

The effect of learners' proficiency on the provision of implicit negative feedback and its incorporation in the interaction between non-native speakers of English

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What is important to consider in future studies dealing with related issues?

- (1) Variables that should be controlled: The degree of familiarity among the students should be controlled. From previous studies and also from a pilot study of my own, I found that, if the participants are familiar with each other, they will not provide much feedback and focus on accomplishing the task only. Also, it is recommendable to control the gestures of the students as this variable also decreases the amount of interaction in the task.
- (2) It is recommendable to have an independent measure of proficiency besides the class level of the students in case the researcher is going to recruit students from multiple institutes. The reason is that it is extremely difficult to measure the proficiency of the students due to the fact that all the institutes will use different measures of proficiency. However, it might be possible to apply the IBT TOEFL scores since the test has a listening and speaking session. However, if there are many students who did not take the IBT TOEFL score then it might be recommendable to use the various criteria found in Crookes (1991).
- (3) It seemed that it might be more helpful if we can look into the proportion of the explicit types of feedback (e.g. explicit error corrections or grammar explanation) and the implicit types of feedback that the learners provide to each other. From what I remembered from transcribing my recordings that the students were providing considerable amount of explicit feedback to each other. Such observation made me think that it would be beneficial if we can see whether the students' preference in helping each other in accomplishing a task.
- (4) I also found out that using picture description tasks has drawbacks in that it does not represent the tasks that are used in real classrooms (although I

heard that it is used in some English classes in Japan) and that the students may not interact as they should. For instance, I saw cases where the students do not interact actively as expected but would wait until one person finishes describing the picture and then ask the questions about the picture. Or they would just describe or draw the picture without any interaction. Such lack of interaction makes it difficult to find out how the students would help each other by providing and incorporating feedback. A possible remedy to this problem would be to use tasks that would give the students the rationale to interact such as spot-the-difference tasks in which students have to find different parts in two slightly different pictures and map task where the students have to find a way to some place by negotiating with two slightly different maps. By having the students accomplish the tasks by not looking at each other's picture, the tasks will give the students the rationale to negotiate and thus we could observe how they provide and incorporate feedback to each other more clearly. Or we could look into students' interaction in actual classroom tasks used in the institute that induces the provision of feedback and its incorporation. By doing so, the study results can be more applicable to the classroom settings (Refer Pica, et. al., 1991 to see what types of tasks can induce pair-work interaction and Pica, et. al, 2006 to see how spot-the-difference tasks and other information gap tasks in general can help find out learner behavior in pair-work interaction)

- (5) I also thought that it would be helpful if qualitative research methods (such as conversation analysis) can be combined in this study. By doing so, we will be able to see how the students help each other in pair-work interaction more comprehensively as we can observe the context where the students would actually provide feedback and incorporate such feedback. Studies such as Izumi (2000), Nakahama, et. al. (2003), and Foster, & Ohta (2004) are good reference with regards to combining both qualitative and quantitative methods. Although they have looked into the interaction of native and non-native speakers, they do give insights about how to frame the research so that the data can be analyzed both quantitative and qualitative ways.

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Introduction

With the advent of communicative language teaching and the emphasis of using tasks in language classrooms, there is an increase of the use of tasks in foreign language education including English. Among these tasks, pair work activities are one of the most popular, and currently they are extensively used especially in conversation classes with various purposes. One of the reasons for a such wide usage of tasks can be attributed to some of the previous studies which showed that such activities can facilitate L2 acquisition of the learners for the following three reasons: 1) The learners have more opportunity to use L2; 2) They will feel more free to talk with each other than with native speakers; 3) Consequently they would be able to receive more feedback and have the chance to incorporate these feedbacks during interaction when they are engaged in pair-work tasks (Long and Porter, 1985; Mackey, et. al., 2003). However, in reality, the benefits of such pair-work activities with regards to interlocutor type are not clear

¹ It seemed that in the previous studies, there is a distinction among interactional moves and feedback (such as clarification requests, confirmation checks, and comprehension checks, recasts, repetition, elaboration, and simplification). Also, it is not clear whether such types of feedback are positive or negative evidence (Leeman, 2003). However, the present study will consider all of these as implicit negative feedback in a sense that 1) the present study will deal with the above features that are initiated by learners' errors, 2) they all indicate that something is not right in either the grammatical form or has some features that the can lead to communication breakdown, and 3) these features are assumed to all have a common function of enabling the learners to notice the gap between their production and L2 linguistic features. Such definition was applied in Mackey, et. al. (2003), although the authors of that study did not mention explicitly about adopting such definition. The types of feedback of interest in this study are confirmation checks, clarification requests, recasts, and repetition.

