TESL-EJ Teaching English as a Second or Foreign Language
June 2009
Volume 13, Number 1

Self-Repair in Oral Production by Intermediate Chinese Learners of English

Jiangtao Liu
Hangzhou Dianzi University
<ralphliu1983@gmail.com>

Abstract

For various reasons, second language learners modify their speech by means of self-repair. This study, based on a small-scale corpus, shows the patterns and features of self-repairs by intermediate Chinese learners of English. The results suggest that intermediate Chinese learners of English more frequently make repairs than advanced Chinese learners of English do. Within the three overt repair types (same information, different information, and appropriateness), different information accounts for the highest percentage of repairs, and appropriateness repairs the lowest. Same information repairs represent the highest percentage of all the repair types. From a chi-square test, the results indicate that intermediate Chinese learners of English make more significant use of same information repairs than relatively advanced Chinese learners of English do. Some pedagogical implications of this finding are discussed.

Introduction

The article "The preference for self-correction in the organization of repair in conversation" (Schegloff, Jefferson, & Sacks, 1977) marked the beginning of conversational repair as a research field. Since that time, the field has drawn the attention and interest of linguists, such as discourse analysts, psycholinguists, sociolinguists, and second language acquisition researchers.

According to the research, basic repair structure consists of a three-step sequence: the production of the trouble source, the initiation of the repair, and the completion of the repair. Both the initiation and the repair can be made by either the trouble source or another party. Hutchby and Wooffitt (1998) proposed four types of repair: self-initiated self-repair, other-initiated self-repair, self-initiated other-repair, and other-initiated other-repair. Studies of self-initiated self-repair (henceforth just "self-repair") started with natural

conversation in the first language (L1) in the area of conversation analysis. Later, researchers explored the psychological mechanism of self-repair from the perspective of psychology and cognitive science. The most representative and influential study was done by Levelt (1983). In this study, Levelt established the L1 output and monitoring model.

Self-repair studies have also made progress in second language acquisition during the last two or three decades. For instance, Kormos (1999, 2000a, 2000b), based on the classification of self-repairs in L1 by Levelt (1983) and Brédart (1991), proposed his classification of the second language self-repairs, that is, different information repair, appropriateness repair, error repair, and rephrasing repair. It should be emphasized that this classification is not consistent. The first three types concerned the *content* of self-repair, but the last one concerned the *mechanism* of self-repair. In van Hest (1996), self-repairs were mainly divided as such: appropriateness repair, error repair, and different repair, based on the content. Other repair types included covert repair and mingled repair. Among all these repair types, appropriateness repairs accounted for 39.7%, followed by error repairs (22.4%) and different repairs (10.1%). Kasper (1985) studied the repair patterns of EFL learners in the EFL class, distinguishing two kinds of language learning activities: language-centered and content-centered. The findings show that the repair patterns in the two kinds of activities are different. Rieger (2003a) focuses on repetitions as self-repair strategies, showing that English-German bilinguals used repetitions as self-repair strategies differently. The study demonstrates that the structure of a particular language shapes the repair strategies of language users. Rieger (2003b) also investigates strategies of intermediate learners of German as a second language within a testing context.

The study of self-repair by Chinese learners of English is not complete or systematic. There are still a lot of issues worth discussing and studying. In a study of English majors at two different proficiency levels, Yang (2002) shows that learners at lower proficiency level repair more frequently than learners at higher proficiency level. Learners at a higher proficiency level are prone to appropriateness repairs whereas learners at lower proficiency level are prone to error repairs and different repairs. Based on the College Learners' Spoken English Corpus (COLSEC), Chen and Pu (2007) investigate the repair patterns and features of non-English majors' oral production in a standardized test called the Spoken English Test of the College English Test (CET-SET). Chen and Pu (2007) believe that the subjects are relatively advanced learners of English. In their study, self-repairs are divided into four types: same information repair, different information repair, appropriateness repair, and error repair. The results show that the frequency of self-repairs in the subjects' oral production is rather high. Same information repairs are the highest proportion of repairs (60.4%), followed by error repairs (18.9%), different information repairs (11.4%), and appropriateness repairs (9.2%). It also suggests that the subjects pay more attention to the form of the language rather than the content, which reflects their poor communicative skills.

Very little research has been done on intermediate learners' self-repair patterns and features in their oral English production in a Chinese context. What are their self-repair patterns and features? Will they repair more frequently than relatively advanced Chinese learners of English? Is there any difference in self-repair between Chinese learners of English at the intermediate level and those at a relatively advanced level? In response to these questions, we conducted the following study.

