Data coding</th>
<th>Statistical analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. NNS utterances were rated correct or incorrect and then evaluated according to level of grammaticality (single or multiple errors)</td>
<td>1. A loglinear analysis was used to measure statistical interaction of grammaticality and negotiation type on the occurrences of recasts.</td>
</tr>
<tr>
<td>2. NS responses were coded as recasts, negotiation and topic continuation in tabulation.</td>
<td>2. A chi-square analysis was used to determine the significance between NNS reactions to recasts in response to single-error and multiple-error NNS utterances.</td>
</tr>
<tr>
<td>3. NNS reactions were categorized into five: (a) topic continuations, (b) negotiations, (c) agreements, (d) successful incorporations of recasts, (e) unsuccessful incorporation of recasts and tabulated in frequency and percentage.</td>
<td>1. A chi-square analysis was used to measure significant relationship between the level of grammaticality and occurrences of recasts, between the NSE recasts to grammatical errors and task types.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total N of turns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. NNSE utterances were rated whether or not they had lexical, phonological, or grammatical errors and recasts following those errors were counted in its frequency. Especially, recasts following grammatical errors were evaluated depending on single error or multiple errors.</td>
<td>2. NSE responses were analyzed and counted as recasts, non-recasts in types of negotiation and topic continuation. Also, answers on questionnaire NNSEs and NSEs were counted with 5-point Likert scale.</td>
</tr>
<tr>
<td>2. NSE responses were coded as recasts, negotiation and topic continuation in tabulation.</td>
<td>3. I classified NNSE reactions to NSE recasts into five categorizations as Braidi (2002).</td>
</tr>
<tr>
<td>3. I classified NNSE reactions to NSE recasts into five categorizations as Braidi (2002).</td>
<td>1. Fisher’s exact test was used to measure a significant relationship between NNSE reactions to NSE recasts and the level of grammaticality.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total N of grammatically incorrect utterances</th>
<th>2522</th>
<th>1046</th>
</tr>
</thead>
<tbody>
<tr>
<td>880 (34.89 %)</td>
<td>130 (12.42%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 indicates how Braidi’s (2002) study and mine were similar and different in research questions, subjects, uses of tasks, data coding, types of statistical analysis and the total number of turns which occurred in interactions of NNSE-NSE dyads. My research questions are an extended version of Braidi’s (2002) study in that I added a few more questions she did not examine. The
different kinds and number of participants were employed and the number of
tasks was also different between two studies. However, I followed the same data
coding, but used slightly different statistical analysis, owing to the low cell
counts.

Major Findings

Research question 1

(a) To what extent do recasts occur in response to lexical, phonological, and
grammatical errors?
(b) Do recasts differ in response to the number of grammatical errors (i.e., single
error vs. multiple errors) in the original NNSE utterances? If so, in what
ways?

To answer research question 1(a), I counted the number of recasts which
followed the lexical, phonological and grammatical errors. As shown in Table 8,
recasts in response to grammatical errors occurred the most frequently (26 cases
out of 44) and the second most frequent recasts were lexical recasts, that is, uses
of inappropriate vocabulary, which occurred fifteen times out of total recasts, 44.
The least frequent recasts were phonological recasts, that is, mispronunciation of
words, which occurred only three times. Phonological errors occurred four times
in total. Three of the phonological errors were all about the mispronunciation of
“guitar” of the NNSE in dyad 1 and the last phonological error appeared in the
NNSE of dyad 3. Interestingly, NNSE in dyad 1 did not incorporate the NSE
recast on the pronunciation of “guitar” at first, but when he pronounced them
incorrectly twice in an utterance and was provided a recast, he finally
incorporated and pronounced it correctly. On the other hand, the NSE in dyad 3
used negotiation on the mispronunciation of “branch” instead of offering a recast.
Table 8. Types and number of recasts which occurred in this study

<table>
<thead>
<tr>
<th></th>
<th>Grammatical recasts</th>
<th>Lexical recasts</th>
<th>Phonological recasts</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of occurrences</td>
<td>26</td>
<td>15</td>
<td>3</td>
<td>44</td>
</tr>
</tbody>
</table>

To answer research question 1(b), I determined if the utterances had grammatical errors and identified whether they have single error or multiple errors. Then, I identified and counted the occurrences of recasts or non-recasts by NSEs, which followed grammatical errors. Table 9 provides the occurrences of recasts and non-recasts in response to the grammaticality level in NNSE utterances. As shown in Table 9, a single error per utterance occurred in 66 cases and multiple errors per utterance in 63 cases, so the total number of grammatical errors, 130, occurred in NNSE utterances. As responses to grammatical errors, recasts occurred much less frequently than non-recasts, regardless of the number of errors per utterance, but recasts occurred more frequently when there were multiple errors in an utterance than when there was a single error.

Table 9. NSE response to NNSE grammatical errors in utterances in this study

<table>
<thead>
<tr>
<th>Grammatical errors</th>
<th>Single error</th>
<th>Multiple errors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of occurrences</td>
<td>%</td>
<td>Number of occurrences</td>
</tr>
<tr>
<td>Recasts</td>
<td>11</td>
<td>15.15</td>
<td>15</td>
</tr>
<tr>
<td>Non-recasts</td>
<td>56</td>
<td>84.85</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100</td>
<td>63</td>
</tr>
</tbody>
</table>

In response to a single error in NNSE utterances, NSEs offered recasts 15% (11 cases) of the time, in contrast to non-recasts 84.85% (56 cases), while in response to multiple errors, NSE gave recasts 23.81% of the time (15 cases) and non-recasts, 76.19% of the time (48 cases). Out of all recasts (N=26), 11 cases,
42.30% were in response to utterances with a single error and 15 cases out of 26, 57.69% were in response to utterances with multiple errors. These results were similar to Braidi’s (2002, p.23) study, as seen in Table 10. Braidi’s results in Table 10 show that non-recasts (84.54%) occurred much more frequently than recasts (15.45%) in the same way this study. However, the difference between Braidi’s and mine is that in the current study, the proportion (57.69%, 15 out of 26 recasts in total) of recasts in response to multiple errors, compared to proportion of recasts in response to single error was higher than that (51.47%, 70 cases out of 136 recasts in total) of Braidi (2002).