and there are still matters to be resolved. One such matter is whether or not non-native speakers at different levels of proficiency could provide each other with appropriate amount of comprehensible input and feedback and, in turn, incorporate the feedback they receive. This issue is important for the following reasons. First of all, it is proposed in the previous literature that implicit negative feedback provides learners with opportunities to either receive comprehensible input which can be a model for their L2 development (Long and Porter, 1985; Long, 1996) or give them opportunities to produce comprehensible output that will push them to be more accurate in L2 (Swain and Lapkin, 1995). However, this issue was not investigated with learners at different L2 proficiency level. Secondly, the students will be in situations where they would have only themselves or the teacher as providers of such feedback in class, especially in foreign language context (Iwashita, 2001; Pica, et. al., 1996) and their proficiency level may differ even though the students are placed in the same class (Iwashita, 2001). Considering these two facts, it seems appropriate to investigate proportion of the implicit negative feedback, the possibility that such feedback would lead to the incorporation of the feedback, and the actual incorporation of the feedback itself among learners at same or different level of L2 proficiency in pair-work activities.

The role of interaction and pair-work tasks in L2 acquisition and their relation to learners' proficiency

As it was briefly mentioned in the Introduction, it is claimed that implicit negative feedback and modified output occurring in interaction could trigger

the learners' cognitive process to focus on the gap between the errors found in their L2 production and helps the learners try out the assumptions that they have on L2, in order to figure out whether or not their assumptions are correct (Gass, et. al., 1998; Long, 1996; Pica, 1994).

The role of the task, with regards to provision of feedback and its incorporation, is to facilitate the production of such features so that the learners are exposed to these features. Also, in the studies by Crookes and Rulon (1985) and Pica, et. al. (1989), it was found that more amount of implicit negative feedback and more incorporation of such feedback occurred in pair-work interaction compared to free conversation. (Crookes and Rulon, 1985) As for the task themselves it is claimed that the amount of provided feedback and its incorporation is higher in tasks that have convergent goals, and unequal in the distribution of the information needed to solve the task, particularly if the information is held by only one of the learners (Pica, et. al., 1989; Pica, et. al. 1993).

According to Mackey and Philp (1998), the learners who interacted in pair-work tasks focused on question formation of English with implicit negative feedback (recasts) extensively performed better in the post-test and delayed post-test than the learners who did not engage in such interaction or did not receive intensive recasts when they were interacting in such tasks. Another important finding is that such implicit negative feedback was only beneficial to the learners who were at the developmental stage where they are able to deal with the feedback they receive. In other words, it seemed that the learners who were more proficient

benefited more with interaction and implicit negative feedback than those who where not. Such results were also found in similar studies done by Mackey (1999), Philp (2003), and Iwashita² (2003).

However, in addition to certain issues related to the methodology of the studies³, it should be pointed out that these studies had only investigated NS-NNS interaction. Therefore it would be interesting if we can investigate into other issues such as 1) whether more proficient non-native speakers can be equally effective as native speakers as providers of implicit negative feedback and 2) whether the interaction between nonnative speakers at same or different level of proficiency has any effect on incorporating feedback. The present study focused on both issues.

Previous studies related to task based pair-work interaction between non-native speakers with different level of proficiency

Although many studies that dealt with interaction in pair-work activities have focused on the interaction between native speakers (NSs) and non-native speakers (NNSs) or non-native speakers with same level of proficiency, there are not many studies that have dealt with the effect of proficiency on interaction between NNS with different level of proficiency (Iwashita, 2001).

There are, however, some studies that suggested NNSs would interact with

² However, among the three grammatical features in Japanese that Iwashita observed (Locative initial structures, locative particles, and the present progressive particle -te-), the acquisition of the -te- form through pair-work interaction was not affected by the learners' proficiency. Although such finding is meaningful, the issue is beyond the issue of this study since it brings the issue of what types of grammatical forms can be learned effectively through receiving feedback.

³ Such as the inconsistency of categorization, the distance between the immediate and delayed post tests, and the limitation of the generalizing the results of the studies due their focus on certain grammatical features of L2

each other more frequently than with NSs and they would be able to benefit more by interacting with other learners at different level of L2 proficiency (Long and Porter, 1985; Porter, 1986; Varonis and Gass, 1985). For instance, in Porter (1986), it was found that the Spanish NNSs of English interacted more with each other than with native speakers in pair work tasks and also provided almost the same amount of implicit negative feedback (termed as other-correction, and repair) to other learners like the native speaker. However, when the interaction between learners with higher and lower proficiency were compared, it was found that the advanced learners spoke more than the intermediate learners but the amount of feedback that they provided to each other did not differ significantly. Based on the results of her study, Porter concluded that learners would interact more with each other than native speakers and that they would also be able to provide feedback to each other almost like native speakers but that the proficiency level of the learners did not have any effect on the provision of implicit negative feedback in NNS-NNS interaction. Also, another study by Varonis and Gass (1985) showed that NNSs who have more different background (L1 background and L2 proficiency) interacted and engaged more negotiation of meaning more than either with the native speaker or with other learners who shared same background in free conversation.