Methods

Subjects

This study was carried out at a college in Shandong, People's Republic of China. The subjects of this study were first year students majoring in international trade. All came from the same class; there were 36 participants--15 male and 21 female. They are intermediate learners of English.

Test Design

At the end of the term, the student participants completed an oral English test, which was a way to evaluate their performance in a required subject, "English Listening and Speaking." Each took the test individually. During the test, the subjects were asked to address topics closely related to daily life, which would therefore be familiar. Considering the oral English proficiency level of the students, we lowered the difficulty level by dividing the test items into required topics and optional topics. There were 36 different required topics, numbered 1 through 36.

The participants drew lots to decide their order for taking the oral test, and the required topic. (For example, if a participant drew lot 8, it means he or she was the eighth one to take the test and the topic was topic 8.) Required topics were kept secret, and subjects had three minutes to prepare the required topic and then had another three minutes to talk about the given topic. In addition, there were ten optional topics. These ten topics were shown to the students beforehand so that they could have time to prepare. This could help to lower the difficulty level as well. If a participant did not use the entire three minutes in talking about the given topic, he or she could still choose a topic from the optional ones. In this way, each participant used approximately the same amount of time in answering.

Data Collection

With the subjects' consent, the oral tests were recorded. Subjects' names and numbers were noted before recording. The total length of the recording was around 120 minutes.

Corpus Transcription

After data collection, we transcribed the recordings, consulting the transcription techniques of Wen, Wang, and Liang (2005). We mainly marked headers, utterance features, and grammatical errors. To begin with, we marked the header information of each subject. For instance, if the first subject was male, then the header would be <No.1> <Gender=M & gt;.

For utterance features, our first and major concern was self-repair features. We transcribed self-repair features according to the exact frequency in the recording. For example, if we heard a subject repeat the phrase *I will*, we would transcribe it as *I will I will.* In addition, we marked long pauses and pause filler features. According to Wen et al. (2005, p. 28), if a pause exceeded the normal pause time (3 sec.), we would consider it as a disfluency pause. We transcribed long pauses as ellipses (that is, ". . ."). For instance, *because he has. . .because he is.* We also marked pause fillers, such as *um, er, ah*, etc. For example, *Er. . .she is. . .er. . . she is a great girl.*

With respect to grammatical errors, we put errors in angled brackets (< >), and the correct forms in the text just before it. For example:

> *I think <have> um a good teacher must be honest <honesty>.*
>
> *And I hope that my best my friend, my parents and my. . .my relatives <relations> can give me many many presents.*
>
> *She is an <a> optimistic girl.*
>
> *I think I need to be patient <patience>.*

In addition, we put missing words in parentheses. We indicated unintelligible parts with double parentheses.

Results

Our classification of self-repairs mainly relies on Kormos (1999, 2000a, 2000b), Levelt (1983), van Hest (1996), Chen, Li, and Zhao (2005), and Chen and Pu (2007). Levelt (1983) presents the self-repair features of native speakers' utterances, and the others present the self-repair features of non-native speakers' utterances. We made some adjustments to this model for the data we collected. In our study, we divided self-repairs into the following four types: same information repair (SIR), different information repair (DIR), appropriateness repair (AR), and error repair (ER). Within each type, there are sub-types, shown in Table 1.

Table 1. Frequency and Percentage of Each Type and Sub-type of Self-Repairs

Types		Frequency	Percentage within Each Type	Total Frequency (Percentage)
Same Information Repair (SIR)	Syllable repetition repair	34	4.8%	714 (78.3%)
	One-word repetition repair	344	48.1%	
	Within-two-word repetition repair	230	32.2%	
	More-than-two-word repetition repair	106	14.8%	
Different Information Repair (DIR)	Different fact repair	10	11.9%	84 (9.2%)
	Message replacement repair	74	88.1%	
Appropriateness Repair (AR)	Appropriate ambiguity repair	2	4.8%	42 (4.6%)
	Appropriate lexical replacement repair	6	14.3%	
	Appropriate insertion repair	26	61.9%	
	Appropriate deletion repair	4	9.5%	
	Appropriate cohesion repair	4	9.5%	
Error Repair (ER)	Phonological error repair	6	8.3%	72 (7.9%)
	Lexical error repair	14	19.5%	
	Morphological error repair	42	58.3%	
	Back-to-error repair	10	13.9%	
Total		912		912 (100%)

We see from Table 1 that the total frequency of self-repairs is 912. Among different types of self-repairs, same information repair (SIR) accounted for 78.3%, the highest percentage. The other three types accounted for less than 25%. The second largest type was different information repair (DIR), accounting for 9.2%, followed by error repair (ER, 7.9%) and appropriateness repair (AR, 4.6%). Their percentages are portrayed in Figure 1.