Table 10. NSE response to NNSE utterances with grammatical errors in Braidi’s (2002) study

<table>
<thead>
<tr>
<th>Grammatical errors</th>
<th>Single error</th>
<th>Multiple errors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of occurrences</td>
<td>%</td>
<td>Number of occurrences</td>
<td>%</td>
</tr>
<tr>
<td>Recasts</td>
<td>66</td>
<td>13.80</td>
<td>70</td>
</tr>
<tr>
<td>Non-recasts</td>
<td>412</td>
<td>86.19</td>
<td>332</td>
</tr>
<tr>
<td>Total</td>
<td>478</td>
<td>402</td>
<td>880</td>
</tr>
</tbody>
</table>

In terms of significance between level of grammaticality and the occurrences of recasts, Braidi (2002) found that the effect of level of grammaticality was significant (p < 0.04) (p. 22) using loglinear analysis to find the significance of both grammaticality and negotiation types on the occurrences of recasts. In contrast, I found in this study the effect of the level of grammaticality was not significant by using a chi-square, \( \chi^2 \) (1, N=26) = 0.6949, p > 0.05 (.4045), which means p-value = 0.40 is greater than alpha = 0.05 under the significant level of alpha = 0.05. Thus a null hypothesis that the level of grammaticality is not related to the occurrences of recasts cannot be rejected. In
other words, occurrences of recasts were not affected by the level of grammaticality whether there is a single error or multiple errors per utterance.

**Research question 2**

(a) Does task predict recasts? If so, in what type of task (i.e., a one-way information gap activity vs. a two-way information gap activity), do recasts in response to grammatical errors occur the more frequently? (b) Does task type appear to affect grammatical recasts in other ways?

To answer the research question 2(a), I counted and compared the occurrences of grammatical recasts and non-recasts for the two types of information gap activity in each group. In addition, following Braidi’s study as detailed in chapter 3, I classified NSE non-recasts into topic continuation and negotiation (clarification requests, confirmation checks, and statements indicating lack of comprehension).

Figure 2 shows how many recasts a NSE in each dyad offered in response to grammatical errors depending on the two types of tasks, and Figure 3 shows how many negotiations as a type of non-recasts a NSE in each dyad used in different tasks. As shown in Figure 2, there is a dyad variation in giving NSE recasts in response to grammatical errors. For example, a NSE in Dyad 1 used the greatest number of recasts in a one-way information task while she never used recasts in a two-way information gap task. However, NSE in Dyad 3 showed the greatest number of recasts in both tasks.

In addition, a NSE in each dyad showed variations of giving negotiations in different types of tasks as shown in Figure 3. For instance, NSEs in Dyad 3 and 5 did not use any negotiations in a one-way information gap task, but used them two times in a two-way information gap task. However, a NSE in Dyad 1 used the
greatest number of negotiations in performing a one-way information gap task, compared to the least number of negotiations in performing a two-way information gap task.

![Occurrences of recasts](image1.png)

**Figure 2.** Occurrences of recasts in response to grammatical errors in each task

![Occurrences of negotiation as nonrecasts](image2.png)

**Figure 3.** Occurrences of negotiations in response to grammatical errors in each task
With regard to female/male NSE differences in performing two tasks, surprisingly, female NSEs (dyad 1 and 3) offered considerably many recasts in contrast to male NSEs (dayd 2, and 4). However, there were not many differences between male and female NSEs in providing negotiation, except for the female NSE in dyad 1 who provided dominantly the highest number of negotiation among the NSEs.

In order to determine general tendencies of NSE responses to grammatical errors depending on task types, the number of frequency of recasts and non-recasts in total was counted in each task as shown in Table 11. In Table 11, the two tasks did not produce significantly big differences in frequencies of recasts: Out of the 26 recasts, 14 (53.84%) occurred in a one-way information gap task and 12 recasts (46.15%) in a two-way information gap task. A chi-square analysis of NSE recasts to NNSE grammatical errors in different types of task (2 × 2 table, as seen in Table 11) revealed a nonsignificant difference between a one-way information gap task and a two-way information gap task, $X^2(1, N=26) = 0.5916, p > 0.05 (0.4418)$, which means p-value = 0.44 is greater than alpha = 0.05 under the significant level of alpha = 0.05. In other words, task type did not predictably affect the occurrence of recasts.