The focus of these studies, however, was mainly focused on the provision of feedback, the amount of conversational moves, and the amount of speech in interaction only and especially in Varonis and Gass' study, the data were not collected from interaction happening in pair-work tasks. Therefore it is somewhat

difficult to conclude that whether the learners will provide sufficient amount of implicit negative feedback that would induce incorporation of the feedback and the amount of feedback they would actually incorporate in pair-work interaction based on the results of these two studies. However, the results do show some possibility that the learners might provide more implicit negative feedback and produce more modified output in pair-work interaction when they are at different level of L2 proficiency since the NNSs seemed to interact more with each other than with NSs.

To the researcher's knowledge, the only study that had somewhat directly dealt with this issue is Iwashita (2001). In her study, Iwashita examined how English learners of Japanese at same or different proficiency level would interact in 2 picture description tasks (one-way information gap task) and 1 jigsaw task (two-way information gap task) in which the participants has to figure out the scenery of a country with the different pictures they were given. The categories of interest in her study were interactional moves (confirmation checks, and clarification requests) and modified output. The results of her study showed that there were no overall significant statistic differences in either the amount of interactional moves or modified output in the interaction of NNS dyads with same or different level of proficiency. Based on the results of her study, Iwashita concluded that proficiency does not affect the amount of either the interactional moves or modified output resulting from such moves.

However, there are three reasons that make it worthwhile to investigate into the relation between learners' proficiency levels and the interaction between the

learners with regards to the provision of implicit negative feedback and its incorporation. First of all, there were no dyads in which the learners who had different L1s and proficiency levels in Iwashita (2001). According to Varonis and Gass (1985), it seemed that NNS with different backgrounds (e.g. L1, proficiency) interacted more than the NNS with same backgrounds. The L1 of the participants in Iwashita's study were all English. Considering that there are classes with learners that would differ with regards to proficiency and L1 both second and foreign language context, it is important to find out how these two variables affect the amount of feedback and its incorporation.

Another reason is related to the coding system. It is known that the distinction between confirmation checks and clarification requests are ambiguous. For instance, in the following example, the response of the NS could be classified as both confirmation checks and clarification requests:

NNS: Yeah, so both side[s].

NS: One on the left and one on the right?

NNS: Yeah.

(Oliver, 2000, pp. 120-121)

Such multiple interpretation of coding could introduce invalidity of the coding process and the mere fact that such ambiguity exists can make the actual frequency of the category unclear and, in turn, make the reliability of the coding system questionable (Chaudron, 1988). Also, recasts and repetitions were incorporated into the either clarification requests or confirmation checks. Although it is known that

the definition, the form, and the function of the recast, repetition, clarification requests, and confirmation check are ambiguous (Mackey, et. al., 2003), and it is necessary to attempt to classify these features into more specific categories considering that their functions according to the effects on the learners' responses are different (Chaudron, 1977; Lyster and Ranta, 1997) ⁴.

Finally, with regards to the incorporation of feedback in the form of modified output, it was not clear in the Iwashita's study on how much the given feedback had lead to modified outputs. Such problem was also found in other studies that had dealt with the similar issue (Pica, et. al., 1989; Shehadeh, 1999). The problem may lie in the fact that these studies had presented the frequency of implicit negative feedback and modified output occurring in the pair-work interaction separately, and therefore it is necessary to find out how much of the feedback would lead to modified output. Also, as it was found in some studies that there are types of feedback there are types of negative feedback that either gives the learners the opportunity to incorporate the feedback they receive (usually in the form of modified output) or does not give them such opportunities at all (Mackey, et. al. 2003; Oliver, 2000). Thus it is important to find out whether such feedback leads to incorporation of feedback in order to find out the potentiality of interaction and feedback with regards to L2 acquisition.

⁴ Although the results of Chaudron (1977) and Lyster and Ranta (1997) are based on teacher-student interaction in classroom setting, it is possible that repetition and recasts may have different effect on learners' production of immediate modified output or their attempts to modify the output even when they interact with each other since the learners will eventually use some of those features while they are interacting in pair-work tasks.