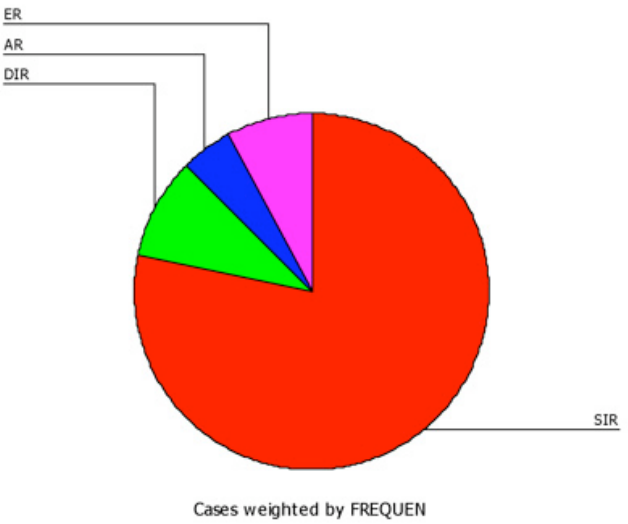

Figure 1. Percentages of Different Types of Self-Repairs

Same Information Repair (SIR)

Same information repair (SIR), also called self-repetition, means to repeat what one has already said. It can vary from one syllable to several words. The repair parts are underlined in the following examples:

1) Syllable Repetition Repair (SRR)

He is capa- capable.

He he had <have> a won- wonderful time.

2) One-Word Repetition Repair (OWRR)

And and my parents can. . .can buy me anything I want to I want to have. . . .

After after several months, his his football career started <start> again.

3) Within-Two-Word Repetition Repair (WTWRR) (This subtype includes repetition with more than one word but not more than two.)

> My hometown is famous for Wu Song, a hero a hero a hero (who) kill killed (the) tiger.
>
> Music is the is the universal language.

4) More-Than-Two-Word Repetition Repair (MTTWRR)

> He he he had he had no he had no choice he had no choice choice but to work as a writer.
>
> He must have this possibility and and he must have have a very have a very wide knowledge. . . .

Same information repair is actually a kind of covert repair (Levelt, 1983). The speaker repeats what he or she has already said to leave time to think of the words that he or she will say next. Our corpus shows that within same information repairs, more than 80% are repetitions of one or two words (Figure 2).

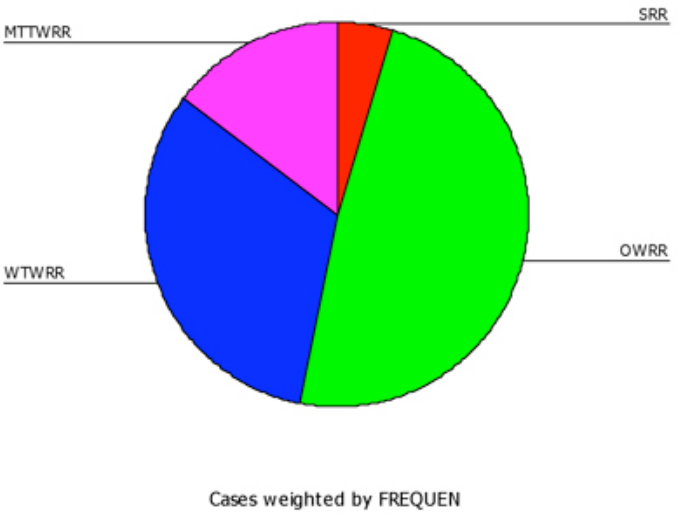

Figure 2. Same Information Repairs

Different Information Repair (DIR)

Different information repair means the speaker denies the information already conveyed and conveys something different. This can be divided into two types:

different fact repair (DFR) and message replacement repair (MRR). The first type mainly involves the content; the speaker realizes what was said is not the case. This may have been caused by a slip of the tongue, so the speaker repairs by correcting the information. In the second type, the speaker finds it is difficult to continue speaking because of a complex topic choice. Speakers in this situation may find it too difficult to express themselves in one way, so they change direction and use a different method of expressing themselves.