Table 11. NSE responses to grammatical errors in types of tasks

<table>
<thead>
<tr>
<th></th>
<th>A one-way Information gap activity</th>
<th>A two-way Information gap activity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recasts</td>
<td>14</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td>Non-recasts</td>
<td>67</td>
<td>37</td>
<td>104</td>
</tr>
<tr>
<td>1) Negotiation</td>
<td>18</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>2) Topic continuation</td>
<td>49</td>
<td>29</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>130</strong></td>
</tr>
</tbody>
</table>
One interesting finding was that a one-way information gap task produced much more negotiation as feedback than a two-way information gap task, as shown in Table 11. Out of 26 negotiations which occurred in both tasks in total, the one-way information gap task had 18 cases of negotiation (69.23%), whereas the two-way information gap task had 8 cases of negotiation (30.77%). This was an unexpected result and in contrast to Pica et al. (1993, p.17) who suggested that a two-way information gap task “promotes the greatest opportunities for learners to experience comprehension of input, feedback on production and interlanguage modification” in task features, as I presented in Chapter 2. However, a similar result to my study was also found in a study of Pica, Holliday, Lewis, Berducci, and Newman (1991) in which negotiation occurred the most in a picture-description task (a one-way information gap task) whereas the two-way information gap tasks such as an opinion exchange task, and information exchange task resulted in less negotiation. The researchers also noted that the negotiation is greater when one single interlocutor is the only one who has all the information to solve problems. It is likely that power differential affected the degree of negotiation occurrences in each task. NNSEs had more focus in the picture description task than the spot-the-difference task because they were required to be active in transmitting the information to their partner. However, in the spot-the-difference task, there was less power differential between NSEs and NNSEs because both interlocutors could ask and provide information without limitations.

In the current study, results of questionnaires participants answered as shown in Table 12 showed that NNSEs enjoyed the spot-the-difference task (mean = 2.2 point) more than the picture description task (mean = 3.6 point) on a
5-point Likert scale with 1 indicating “strongly agree” and 5 indicating “strongly disagree.” Some of NNSE participants addressed in private talks with me that they did not enjoy the picture description task much because of their nervousness in needing to convey all the information to complete the task in target language when they were sometimes asked to describe in detail by partners which might be very challenging and beyond their ability. However, NSEs showed little differences in their preference for two tasks, with a mean equal to 2.6 for the picture description task, and a mean equal to 2.8 for the spot-the-difference task, as shown in Table 12.

Table 12. NNSE and NSE preference for tasks

<table>
<thead>
<tr>
<th>Questions</th>
<th>5 NNSEs Mean</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The first task was more enjoyable than the second task.</td>
<td>NNSEs 3.6</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NSEs 2.6</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>The second task was more enjoyable than the first one.</td>
<td>NNSEs 2.2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NSEs 2.8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Research question 3

How do adult Korean graduate students at an intermediate speaking/listening proficiency in English react to NSE grammatical recasts? Are they aware of corrective feedback given by NSEs?

To answer this question, I classified each NNSE reaction to a grammatical recast into the five categories, following Braidi’s (2002) study: (a) topic continuation, (b) negotiation, (c) agreement, (d) successful incorporation, and (e) unsuccessful incorporation. Then, I counted the number of frequency and added the total numbers as shown in Table 13.
Unlike Braidi (2002), I analyzed individual NNSE reactions to grammatical recasts. I found variability in these NNSE reactions as shown in Table 13. For instance, the male NNSE in Dyad 1 never incorporated all recasts at all whereas the male NNSE in Dyad 3 incorporated recasts successfully with rate of 45.50% (5 cases out of 11). In addition, each female NNSE (dyad 2, 4, and 5) showed variations in reacting to NSE grammatical recasts that female NNSE in dyad 5 incorporated the two recasts she received while female NNSE in dyad 4 did not incorporate recasts, but responded with topic continuation, and agreement.

Table 13. Each NNSE reaction to grammatical recasts in dyads

<table>
<thead>
<tr>
<th></th>
<th>NNSE in Dyad 1</th>
<th>NNSE in Dyad 2</th>
<th>NNSE in Dyad 3</th>
<th>NNSE in Dyad 4</th>
<th>NNSE in Dyad 5</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic continuation</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>23.07</td>
</tr>
<tr>
<td>Negotiation</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>Agreement</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>23.07</td>
</tr>
<tr>
<td>Successful incorporation</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>26.92</td>
</tr>
<tr>
<td>Unsuccessful incorporation</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>26.92</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
<td><strong>2</strong></td>
<td><strong>11</strong></td>
<td><strong>6</strong></td>
<td><strong>2</strong></td>
<td><strong>26</strong></td>
<td><strong>99.98</strong></td>
</tr>
</tbody>
</table>

Table 14. NNSE reactions to NSE grammatical recasts in Braidi’s (2002) study

<table>
<thead>
<tr>
<th></th>
<th>Number of occurrences</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic continuation</td>
<td>60</td>
<td>44.11</td>
</tr>
<tr>
<td>Negotiate</td>
<td>14</td>
<td>10.29</td>
</tr>
<tr>
<td>Agreement</td>
<td>39</td>
<td>28.67</td>
</tr>
<tr>
<td>Successful incorporation</td>
<td>13</td>
<td>9.5</td>
</tr>
<tr>
<td>Unsuccessful incorporation</td>
<td>10</td>
<td>7.3</td>
</tr>
</tbody>
</table>

When NNSE reactions to grammatical recasts in Braidi’s (2002, p. 24) study as presented in Table 14 were compared to those of this study, differences are found: (a) In Braidi’s (2002) study, Japanese NNSEs used topic continuation
with the highest frequency (44.11%) as a reaction to NS recasts, followed by agreement, the second most highest reaction (28.67%) and negotiation, the third most reaction (10.29%). However, in my study, as shown in Table 13, Korean ESL learners reacted to grammatical recasts with the same frequency, 7 cases out of 26 (26.92%) respectively in successful incorporation and unsuccessful incorporation with the highest frequency. (b) In Braidi’s study, negotiation existed, even though it occurred with low rate whereas in this study NNSEs did not use any negotiation in reaction to NSE recasts.