The present study

Building upon Iwashita's study, this study will investigate the effect of learners' proficiency on the provision of implicit negative feedback and the incorporation of the feedback. The study will be a descriptive and exploratory study as it will only observe and explain the behavior of the learners in a particular setting. The reason is that in the current situation, it is not possible to make any causal claims on whether or not the features of interest in this study will occur frequently in one type of dyads due to the fact that there are so few studies related to this issue.

Based on the findings of Oliver (2000) and Mackey, et. al. (2003), the study will also look into how much the provided feedback gives the learners the opportunity to incorporate the feedback. Thus, the research questions of the present study are as following:

- 1) Would proficiency of the learners have effect on the types and amount of feedback that they provide to each other in pair-work activities?
- 2) Would there be any difference in the amount of implicit negative feedback providing opportunities to produce modified output among learners according to their proficiency level when they are engaged in pair-work activities?
- 3) How would the learners respond to the feedback they receive from each other in such pair-work activities? How would the proficiency level of the learners affect the actual production of modified output in pair-work activities?

Also, based on the assumption that the pair-work interaction of the learners may lead to more provision of feedback and incorporation of the feedback, the study has the following hypothesis:

- 1) The learners in dyads with participants who are at different levels of proficiency will provide more feedback to each other than those in dyads with participants who have the same proficiency level.
- 2) The learners in dyads with participants who are at different levels of proficiency will produce implicit negative feedback that provides more opportunities to produce modified output to each other than those in dyads with participants who have the same proficiency level.
- 3) The learners in dyads with participants who are at different levels of proficiency will produce more modified output than those in dyads with participants who have the same proficiency level.

Methodology

Participants

24 Students with various L1s attending at two different English language institutes at the University of Hawai'i (UH) are planned to be recruited to participate in the experiment. The students in these institutes are considered to be distinct with regards to their proficiency in English.

One of the institutes consists of graduate and undergraduate students of UH. Their level of proficiency in English is regarded to be fairly advanced in that, first

of all, their TOEFL scores are just barely below 600 (PBT). The courses they take are usually related to listening to academic lectures, leading group discussions or making presentations. Such activities require proficiency level in which the learners would have more burden of using English because academic language is more demanding than general conversation. The students recruited from this institute are also considered to be at a fairly advanced level of proficiency in English by the teachers and the administrators of this institute.

In case of the other institute, there is a more variety of students. The students may or may not be enrolled in UH. The students are classified into 6 groups according to their proficiency levels and their proficiency level ranged from “false” beginners to advanced students. The courses they take are varied also ranging from general conversation to business or academic English. Also, the courses are divided into fluency and accuracy classes that are each divided according to the focus of the class (listening and speaking, reading and writing). In this study the students who were attending classes at the high intermediate level focused on either accuracy or fluency will be recruited. The reason is that, according to the institute’s criterion on speaking ability, it was found that these students were at the level where they would be able to describe things that are not related to them but may need some more practice in doing so compared to the students at the advanced level in the same institute. Their proficiency level was also considered to be distinct by the administrators and the teachers of that institute compared to the students in the other institute.

In order to find out about the proficiency level of the students attending those institutes, the researcher interviewed teachers and administrators about the students' proficiency in listening and speaking in English from both institutes. He also examined other documents (if available) such as criterion for speaking in L2, speaking tests and so on to determine whether the proficiency level of the students will be clearly distinct from each other and whether they will be able to cope with the given tasks.

Tasks to be used in the study

Two one-way information tasks will be used in this study. In these tasks, one of the participants will describe a given picture to another who has to draw it. The reason that these types of tasks are used is because they were considered to induce participants to provide more amount of feedback in interaction (Pica, et. al. 1989; Pica, et. al, 1991). The pictures are from Ur (1981) and they were originally from sets of pictures used for two way information gap tasks. One of the pictures is about a scene in a subway station where there were people doing various activities (such as running out of a coffee shop or drinking a cup of coffee). Another picture is scene of park in which people were engaged in different activities (such as feeding the birds or walking a dog). The pictures were in black-and-white but the pictures themselves seemed somewhat demanding for the participants to describe or draw. Since these pictures were not intended to be used in one-way information task, the researcher pilot-tested on two NNSs to find out how long it would take to

describe and draw the pictures and to see whether the pictures are appropriate to use in one-way information gap tasks. Based on the results of the test, the researcher modified the picture of a subway station because it has too many information and scenes that are difficult to describe. Although a pilot test has been implemented to exclude any intervening variables the task will be nonetheless counterbalanced. In other words, if one group of dyad did the picture of the subway scene first and then the park scene, then another group of dyad will do the tasks in the other order.