1) Different Fact Repair (DFR)

> I can I can learn more from a good music, no, good film.
>
> College life was college life was was relax and relax relax and relax and busy free <freed> relax and free <freed>.

2) Message Replacement Repair (MRR)

> His hobby he has many hobbies <hobby>, such as football, basketball.
>
> It is it cut it crossing it is crossing my hometown.
>
> Another another thing is Jingjiu Railway. It crosses <crossing> my hometown and promotes <promote> my promotes <promote> um local promotes <promote> my hometown's um um my hometown's um economy.

Our corpus shows that message replacement repairs (MRR) account for a higher percentage (88.1%) than different fact repairs (DFR) (11.9%) (Figure 3). This could be considered a communicative strategy. If the participants find it hard to continue, they would choose other ways to express themselves.

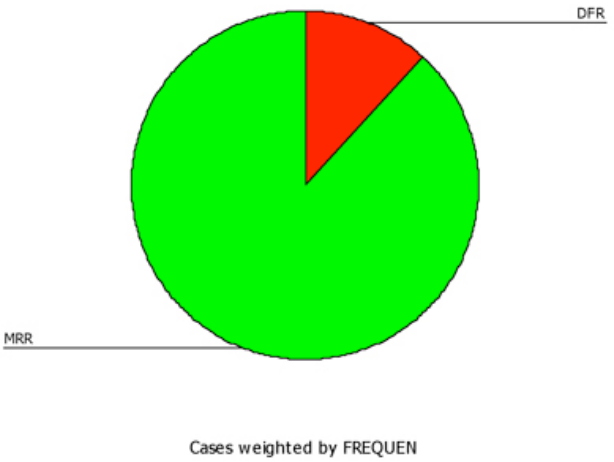

Figure 3. Different Information Repairs

Appropriateness Repair (AR)

Appropriateness repair (AR) is concerned with whether or not an idea is expressed properly, clearly, unambiguously, cohesively, etc. It includes appropriate ambiguity repair (AAR), appropriate lexical replacement repair (ALRR), appropriate insertion repair (AIR), appropriate deletion repair (ADR) and appropriate cohesion repair (ACR).

1) Appropriate Ambiguity Repair (AAR) (Speakers realize what they just said is ambiguous and may cause misunderstanding so they repair.)

He has to sit on the seat to to see other to see his team members play with other.

2) Appropriate Lexical Replacement Repair (ALRR) (This type also involves the change and choice of words, but the starting point is about appropriateness.)

I will go to super I will go shopping . . .

I think um I believe (in) a proverb, "live and learn"

3) Appropriate Insertion Repair (AIR) (In this case, the speaker inserts something to make an utterance more proper. The inserted part below has been italicized.)

My hometown has has a very very large has (a) *lot of* large company companies.

A few minutes later, Li Ming, my best friend, put me a hot put me *a cup of* hot water and some medicine.

4) Appropriate Deletion Repair (ADR) (In this case, the speaker deletes some redundant information to make an utterance more appropriate. The deleted part below has been italicized.)

I have been dreaming *about* been dreaming there is a house (which) belong belong to be.

Therefore I want *to* I want I want that my birthday presents can can can let my birthday party more exciting.

5) Appropriate Cohesion Repair (ACR) (The speaker adds cohesive devices to make an utterance more fluent and logical.)

If I because I I want to say a football player (who) is a foreigner.

On the whole, appropriateness repairs made up the smallest percentage, only 4.6%. Among the different subtypes of appropriateness repairs, appropriate insertion repairs (AIR) accounted for the highest percentage (61.9%) (Figure 4).

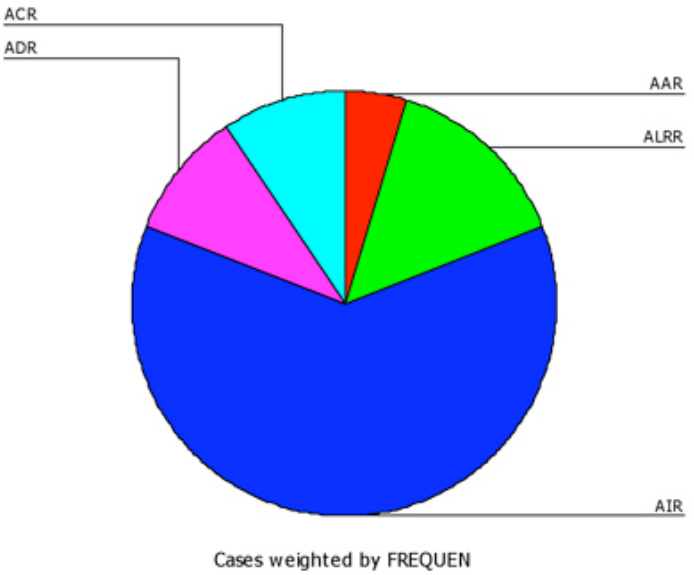

Figure 4. Appropriateness Repair

Error Repair (ER)

