

The Impact of Teacher's Implicit versus Explicit Corrective Feedback on Learning L2 grammar by Iranian English learners

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Abstract

This study aimed to investigate the impact of oral corrective feedback on acquiring simple past tense and quantifiers by Persian EFL learners in spring 2012. In an experimental design (two experimental groups and a control group), 90 low-intermediate learners of second language English performed communicative tasks (spot different test) during which they received either recasts (implicit feedback) or metalinguistic explanation (explicit feedback) in response to any utterance that contained an error in the target structure. Acquisition was measured by means of a multiple choice test. The test was administered prior to the instruction, 1 day after the instruction, and again 2 weeks later. Statistical comparisons of the learners' performance on the immediate and delayed posttest showed a clear advantage for explicit feedback over implicit feedback.

Keywords: Corrective Feedback, Implicit Feedback, Explicit Feedback, Meta-linguistic Explanation.

1. Introduction

The role of classroom interaction in second language acquisition have been investigated by many studies. It is believed that classroom interactions provide learners with comprehensible input, opportunities to negotiate for meaning, and opportunities to produce modified output (Swain, 1995; Long, 1996). Meanwhile, research has showed that exposure to input alone and positive evidence, is not sufficient for learners to discover how their interlanguage differs from the target language (e.g., White, 1987; Long, 1977; Norris & Ortega, 2000). Corrective feedback is among the techniques which is believed to facilitate L2 development by providing learners with negative evidence (Long, 1996). While Positive evidence inform of possibility of learner's utterance, Negative evidence is information that certain utterances or types of utterances are impossible in the language being learned (Leeman, 2010).

Corrective feedback is defined by Ellis & etal. (2006) as "the form of the response to the learners' utterances that contain an error" (p.340). According to Ellis & etal. (2006) Corrective

feedback takes two forms of implicit and explicit CF. explicit feedback indicate that an error has been committed whereas Implicit types of corrective feedback are strategies which do not explicitly warn learners where their utterance is problematic and thus do not interrupt the flow of communication.

Implicit CF often takes the form of recast that is, “the reformulation of the whole or part of learner’s erroneous utterance without changing its meaning” (Sheen, 2004, p.278). Research has shown that most of feedback moves in class environment involved recasts (Oliver, 1995; Braid, 2002; Sheen, 2004). In addition, Ammar (2008), reported that recasts are considered as a prime example of interactional feedback because they are implicit and they indicate that the error has been committed without interrupting the flow of communication. Effectiveness of recasts has been questioned with regard that they are ambiguous and learners often fail to distinguish them from non-corrective repetitions. Furthermore, although recasts are considered as ideal interactional feedback they differ in terms that whether they provide negative or positive evidence. Saliency of the recasts increases when they are phonetically emphasized by interlocutors Nonetheless, recasts are generally considered as an effective tool for correcting learners’ errors in L2 classrooms in meaning-focused activities.

In contrast to recasts, metalinguistic explanation is an explicit type of feedback which is defined by Lyster and Ranta (1997) as “comments, information, or questions related to the well-formedness of the learner’s utterance” (p.47). Corrective force of feedback is more evident in explicit feedback than implicit one which in turn helps to notice gap between their errors and target forms.

A number of experimental studies compared the effects of recasts and metalinguistic feedback on L2 knowledge. Carroll and Swain (1993), for example, found that the group receiving explicit feedback in the form of metalinguistic information outperformed the other experimental groups. Similarly, Rosa and Leow (2004) found that explicit corrective feedback in terms of metalinguistic feedback is more effective than recasts on acquisition of conditional sentences in past by advanced learners. Ellis et al. (2006) also investigated the effects of different types of interactional feedback on learners’ acquisition of regular past tense by thirty-four ESL low intermediate learners. They reported that the metalinguistic information group outperformed the no-feedback group and the recast group only on the delayed post-test. Sheen (2007) also conducted a study to explore the effects of recasts and metalinguistic corrective feedback on the acquisition of English articles by three groups of intermediate-level EFL learners. Another purpose of this study was to determine the extent to which learners’ language aptitude and attitudes towards corrective feedback mediate the effects of corrective feedback. The results indicated that the metalinguistic group outperformed both the recast and the control groups. In Varnosfadrani and Basturkmen (2008), results revealed higher scores for explicitly corrected learners than implicitly corrected ones and it was also found that developmental early features are learned better with explicit correction and developmental late features with implicit correction.

Motivations for the Current Study

It is difficult to reach firm and unequivocal conclusions regarding the comparative effectiveness of recasts and metalinguistic feedback on learning L2 knowledge. Further research is essential to have a clear idea on the role that the manner of correction plays in restructuring learners’ interlanguage. One shortcoming of previous studies of corrective feedback is that studies that have compared explicit and implicit corrective feedback have

been laboratory based. This study used metalinguistic explanations as an explicit corrective feedback and recasts as implicit corrective feedback in classroom-based instruction. In addition, most research on corrective feedback has been conducted in immersion and ESL contexts therefore investigating the effects of corrective feedback on developing L2 knowledge in Iranian EFL context will raise our awareness of effectiveness of corrective feedback.

Research Questions

This study attempts to answer the following research questions:

1. What are the effects of recasts and metalinguistic feedback on the acquisition of L2 grammar knowledge?
2. Do recasts and metalinguistic feedback have differential effects on the acquisition of L2 grammar knowledge?