Procedures

The participants will be divided into three groups of dyads according to their proficiency in English: Advanced-Advanced, Mixed (Advanced-Intermediate), Intermediate-Intermediate. There will be 4 dyads in each group in order to make statistical analysis possible. The participants will engage in the two tasks and will change roles after the first task. Written instructions will be given to the participants in addition to giving the instruction orally so as to ensure that the participants would know what to do. The participants will also have the opportunity to check the picture and see the difference or the similarity of the original picture and the picture that one of the participants has drawn. The rationale for this stage is to give the participants some kind of goal to achieve so that they will not get tired or demotivated by doing tasks of the same type. The participants will engage in this stage after all the tasks is done. The reason is that, after another pilot-test

on the two learners of English, it was found that such process introduces another variable, the planning process⁵ which eventually led to less interaction in the second task. Also, the use of gesture will be restricted as this factor seemed to be an intervening variable that hindered interaction among the participants. A cardboard blind was placed between the learners to prevent them from seeing each other's picture. The total time to do each task is approximately 10 minutes. After the participants have finished the task, they will answer a short questionnaire asking about their personal and educational background. The interaction of the participants will be audio-recorded with the presence of the researcher. However, the researcher will be in a position where he will not interfere with the participant. For the present, it is not clear how much of the recorded interaction will be transcribed but the researcher will transcribe the entire portion of interaction (10 minutes for each interaction) in order to collect all the categories that actually occurred in the interaction. The instruction and the pictures used in the tasks are presented in Appendices A and B of this study respectively.

Coding the data

The basic unit of analysis will be defined by utterances according to Long (1991): a stream of speech (a) under one intonation contour, (b) bounded by pauses, and (c) constituting a single semantic unit.

⁵ The learners were actually negotiating about how to perform the task effectively in addition to checking the similarities and the differences of their production and the actual drawing. Although it is not certain for the present, it seemed that such negotiation eventually led to less interaction in the second task.

The coding of the categories is based on Mackey et. al. (2003) and Chaudron (1977). Only those categories occurring in interaction initiated by nontargetlike utterances (phonological, morphosyntactic, lexical, semantic) will be coded so as to ensure that the following responses of the interlocutor could be classified as the features of interest. The mechanism of the coding system and its basic categories are presented in Figure 1:

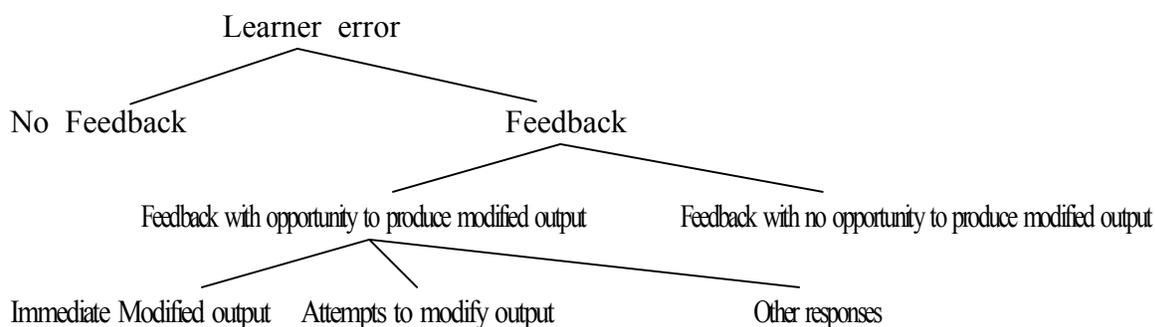


Figure 1: Mechanism of the coding system applied in this study

(Based on Mackey et. al. 2003 with modification)

The categories for implicit negative feedback will be grouped into three: 1) repetition 2) recast, and 3) questions and requests related to the learners' previous utterance. They will also be classified by whether or not they provide opportunities to produce modified output. The learners' responses will be classified into three groups: 1) modified output 2) attempts to modify output, and 3) other responses. Additionally, categories of utterances that are considered to be providing no feedback are added to the coding system to avoid confusion with feedback that does not provide opportunity to produce modified output. The categories with the

examples are presented in the Appendix C of this study.

The coding system of this study is unique compared with other studies of similar topic as it has applied low inference categories. In other words, the coding system is defining the category based solely on its actual forms in interaction rather than assigning a possible cognitive process related to the category.