Error repair corrects accidental errors, which include phonological, lexical, and morphological errors. It is interesting to note that there are some cases in which the speaker says something correctly and then changes it into an incorrect statement. We call this type back-to-error repair (BTER), and also place it in the category of error repairs.

1) Phonological Error Repair (PER) (Speakers may find they do not pronounce some sounds correctly which may cause misunderstanding, so they go back and correct them.)

If if the glass class give give didn't give the teacher presents, she the teacher will not pass will not let the student pass the exams.

She like she likes like working wearing dresses.

My happinest my happiest memory is related to my friends.

2) Lexical Error Repair (LER)

It's important for for us to accelerate accumulate the working experience.

3) Morphological Error Repair (MER) (Includes repairing word forms, tenses, and so on.)

He were he was discovered by Wu Zongxian, who who helped Jay who help Jay to make to make album album.

In my in everyday life, she always help me helps me.

I consider the price and the quality of the good goods.

4) Back-To-Error Repair (BTER)

All the thing is is wooden by by the wooden.

Every year in every year before my birthday, I will be very excited.

All in all, error repairs made up the second smallest percentage, only 7.9%. Within error repairs, morphological error repairs (MER) accounted for the highest (58.3%) (Figure 5).

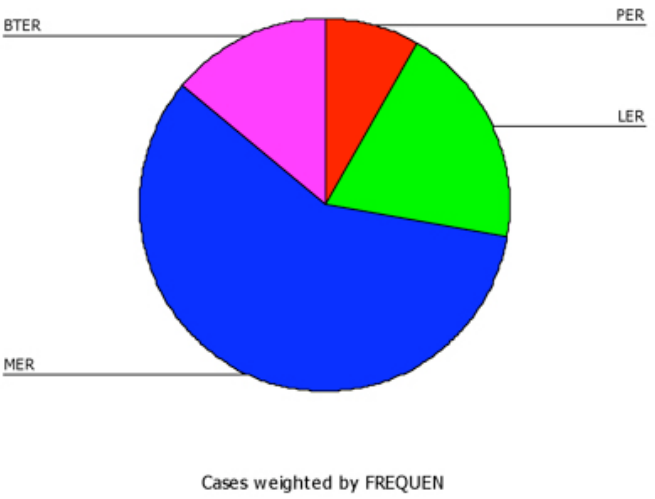

Figure 5. Error Repair

Discussion

Our corpus contains about 8,000 words; the total recording time is approximately 120 minutes. We recorded 912 repairs for the 36 participants. In other words, on average each participant makes 7.6 repairs per minute. The average is 25.3 repairs, about once every 9 words. In Chen and Pu (2007), relatively advanced Chinese learners of English make a repair every sixteen words. In comparison, from our study it appears that intermediate Chinese learners of English make repairs more frequently than relatively advanced Chinese learners of English.

It is worth noting that same information repairs make up the highest percentage of repairs (78.3%). As previously stated, same information repair is a kind of covert repair (Levelt, 1983). The speaker may repeat a syllable, a word, or a phrase to give time to think of the words that will be said next. In this way, the speaker may avoid making mistakes; this is a communicative strategy. However, if a speaker uses too much same information repair, the production gives an impression of disfluency and incoherence.

Different information repair, appropriateness repair, and error repair are overt repairs. This is the typical definition of *repair*. In our study, within these three types, different information repairs account for the highest percentage (42.4%), followed by error repairs (36. 4%). Appropriateness repairs account for the lowest proportion (21.2%). Within different information repairs, on most occasions, subjects' repairs reflect their difficulty in continuing, causing them to choose alternative expressions. It also indicates that the subjects' oral English proficiency is rather low, and they have problems expressing their ideas freely in English.