An interesting result was found in NNSE reactions to NSE lexical recasts as shown in Table 15. Of all fifteen lexical recasts, more than fifty percent (8 cases out of 15) was successfully incorporated by NNSEs. This may be because NNSEs were eager to look for an appropriate word or a phrase such as tassel, a birthday hat, or rolling up sleeves which might be difficult or unfamiliar for them to describe. Hence, their perception of lexical gaps might have been strong, so that when recasts were provided, participants tended to use them right after recasts.

Table 15. NNSE responses to lexical recasts

<table>
<thead>
<tr>
<th></th>
<th># of NNSE responses to lexical recasts</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic continuation</td>
<td>2</td>
<td>13.33 (=2/15 *100)</td>
</tr>
<tr>
<td>Negotiation</td>
<td>2</td>
<td>13.33</td>
</tr>
<tr>
<td>Agreement</td>
<td>3</td>
<td>20.00</td>
</tr>
<tr>
<td>Successful incorporation</td>
<td>8</td>
<td>53.33</td>
</tr>
<tr>
<td>Unsuccessful incorporation</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

To determine the relationship between NNS reactions to NS recasts in response to single-error utterances vs. multiple-error utterances, Braidi (2002)
used a chi-square test, but I used Fisher’s exact test because it was appropriate when each cell count is below five as shown in Table 16. Bradi’s results showed a nonsignificant difference between NNSE reactions to NS recasts in response to single-error utterances and multiple-error utterances. I had a similar result to Braidi that Fisher’s exact test did not show significant difference between NNSE reactions to NS recasts to single-error utterances versus multiple-error utterances, p > 0.05 (.3011). In other words, NNSE reactions to recasts did not reveal any significant difference, depending on the level of grammatical errors – single error versus multiple errors.

Table 16. NNSE reactions to NS recast based on level of grammaticality

<table>
<thead>
<tr>
<th>Errors in utterance/recast/continue</th>
<th>Single error N</th>
<th>Multiple errors N</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Errors in utterance/recast/negotiate</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Errors in utterance/recast/agreement</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Errors in utterance/recast/successful incorporation</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Errors in utterance/recast/unsuccessful or non-incorporation</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>15</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

Table 17. Participants' perception of corrective feedback

<table>
<thead>
<tr>
<th>Questions</th>
<th>NNSEs/ NSEs</th>
<th>NNSEs Only for</th>
<th>Mean</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I usually noticed the feedback on my grammatical errors from my partner.</td>
<td>Only</td>
<td>3.2</td>
<td></td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I used the feedback to correct my grammatical errors.</td>
<td>Only</td>
<td>2.6</td>
<td></td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I tried to give feedback on grammatical errors my partner produced</td>
<td>Only</td>
<td>2.6</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Through a questionnaire, I examined the NNSE perception of corrective feedback given by NSEs, and found that NNSEs were not likely to be aware of feedback while conducting the tasks (mean = 3.2 point) as shown in Table 17. In addition, the NSE awareness of giving grammatical feedback was very slightly positive with mean (=2.6 point), which means sometimes they were aware of giving grammatical feedback and sometimes not.

In summary, there are similarities and contrasts in results between Braidi’s (2002) study and mine.

Similarities in both studies are

- Recasts are relatively rare in natural communication, in contrast to classroom situations in which teachers widely use recasts as feedback.
- There was no significant difference between NNSE reactions to NSE recasts in response to single-error utterances versus multiple-error utterances.

Contrasts between two studies are

- Braidi’s (2002) study found that there was significant relationship between the level of grammaticality and the occurrences of NSE recasts, whereas my study did not find any significant relationship between those two factors.
- Unlike Braidi (2002), I studied the significant relationship between occurrences of recasts and different task types and found nonsignificant relationship between them. However, there were individual variations on offering recasts and non-recasts among NSE participants.
- With regard to NNSE reactions to NSE grammatical recasts, Braidi (2002) found that NNSE mainly used topic continuation with the highest
frequency, followed by agreement and negotiation, whereas I found that NNSE successfully or unsuccessfully incorporated recasts with the same high frequency, respectively, 26.92% and that interestingly NNSE never used negotiations.

- Unlike Braidi (2002), I also studied lexical recasts and found that lexical recasts were incorporated with the highest percentage, approximately 53%.
CHAPTER 5. CONCLUSIONS

Summary of the Study

The purpose of this study, as a partial replication of Braidi’s (2002) study, was to examine whether or not recasts occur in the natural conversations of Korean ESL learners and native English-speaking teaching assistants in university in the U.S. and to determine how task types and grammaticality level may affect recasts. This study also investigates how non-native speakers of English (NNSEs) respond to native-speakers of English (NSE) recasts.

To examine occurrences of recasts and NNSE reactions to NSE recasts, the data from five dyads of a NNSE and a NSE were collected, analyzed, tabulated and compared. To determine the relationship between the level of grammaticality and occurrences of recasts, and the relationship between the task types and occurrences of recasts, a chi-square test was used. To determine the relationship between NNSE reactions to NSE recasts and the grammaticality, a Fisher’s exact test was used, due to the small cell counts.

The results indicated that recasts in response to grammatical errors existed in conversations of NSE and NNSE with low frequency while non-recasts such as negotiation and topic continuation occurred much more frequently than recasts. However, whether there was a single error or multiple errors did not result in a statistically significant relationship with the occurrences of recasts. This was in contrast to the results of Braidi’s (2002) study in which there was a significant relationship between the level of grammaticality and occurrences of recasts. In addition, the results suggested that types of information gap tasks did not influence the frequencies of recasts too, that is, there was no significant
relationship between the two factors. But, a one-way information gap task led to much higher negotiation by NSEs than a two-way information gap task, unlike the research suggestion of Pica et al. (1993) that two-way information gap tasks might facilitate the greatest opportunities for learners to experience comprehension of input and feedback on production. It might be due to the characteristics of a picture description task as a one-way information gap task in this study that NSEs needed much detailed description on the information their NNSE partners had provided, which resulted in much negotiation. Also, it might be due to the degree of gap in information because NSEs had a larger information gap on the picture-description task than in the spot-the-difference task in which each person has a portion of similar and different information in a given picture.