Defining categories in such way is considered to be advantageous compared to high inference categories (categories that defines the cognitive process involved in the behavior of the learner or the teacher in addition to defining the actual appearance of the behavior) because, it is relatively easier to identify and tally the features occurring in the interaction. In turn, such advantages could lead to higher reliability of the coding system solving the problem of ambiguity and overlapping of the coding system (Chaudron, 1988). However, it is evident that the limit of such categorization is that it is not possible to connect the observed behaviors with the function of the interactional moves mentioned in the literature (e.g. the interactional move “what?” which is classified as both confirmation check and clarification requests in this study, unlike the previous studies which attempted to classify this move into either confirmation check or clarification request). Thus, it may be necessary to conduct a qualitative study with the types of implicit negative feedback and its incorporation that was defined in this study in order to understand more about the functions of these moves mentioned in the previous literature.

Also, regarding the possibility that the learners may not be able to incorporate the feedback because their developmental stage is low even though they are aware

that they received feedback (Mackey and Philp, 1998; Philp, 2003), incorrect modified output and explicit request for help are also considered to be responses related to incorporation of the feedback and will be investigated in addition to the frequency of immediate modified output. To the researcher's belief, such inclusion of features would be helpful as an indicator that would, at least, show whether or not the learner perceived the feedback in the interaction.

After the transcription and coding, the coded transcription will be given to a native speaker of English to check for errors in the transcription and the reliability of the coding system. The native speaker of English will also receive a manual about the coding system so that he/she will become familiar with it. The inter-rater reliability will be calculated by using simple percentage and Cohen's Kappa. The simple percentage will be used to show the overall agreement of the raters (including the researcher) in judging the categories in the coding system. Cohen's Kappa will be used to see how much each individual rater differs or agrees on the judgment of each category. If necessary, a table showing the degree of agreement or disagreement between the two raters on each category will be presented so that the reader will get the exact picture of the reliability of each category.

The researcher actually attempted to calculate the interrater reliability of the coding system in a pilot study, and found that there were problems of identifying phonological errors due to the fact that the NNSs all have distinct accents. Also, it was found that the interlocutors were silent to most of the error containing utterances. Such facts seemed to have the possibility of affecting the frequency of

these categories. It was also discovered that self correction of the learner was not considered in the coding system. Therefore, the researcher decided that if the learner was able to self correct his error successfully it will not be considered as an error containing utterance. Considering that the coding system has not been used in the previous studies, the researcher will keep constant watch of the problems that might occur during the study and refine the coding system accordingly.

Analysis

The frequencies of each category occurring in the three groups of dyads will be analyzed in a “step-down-wise fashion.” In other words, the total occurrences of utterances containing an error, implicit negative feedback, the implicit negative feedback providing the opportunity to incorporate the feedback, and the actual incorporation of the feedback will be presented subsequently. The advantage of presenting the data in such way is that it would clearly show the frequency of the categories occurring in the total utterances and also give a clearer illustration of how each category occurs with regards to the occurrences of the category at the higher level. These data will be presented in descriptive statistics to show what actually happened in the interaction. Two-dimensional bar graphs will be used to describe the relation between the categories of interest. In these graphs, the mean of the total amount of the error containing utterances, the implicit negative feedback that has been provided, the implicit negative feedback that offers opportunity to incorporate the feedback, and the actual incorporation of the feedback (divided into

immediate modified output and responses related to the incorporation of the feedback) will be presented in bars subsequently.

If sufficient amount of data could be collected, a series of Chi-square tests will be used to test the statistical significance of the frequency of the categories. The Chi-square tests will be implemented in the following way. First of all, the statistical significance of the frequency of the implicit negative feedback in the total amount of error-containing utterances will be calculated. Then a separate Chi-square test will be carried out to find out whether the frequency of the implicit negative feedback providing the opportunity in the total amount of implicit negative feedback is statistically significant. Finally, the statistical significance of the frequency of the actual incorporation of feedback within the total amount of the implicit negative feedback providing opportunities to incorporate the feedback will be calculated. (However, the statistical significance of the frequency of immediate modified output and other responses related to the incorporation of the feedback will be calculated separately)

The reason for using multiple Chi-square tests is that, first of all, the dependent variables of this study are all categorical because the rater needs to determine whether or not certain interactional moves belongs to a certain category mentioned in the coding system. Also, the dependent variables are all dependent to each other. For example the amount of implicit negative feedback that gives the opportunity to produce modified output will be influenced by the amount of the implicit negative feedback itself in the total utterances.

Therefore, it is necessary to conduct Chi-square tests for each dependent variable in order to keep these variables independent to each other and, in turn, make the statistical calculation more accurate.