As we mentioned previously, the study by Chen and Pu (2007) focuses on relatively advanced Chinese learners of English. Their results show that the four types of repairs accounted for 60.4%, 11.4%, 9.2%, and 18.9% of the total repairs respectively. We use a chi-square test to check whether there is any significant difference between Chinese learners of English at the intermediate level and those at a relatively advanced level. The chi-square test shows that there is a significant difference between the two groups (χ^2=8.167, p= .043). This indicates that intermediate Chinese learners of English make more significant use of same information repairs than relatively advanced Chinese learners of English.

Conclusion

We may conclude from the results and discussion above that:

1. Intermediate Chinese learners of English more frequently make repairs than advanced Chinese learners of English.
2. Intermediate Chinese learners of English might change a correct expression into an incorrect one, showing uncertainty about language use.
3. Same information repairs make up the biggest percentage of all the repair types, causing disfluency and incoherence of the language.
4. Within the three types of overt repairs, different information repairs account for the highest percentage. Appropriateness repairs account for the lowest.
5. In comparison to the findings of Chen and Pu (2007) through a chi-square test, intermediate level Chinese learners of English make more significant use of same information repairs than relatively advanced Chinese learners of English do.

Pedagogical Implications

In order to improve the communicative skills of intermediate Chinese learners of English, teachers must further develop learners' basic language skills, especially speaking skills. For some time in China, teachers have emphasized the importance of passing standardized English tests. They have taught their students how to do well on the tests. We suggest that teachers should create more chances for learners to speak in English, and encourage them to speak. Moreover, intermediate Chinese learners of English need more competence in English language use. We note that sometimes learners are motivated to speak in English, but struggle to express their ideas. We suggest that that this problem can be addressed through materials' use. Teachers should introduce students to more interesting materials, either for listening or for reading. It is also necessary to develop learners' communicative strategies. For instance, teachers can advise learners to use native-like fillers and markers like "well", "you know", "I mean", "that is to say", etc., when learners struggle to express

their ideas (Chen & Pu, 2007, p. 61). In this way, communication can go more smoothly.

Acknowledgment

My gratitude goes to Richard Toepler of Yanshan University, PRC, for his valuable comments and suggestions.

About the Author

Jiangtao Liu teaches English at Hangzhou Dianzi University, PRC. His research interests include auditory phonetics, psycholinguistics, child language, and second language acquisition.

References

Brédart, S. (1991). Word interruption in self-repairing. *Journal of Psycholinguistic Research*, *20*, 123-137.

Chen, L., Li, J., & Zhao, W. (2005). Gender differences in self-repairs by Chinese non-English majors in their spoken English. *Modern Foreign Languages* (*Xiandai Waiyu*), *28*(3), 279-287.

Chen, L., & Pu, J. (2007). A corpus-based analysis of self-repairs by college non-English majors. *Foreign Language Education* (*Waiyu Jiaoxue*), *28*(2), 57-61.

Hutchby, I., & Wooffitt, R. (1998). *Conversation analysis: Principles, practices, and applications*. Cambridge: Polity Press.

Kasper, G. (1985). Repair in foreign language teaching. *Studies in Second Language Acquisition*, *7*, 200-215.

Kormos, J. (1999). Monitoring and self-repair in L2. *Language Learning*, *49*(2), 303-342.

Kormos, J. (2000a). The timing of self-repairs in second language speech production. *Studies in Second Language Acquisition*, *22*, 145-167.

Kormos, J. (2000b). The role of attention in monitoring second language speech production. *Language Learning*, *50*, 343-384.

Levelt, W. J. M. (1983). Monitoring and self-repair in speech. *Cognition*, *14*(1), 41-104.

Rieger, C. L. (2003a). Repetitions as self-repair strategies in English and German Conversations. *Journal of Pragmatics*, *35*, 47-69.

Rieger, C. L. (2003b). Disfluencies and hesitation strategies in oral L2 tests. In R. Eklund (Ed.), *Gothenburg Papers in Theoretical Linguistics 90* (pp. 41-44). Proceedings of DiSS'03, Disfluency in Spontaneous Speech Workshop, 2003, Göteborg University, Sweden.

Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, *53*(2), 361-382.

van Hest, E. (1996). *Self-repair in L1 and L2 production*. Tilburg: Tilburg University Press.

Wen, Q., Wang, L., & Liang, M. (2005). *Spoken and written English Corpus of Chinese learners*. Beijing: Foreign Language Teaching and Research Press.

Yang, L. (2002). The effect of English proficiency on self-repair behavior of EFL learners. *Shandong Foreign Languages Journal* (*Shandong Waiyu Jiaoxue)*, *4*, 74-76.