It is important to note the wide variation in dyad performance. Two NSEs in Dyads 2 and 5 provided the least number of recasts while a NSE in Dyad 3 offered the most number of recasts (11 cases). The NNSE in Dyad 1 never incorporated any of the five recasts he received while the NNSE in Dyad 3 incorporated successfully five times out of 11 recasts. An interesting finding in NNSE reactions to recasts was that none of the NNSEs used negotiation in response to NSE recasts, compared to Braidi (2002) in which NNSEs used negotiation in response to NSE recasts many times. In terms of NNSE reactions to NSE recasts, Braidi’s (2002) study showed that NNSEs reacted to NSE recasts by mainly using topic continuation (44.11%). In contrast, my study indicated successful incorporation and unsuccessful incorporation occurred with the same highest frequency, 26.92%. As to incorporation of recasts in different types of errors, interestingly lexical errors were incorporated with a high rate in contrast to a low rate of incorporation of grammatical errors.
In summary, recasts do occur in non-instructional conversations. They vary considerably by dyads and neither task type nor number of grammatical errors predicts recast occurrence.

Limitations

This study contains limitations. The first limitation is that this study was slightly manipulated in that participants were provided with tasks which have been used in classroom situations, even though the focus was on the occurrences of recasts in a natural conversation of a dyad. Also, tasks were not “natural” in the sense of being related to everyday interactions such as service encounters, but rather closer to classroom activities. As to the NNSE incorporation of recasts, this study examined the incorporation of recasts in only the immediate turn, so it is not clear whether or not NNSEs might utilize the recasts later after this study. So in future research, it is necessary to examine if recasts might be incorporated by learners after some delay in time. Ideally, one would observe natural conversations of NNSEs and NSEs many times as part of a longitudinal study over a longer period to examine occurrences of recasts and its incorporation in uncontrolled non-instructional settings. Obviously, such a study would be logistically challenging.

A second limitation was that this study did not investigate differences between same-gender dyads and mixed-gender dyads. Same-gender dyads and mixed-gender dyads might show different performance on offering recasts, reactions to recasts or negotiations. For example, Pica et al. (1991) in her study of NS-NNS conversations noted, a lack of negotiation in mixed-gender dyads
occurred in the male native speaker – female non-native speaker pairs. So it might be interesting to investigate differences of giving feedback as a form of recasts and NNSEs reactions to NSE recasts depending on the same-gender dyads and mixed-gender dyads.

**Implications**

**Pedagogical implications**

The results of this study suggest that lexical recasts were more likely to be incorporated by NNSEs than grammatical recasts. In other words, NNSEs utilized lexical recasts more often than grammatical recasts in non-instructional conversations with NSEs. Lexical recasts may lead to NNSEs unconsciously acquiring or expanding their vocabulary. Thus, teachers should be encouraged to provide lexical recasts in the case of student lexical errors or requests from learners. Another possible implication is that recasts which may occur in conversations of NNSE-NSE dyads may not play a crucial role in raising NNSE awareness of their grammatical errors in this current study.

For longitudinal studies to investigate effectiveness of recasts in natural conversation, it might be a way to examine recasts using a corpora such as MICASE if it is impossible to collect natural interactions of NNSEs and NSEs.

**Research implications**

The individual variations on providing feedback in the form of recasts and non-recasts and individual NNSE differences in reactions to NSE recasts found in this study supports the notion of variation in individual conversing styles in NSE-
NNSE communication. Therefore, it might be interesting to examine what factors may affect NSE responses to errors, and NNSE reactions to NSE feedback, such as personality types, or the rapport between interlocutors.

Familiarity with an interlocutor might be another issue. In this study participants had no familiarity with their partners before the experiments, and it might have led to fewer recasts or more recasts if participants had familiarity with their partners before the experiment. For example, Plough and Gass (1993) showed that unfamiliar dyads of NNSE-NNSE used less negotiation compared to familiar dyads of NNSE-NNSE and repeated prior utterances many times to keep conversation going smoothly.

In short, there are many options for future studies which might help researchers learn more about NSE recasts in reaction to NNSE errors and NNSE responses to recasts in relation to other issues such as the gender of dyads, personality, rapport, and familiarity between partners among other possible factors which might affect the natural interactions of NNSEs and NSEs.
APPENDIX A: Informed Consent Document
INFORMED CONSENT DOCUMENT

Title of Study: The role of recasts in adult NSs-NNSs interactions

Principal investigators: Hyunjung Lee and Roberta Vann

Introduction
This form describes a research project. It has information to help you decide whether or not you wish to participate. Research studies include only people who choose to take part—your participation is completely voluntary. Please discuss any questions you have about the study or about this form with the project staff before deciding to participate.

The purpose of this study is to examine to what extent recast, that is, a reformulation of incorrect non-native speakers’ utterances occur in interactions between native speakers of English and non-native speakers of English and to investigate whether or not different types of activities might lead to differences in frequencies of recasts.

You are being asked to take part in this study because you are adult ESL learners or native speakers of English who might be interested in communicating in English. You should not participate if you are under age 18 because this study targets adult ESL learners and native speakers of English.

Description of Procedures
If you agree to participate, you will be asked to perform two different types of activities with your partner. In one task you will work with your partner to describe or draw a picture and in another task you will look at a picture and describe to your partner who will in turn describe his/her picture to you. Your interactions will be audio and video recorded so that we can collect and analyze data. After completing these tasks, you will be asked to complete a questionnaire concerning your language learning or teaching experience.