Expected results

As mentioned in the hypotheses of this study, it is assumed that the mixed dyads will provide each other with more amount of feedback and that most of the feedback provided will produce modified output. Also, it is assumed that mixed dyads will produce more modified outputs or attempts to produce modified output than the dyads with the participants at the same level of proficiency.

As for the dyads consisting of participants at either advanced or intermediate level of proficiency, it is not certain which dyad will produce more of these features of interest in this study due to the fact that, to the researcher's knowledge, there were no studies directly related to this issue. Therefore, the study did not have any hypotheses about the behavior of these two groups but it will observe what will actually happen in the interaction between these two groups and report the results when the experiment is actually implemented.

Limitation of the study

Although the results of the study may be meaningful, there are some limitations of the study which should be mentioned.

First of all, the results of the study cannot be generalized into the whole

second language and foreign language context because the participants will be recruited from two particular language programs in a particular university. Other schools or institute might be in some other circumstances.

Also, there are intervening variables that are not controlled. It is known in the previous studies that gender, individual preferences on task types, and interlocutors, perception of the feedback, familiarity of the interlocutors or task types, and the task itself all affect pair-work interaction. As the study will collect and pair participants with different L1 only, it will be difficult to interpret of the results to cases in which learners with same L1 at different level of proficiency are engaged in pair-work activities. Since the study will not implement retrospection or think-aloud protocols to investigate what the students have in their mind when they receive feedback or incorporate that feedback, it will not be certain whether or not the feedback or its incorporation is actually related to learners' perceiving of the error. The mere fact that the study will recruit only a small number of participants will also make the generalization of the results of this study difficult.

Another limitation is that the categories applied in this study are somewhat different from those that were applied in related studies and, therefore, there will be difficulties in applying or comparing the results of this study with other studies.

Also, the study only investigated on what condition would facilitate the provision of implicit negative feedback and its incorporation in pair-work interaction, so the results found in the present study will not be able to address the issue of whether such interaction would have long-term (or even short term) effect on L2

acquisition.

Finally, it will be difficult to apply the results of the study in actual language classroom since the study was done in an experimental setting and it is known that in classroom setting that there are many intervening variables which makes it difficult to directly apply the results found in the experimental settings (Foster, 1998).

Therefore, the results of this study should be used only as a reference that could give other researchers and teachers some insight about how learners at the same or different level of L2 proficiency interact each other, what kind of help they could provide with respect to error correction, and what might be the optimal way to pair the learners in pair-work activities.

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Appendix A: Instruction for the picture description tasks

In these two tasks, you will first be assigned a role of a Speaker or a Drawer. The Speaker will be given a picture that he/she has to describe to the Drawer so that the Drawer will be able to draw the picture. The Drawer will not be allowed to look at the picture and must rely solely on the description that the Speaker is giving. The Drawer can ask questions, of course. However, please do not use gestures. After the Drawer finishes drawing the picture according to the Speaker's description, the Drawer can show the picture to the Speaker and you can both check whether the picture is drawn correctly. After that, a different picture will be given to the Speaker

and you will change your roles of Speaker and Drawer.

The Speaker has to explain the following features:

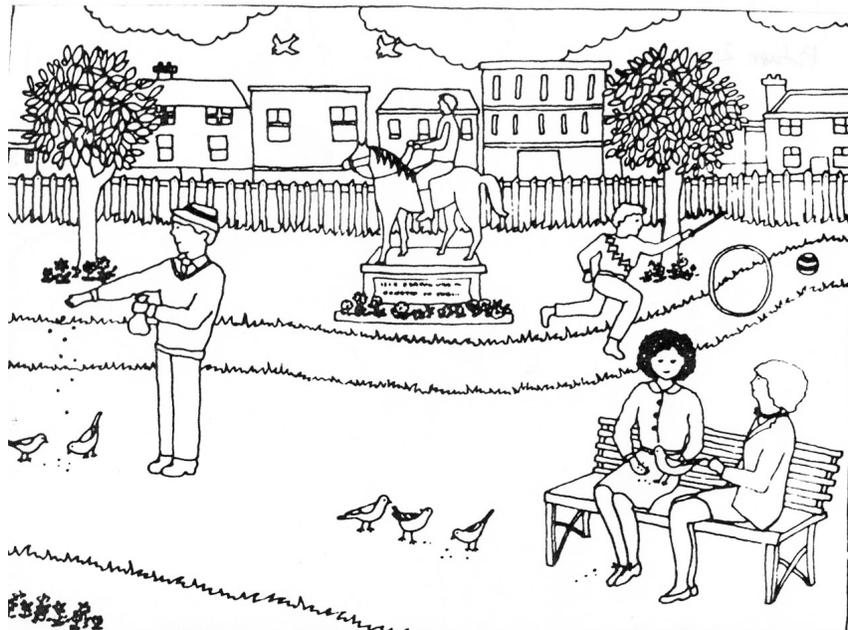
1. Where the items are placed in the picture
2. How the items look like

You will be given approximately 10 minutes to finish the first task. After that, your role will be changed and you will do the second task. In case you are the Drawer, you do not need to draw the items exactly in the same way as the original picture. Just draw as the best as you can and explain the item that you have drawn to the Speaker so that he has the general idea of what you have drawn. Finally, after you have finished the two tasks, you can compare the pictures you have drawn with the original pictures.

Appendix B: Pictures used in the picture description tasks



Picture 1: Scene of a subway station



Picture 2: Scene of a park

Appendix C: The categories of the coding system applied in this study and their examples

1. Types of errors (Errors that have been recognized in the previous literature):

1) Phonological

A: So what do you have in your picture?
B: I have a dok. (dog)

2) Morphosyntactic

A: And what's next to the dog?
B: Three cat.

3) Lexical

A: There is a library.
B: A what?
A: A place where you put books.
B: A bookshelf?
A: A book.
B: Bookshelf. (Mackey, et. al., 2000)

4) Semantic (global)

A: He is standing on the tree.
B: He is standing on the tree?
A: Yeah, standing on the tree.
(Mackey, et. al., 2000)

5) Multiple errors

A: Dogs is next to house.
B: The dogs are next to the house.

2. Implicit negative feedback with opportunity to produce modified output (Defined as Recast, Confirmation check, and Clarification check in previous literature)

Repetition

- a) Repetition of the previous utterance without modification but with an emphasis on the error form in question.

A: I have two dog
B: I have two **dog?**

A: What is in front of the man?
B: Two dog.
A: Two **dog?**

- b) Partial repetition of the error in the previous utterance only with an emphasis on the error form in question.

A: I have two dog.
B: two **dog?** / **dog?**

Recasts

- a) Repetition of the previous utterance with the corrected form of the error in the previous utterance

A: I have a dogs.
B: I have **dogs**.

- b) Paraphrasing of the incorrect form with modification containing the correct form with/without emphasis in question format

A: I have two dog.
B: So, you have **two dogs**?

- c) Repetition of the error in question form

A: I have two dog
B: two **dogs**? / **Dogs**?

Questions/requests/prompts of the previous utterance containing the error

- a) Questions or request with one or more words requiring clarification or repetition of what has been just said but not including the error of the utterance

A: I have two dog.
B: What? What did you say? Please say that again. Huh? Etc.

- b) Prompts: initiating repair through by omitting the part that has the error

A: I have dog.
B: I have

Topic continuations and questions related to the topic of the task following the feedback (Feedback that does not provide opportunity to produce modified output)

- a) Topic continuation without considering the incorrect utterance

A: Where is candle?
B: mm where is the candle? Candle candle mm there isn't (Mackey, et. al., 2003)

- b) Asking questions which are not related to the incorrect form but about the topic of the task.

A: Where is a boys?
B: A boy? The little one with the thing in his hand? (Mackey, et. al., 2003)

A: Why does the alien attack earth?
B: Right why did the aliens attack earth? (Mackey, et. al., 2003)

Cf) No feedback: Topic continuations or questions related to the topic which do not include the correction of the error of the previous utterance

- a) Topic continuation

A: I have two dog next to the house.
B: Okay, go on.

- b) Questions related to topic

A: I have two dog.
B: Where?
A: Next to the house

3. Immediate Modified output

- a) Paraphrasing of the provided feedback with correction of the error

A: I have dog.

B: You have a dog?
A: I have a dog.

b) Repetition of the correction in the feedback

A: I have seven plate.
B: Seven plates?
A: Seven plates.

c) Paraphrasing or substituting of the incorrect utterances to some other sentences or words after receiving feedback.

A: I have a dog.
B: What?
A: I have something barks.

4. Attempts to modify the output

c) Explicit request for help

A: I have two.. two...
B: What?
A: What do you call something that barks?

d) Repetition of the error mentioned in the provided feedback

A: I have dog.
B: You have a dog?
A: Yes, dog.

e) Indirect request for help

A: What is next to the house?
B: There is a dog and....a thing with leaves I don't know in English.

5. Other responses to the feedback

a) Confirmation of the interlocutor's feedback that is in form of question

A: I have dog.
B: A dog?
A: yeah.

b) Ignoring the feedback

A: I have dog.
B: You have a dog.
A: And some cats.