Benefits and Risks
There are no foreseeable risks from participating in this study. If you are a nonnative speaker of English, you can benefit by gaining opportunities for improving listening/speaking skills and developing communication strategies to complete given tasks. If you are a native speaker of English, you can obtain opportunities of learning how to negotiate meaning or form when communication breakdowns occur when you have a conversation with a nonnative speaker.

The findings will be helpful and beneficial for researchers, teachers and English language training programs. If results have improvements or advancements in communication between English language learners and native speakers of English, it would indicate teaching implications about English teachers’ feedback on errors learners produce in ESL programs. Teachers might use them in their classrooms and English curriculum developers also might try to reflect them in curriculum design. For researchers, it might also suggest theoretically how feedback native speakers provide plays an important role in communication with English language learners (ELLs). For
community, it might have more successful ELLs and they tend to easily adapt to living in the U.S.

Compensation
You will not have any costs from participating in this study. You will not be compensated directly for participating in this study.

Participants Rights
Your participation is completely voluntary and you have the right to refuse to participate or leave the study at any time without any penalty.

Confidentiality
Only researcher will have access to audio-recorded files because she will make the files code-protected in her computer which is also password-protected. All the files will be erased on Dec. 31. 2008. Also, research participants will not be asked to provide any information that could be used to track their identities (birthdays, university ID, etc) and when the results are published, your identity will remain confidential because you will be randomly assigned a unique code instead of your names.

Questions and Problems
For further information about the study, please contact Hyunjung Lee, darialee@iastate.edu, 515-520-1639, TESL/ Department of English or Dr. Roberta Vann, rvann@iastate.edu,  (515) – 294- 3577, 335 Ross Hall, Iowa State University, Ames, IA. If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office of Research Assurances, 1138 Pearson Hall, Iowa State University, Ames, Iowa 50011.

Consent and Authorization Provisions
Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.

Participant’s Name (printed) _____________________________________________

______________________________________________________________________

(Participant’s Signature) (Date)

______________________________________________________________________

(Signature of Parent/Guardian or Legally Authorized Representative) (Date)

Investigator Statement
I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that the
participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate.

(Signature of Person Obtaining Consent)   (Date)
APPENDIX B: One-way Information Gap Task Used in this Study
Picture Description (Type A)

Directions: Look at the picture. You are the only person who has the information about this picture and your partner does not have this picture. You should describe people in the picture and then your partner will draw them in a given blank paper. Do NOT show your picture to your partner.

Picture Description (Type B)

Directions: As your partner describes people in his/her picture, listen carefully and draw them in a given blank box below, listening carefully to your partner. Please do NOT look at the picture your partner has.
APPENDIX C: Two-way Information Gap Task Used in this Study
Spot the difference (Type A)

Directions: Look at the picture below. Your partner has a similar picture of park with TEN differences. ESL learners should start conversation asking each other questions to find the differences. Mark the differences on your picture. Do NOT look at your partner’s picture and do NOT show your sheet to your partner. Additionally, since this is a thesis research your interactions will be video and audio-recorded and confidentiality is guaranteed.

Spot the difference (Type B)

Directions: Look at the picture. Your partner has a similar picture of park with **TEN** differences. ESL learners should start conversation asking each other questions to find the differences. Mark the differences on your picture. Do NOT look at your partner’s picture and do NOT show your sheet to your partner. Additionally, since this is a thesis research your interactions will be video and audio-recorded and confidentiality is guaranteed.

APPENDIX D: Post-task Questionnaire for Nonnative Speakers of English

Notice: Information you will provide in this paper will be NOT be revealed to others except for researchers. In other words, only researchers can be accessible to read the information.

I. Background Information
1. Gender: Male _________   Female ___________
2. Age: ____________
3. Program: ESL learners at IEOP ______  Undergraduate _______ Graduate ________
4. Major subject (e.g. Business) or Major
5. Country you are from  _________________
6. Native language  _____________________
7. How long have been in the States? ___________ Years _______ Months
8. Have you ever taken TOEFL test before?  Yes ________   No _______
   If yes, please answer following questions. If you took it more then one time, please write down your average score.
8-1. When was the last time for you to take TOEFL test? __________________
8-2. Circle the test type you’ve taken : PBT   CBT   iBT
8-3. Write down your score. ______________
9. Have you ever taken Speak/Teach test conducted by ISU? If yes, please answer the following questions.
9-1. When was the last time for you to take the Speak/Teach test? ________________
9-2. What level did you get? ________________

II. Reactions to completing the tasks
Please use the scale below to find the response that is mostly close to your answer.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Performing a picture description task with your partner was difficult</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B: Performing a spot-the-difference task with your partner was difficult.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C: The first task was more enjoyable than the second task</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D: The second task was more enjoyable than the first one.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>E: I usually noticed the feedback on my grammatical errors from my partner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>F: I used the feedback to correct my grammatical errors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX E: Post-task Questionnaire for Native Speakers of English

Notice: Information you will provide in this paper will be NOT be revealed to others except for researchers. In other words, only researchers can be accessible to read the information.

I. Background Information
1. Gender: Male _________   Female ___________
2. Age: ___________
3. Program: Undergraduate _______  Graduate ______
4. Major subject (e.g. Business) or Major ________________
5. Country you are from ________________
6. Native language ___________________
7. Have you ever taught ESL or EFL learners before?  Yes _____   No _____
    If yes, please answer following questions.
    7-1. How long have you taught ESL or EFL learners?  ________ Years _____
            Months
    7-2. Where did you teach them?  (e.g. ESL programs in American universities, or EFL classes in Japan, etc.)

II. Reactions to completing the tasks
Please use the scale below to circle the response that is mostly close to your answer.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly agree</th>
<th>Agree</th>
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<th>Disagree</th>
<th>Strongly disagree</th>
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<td>A: Performing a picture description task with your partner was difficult</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B: Performing spot-the-difference task with your partner was difficult.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>C: The first task was more enjoyable than the second task</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D: The second task was more enjoyable than the first one.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>E: I tried to give feedback on grammatical errors my partner produced</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX F: Sample Transcription
The transcription: A dyad of a NNSE (referred to as E) and a NSE (referred to as F)

Task 1 – One-way information gap task

E: Woman, uh, playing a guitar. A man taking a picture, is taking a picture. Child, uh, a boy, a boy is sitting on a chair and he blow out the candle on the cake.

F: Ok. I can ask, I can ask you a question?

E: Yeah.

F: Ok. So and there's three people.

E: Oh. No. One more.

F: Oh. Another person is coming. But they are in the same scene altogether? Are they in separate pictures?

E: Hm..

F: Are they, are they in a same place?

E: Yes. Same place and one of them stand and one man stand and taking picture. And a boy sit sit on a chair and blowing out the candle on a birthday cake.

F: Uh-uh

E: And another girl see the uh, see the boy. Yeah.

F: Ok. Actually I should ask you where they are in the picture? Where each person is? Man is taking the picture. Woman is playing guitar. There's a boy blowing out birthday candle?

E: Yeah.

F: And the girl, where are they in the picture? What part of the frame?

E: In table, table.

F: Ok. Around the table?

E: Yeah. Around the table.

F: Ok. And is the woman on the right side or left side?

E: Uh..Woman on left side.

F: She's on the left side.

E: Yeah.

F: Ok.
E: Middle, middle is a boy.
F: Boy's in the middle.
E: Boy's in the middle.
F: Ok.
E: And the man is right side. And a girl, in front of boy's in front of a man, the man.
F: Ok. And the girl is the one who's blowing out the birthday candles.
E: Yeah..A boy, yeah..
F: Ok. And the birthday cake is in the middle of the table.
E: Yes.
F: Yeah..ok..But the woman playing guitar, she is on her left?
E: Yes.
F: Ok..All right. And ok. ‘Cause I drew her on right side first, I didn't know where she was. I put her in the wrong side of the picture. OK. Are the people happy?
E: Yeah. Smile.
F: Ok. have a good time? Ok..A man. He is standing? Both a man and a woman are standing?
E: Yeah.
F: Ok.
E: And a girl sit, sit.
F: She's sitting?
E: Yeah. She's sitting.
F: Ok. Is she really younger or?
E: Yeah. Younger, younger.
F: Very younger
E: Boy and girl
F: Ok. What kind of clothes they are wearing?
E: Hm..Woman wears sweater, looks like a flower, flower. I am not sure. And a man wear short.
F: He's wearing shorts. It's kind of sunny day, maybe?
E: I am not sure, maybe.
F: I've seen anybody wearing shorts in couple of months. Uh?
E: Right.
F: So cold.
E: Yeah.
F: Ok. And around the big table, the boy's behind the table?
E: Yeah.
F: Ok. Ok. Well. Does it look anything like that?
E: Yeah. Yeah. It's very similar and it’s hard to think of all that things a person needs to know to make a picture.

**Task 2 – Two-way information gap task**

E: Sun shining?
F: In my picture, the sun is shining, but there's some clouds. There's clouds over the sun.
E: Over the sun?
F: Yeah. Halfway over the sun.
E: I'm not.
F: You're different.
E: Yeah. Different and a girl and uh, one boy playing baseball.
F: In my picture, two children are playing soccer, kicking ball.
E: Yeah..Two children..soccer?
F: Second difference, I think. And then, two men walking along the road and uh, woman sitting in the bench and he..she..read a newspaper. Ok. The woman is seated reading a book, small book.
E: Book? Oh...Third difference
F: Is it different?
E: Yeah..Different newspaper in my picture.
F: Ok. Right..
E: And then two dogs playing..

F: Ahhh, Ahhhh....In my picture, there's only one dog.

E: One dog? Ok. Fourth difference and then..

F: The two men walking? Do you wanna describe them? Maybe they're different.

E: Uhhh...They're walking.

F: Uh-uh What are they wearing?

E: One man is..uh..white white hair, white shirt, and uh..black necktie.

F: Uh-uh. Mine too

E: Ok. The next person uh...wear T-shirt and black hair and pants. Do you see the right side and there are, there is old tree.

F: Ok.

E: And there is a school. There is a, an animal on the branch.

F: There is an animal on the bench?

E: Branch, branch

F: Oh on the branch of the tree?

E: Yeah..On the tree.

F: I don't have any animal on the branch of my tree.

E: Oh..Ok.. Yeah..Five difference.

F: Yeah..

E: And then uh..and..there's a..there are many buildings, buildings backward of tree.

F: Yeah. In my background, there aren't any buildings.

E: Ahhh...Really?

F: No.

E: Oh.

F: There are mountains.

E: Mountains? Six difference?

F: You said the man walking on a road. Uh..Can you describe that? What it looks like where they're walking?
E: Yeah..walking on the small road. And in the middle, there is middle in the picture.
F: Ok.
E: And then, and then....Ah..there is a trash, trash basket, trash basket
F: Yeah..Or trash can..
E: Ah. Trash can
F: Umm..There isn't.
E: Beside, beside bench.
F: Beside the bench.
E: Yeah..Beside the bench.
F: Ok. There isn't a trash can in my picture.
E: Ok.
F: Yeah.
E: Seven difference.
F: Uh-uh..And what does the bench look like? That's woman, you said, woman was sitting?
E: Yeah..Yes..
F: Is it a bench, is it a chair?
E: Bench.
F: It's definitely a bench.
E: Yeah. Bench.
F: Ok. Another could sit on it?
E: No. Only..There is only…
F: It’s only for one person.
E: Yeah..Only for one person.
F: Ok..Ok. I think we usually say if I say 'bench', I am thinking of a place for more than one person.
E: Ahhh.
F: But if it's just for one person, I call it chair.
E: Ahhh.

F: And the woman here is sitting on a chair.

E: Sitting on a chair? (U)

F: One person can sit on it.

E: Ok. Eight difference?

F: No. I think yours only for one person.

E: Yeah. Yeah. Only one person.

F: Mine, too. Same. Mine is the same. Only one person.

E: Ok. Difference is bench and chair, right?

F: There are difference in the words, but I think our pictures are the same.

E: Hmmm..Haha

F: Right? I think, I think, I just was the same that if you say 'bench', I think of something longer.

E: Longer chair?

F: Yeah..It's a longer chair. But you don't have the bench, I think. I think you only have a chair, maybe.

E: So yeah..Maybe..Ok.

F: We found eight differences, do you think, or seven differences? That's a lot.

E: Seven difference, I think.

F: What are the things do you see? Is there anything next to the lady?

E: Uhh..So there is a flower, flowers, beside the woman.

F: Uh-uh. My picture has flowers next to the woman too.

E: Yeah..Ok..and then..and..background is there are trees below the sun.

F: Uh-uh..There's few tress in the background, too on the left side.

E: Yeah..Left side right.

F: Ok. On the right side, I have, like I said I have the mountains in the background. Yeah.

E: Ok..So where is your dog in your picture?
F: Ahh.. The dog is in a front left side.

E: Left side?
F: Just the dog laying down.

E: Uh-uh..Ok. So.

F: What is the woman wearing?
E: Wearing..woman wear suit..Uhh...

F: Does she have a pants?
E: No.No Pants.

F: Does she have a dress?
E: Yeah..Dress.

F: She has a dress?
E: Yeah..

F: Ok..Ok..Can you describe the kind of tree that is behind her? You said there was a big tree behind her.
E: Yeah. Big tree. Uh-uh. I don't know what kind of trees.

F: Ok..Ok..Where's next to the men on a path? The two men that are walking,
E: Yeah.

F: And In my picture, they are walking on a path, not a road. Let's say, it's like a park, umm... path.
E: Ahh..Yeah..That's the same thing.

F: Ok..Is there something next to them on the path? Anything next to them to the side.
E: Yeah..Next side, there are flowers, small flowers.

F: Ok. Me, too.

E: In my picture, the woman hair is white.

F: Uh-uh, Mine too.

E: Did you say the two children is soccer game, playing soccer?
F: Yeah..Playing soccer, chasing the soccer ball.

E: Soccer ball. Uh-uh.
F: I think it's two boys.

E: Two boys? Ahhh…

F: Yours was a boy and a girl?

E: In my picture, girl and boy playing baseball.

F: Ok. Well, maybe that's two differences, then. Not just one difference.

E: Yeah.

F: Now we're up to eight.

E: Could you describe mountains?

F: OK. The mountains are in the far background on the right side and near background, not too far, there's a roll of trees around the horizon. Uh..Let's see. Hm..What else? Umm..Ok..the woman, the chair that the woman is in looks like it's made of wood and wooden slats, so it's made in pieces, separate pieces of wood, slats.

E: Yeah.

F: Ok. All right. I'm gonna count again all the things that we found that were different. You said yours' sunny and mine has clouds.

E: Yeah..and So..How many clouds in...?

F: Oh.. How many clouds? I have one, two, three, four, five, six, seven, eight clouds.

E: Oh, really? I have two clouds.

F: Ok.

E: So..

F: Yours is sunny and mine is cloudy.

E: Yeah.

F: Ok. And I have two boys and you have a boy and a girl.

E: Yeah.

F: They're playing baseball in yours and soccer in mine. There's two dogs in yours and one dog in mine. You said the dogs are playing?

E: Yeah, playing..

F: Both your dogs are playing?

E: Yeah..Dogs are playing.
F: Ok. My dog is laying down. Does that count? I don't know. Then you said, there's buildings in the background and mine has mountains in the background. You said the woman is reading newspaper, she just reading a book in mine, a very small book. And then, that's seven.

E: Animal on the tree?

F: There's an animal on the branch of the tree.

E: Yeah..

F: That's eight. Ok. And...

E: cl.. a cloud..the number of clouds.

F: Ok. The different number of clouds.

E: Yeah.

F: Ok. That's nine. And I..I..I'm wondering about Ok. You said there's a man dressed in a business suit with light color hair.

E: Yeah.

F: And the other guy in dark hair is like a sweater and pants on.

E: Yeah.

F: Ok. That's the same. And so the last thing, the woman, she's wearing a dress.

E: Yeah..

F: OK. That's the same. And you said there were some trees in the background to the left? It's where the kids are playing baseball or something.

E: Yeah..

F: Ok. And..Ok..What kind of shoes is the woman wearing?

E: Shoes..

F: Are they very small?

E: Yeah..Small...

F: Hm. You said the men, are they walking on a road like a street, like there's concrete? Or it looks like it's in a park?

E: It looks like a park.

F: Ok. Mine, too. And street, and the clouds..Ok. I think we're done.
REFERENCES


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