2. Metod

2.1 design

The study used a quasi-experimental design involving pre-tests, treatment, post-tests, and delayed post-tests using intact EFL classes.

2.2 participants

90 students participated in this study. They were selected from among 150 students that were studying in intermediate level. Out of 150 students who took the test, 90 students who scored one standard deviation above and below the mean on the Nelson Proficiency Test were selected as subjects of study and as students of low proficiency level. The students were homogenous in terms of their age, learning background and their first language; their first language was Persian; they aged between 13 and 15; they had similar learning background in that all of them had studied English in their guidance schools between two or three years. There was the same ratio of male to female between the subjects so the gender bias was also avoided. Three classes of students were involved. Every class included 30 students. The subjects were assigned to three homogenous groups so that each group had 30 students. Three groups shared the same conditions except the kind of corrective feedback that they received.

2.3 Operationalization

2.3.1. Recasts

Recasts were operationalized 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 are replaced by the corresponding target language forms (Long, 2006). The recasts which were employed in the current study were implicit feedback as any attempt was not to make them explicit. In other words, the corrected part of the learner's incorrect utterance wasn't phonetically emphasized.

2.3.2. Metalinguistic feedback

Metalinguistic feedback was operationalized as comments, information, or questions related to the well-formedness of the student's utterance, without providing the correct form (Lyster and Ranta, 1997). The following example shows how metalinguistic feedback was operationalized:

Example 2

Learner: they are a little children in the park.

Interlocutor: we are talking about countable nouns.

Learner. They are a few children in the park.

2.4 target structures.

For the purpose of the current study, quantifiers were the focus of this study for several reasons. First, the participants of the current study had not received any explicit instruction regarding these target structure before the study. Thus, the results of the study could only be attributed to the treatment. Second, they are easy to elicit and measure in the context of meaning-focused activities.

2.5 material and procedure

The subjects in the study performed spot different task using structures that were targets of the study. This task consisted of two sets of pictures with one set differed from another one slightly. Learners were informed that there exist some differences between your cards and those of the interlocutor and they should find these differences. Each set of pictures included 5 pictures. The learners were also told that for each picture just one difference should be found. Learners were then assigned to three groups and each group was then assigned to one of the 3 interlocutors. They were asked to discuss the possible differences which existed between their cards and those of the interlocutor for 20 minutes. In order to elicit the desired response, the interlocutors provided the learners with some hints regarding the differences between the two sets of cards. During the treatment sessions, when learners could not produce quantifiers, they received feedback according to their group assignment. The example shows how the learner was provided with a recast.

Interlocutor: now, is there any flower in your picture?

Learner: yes they are much flowers?

Interlocutor: they are many flowers (the learner was provided with a recast)

Learner: yea, they are many flowers.

Interlocutor: in my picture, there is not any flower.

2.6 test and procedure

After two treatment sessions were audio-recorded during which group A was provided by implicit CF and group B was provided by explicit feedback and group C didn't receive any feedback during performing spot difference task a multiple choice test was assigned as pretest, posttest and delayed posttest. Immediate post-test was administered to students one day after treatment. Delayed posttest was administered to the subjects of the study two weeks later. The subjects didn't know that delayed post-test would be administered to them so they couldn't study to be prepared for this exam. The test was administered to the students by a research assistant, and students were given sufficient time, which never exceeded more than 45 minutes to complete test. Time given to students was determined based on pilot test that was administered to other students other than students in this study in the same level of proficiency. Test included 30 questions that tested the subjects' knowledge in grammatical category (quantifiers) that was target of this study.

2.7 reliability of test

R21 formula was employed to calculate the internal reliability of test administered in the study. The results are presented in Table 1. In order to calculate the reliability of tests, the scores of all students regardless of gender were taken into consideration.

Table 1. Tests' reliability

Test	Mean	Variance	R21
Multiple choice test	25.8369	19.00	0.83

2.8 Analysis

This study was based on a quasi-experimental design. As a result pre-test and post-tests were administered to the subjects of the study. A one way analysis of ANOVA was conducted to examine the performance of groups (A, B and C) in their immediate post-test of multiple choice tests. In addition another one way ANOVA was conducted to examine the performance of these three groups in their delayed post-test. Furthermore in order to determine the performance of groups (A, B) on three different tests (pre-test, immediate post-test, and delayed post-test), repeated measures one-way ANOVA was applied.

3. Results

Table 2 presents descriptive statistics for learners' performance in the multiple choice test over the three testing occasions: pre-test, post-test, and delayed post-test. As table 2 indicates, all three groups have some gains from the pre-test to the post-test. A one-way ANOVA on pre-test scores revealed no significant differences among the groups, $F(2, 90) = 0.48$.

Table 2. Descriptive statistics for the multiple choice test

Group	pre-test			post-test		delayed	
	N	M	SD	M	SD	M	SD
Recasts	30	11.93	.86	12.76	0.97	12.30	.99
Metalinguistic	30	12.24	1.05	13.37	0.72	13.68	.80
Control	30	12.16	0.91	12.2	1.1	12.13	.90

Mixed between-within group ANOVA was also performed to investigate learning gains as a result of treatment over time. Table 3 presents the results.

Table 3. Mixed between –within group ANOVA for the multiple choice test

source	df	F	Sig.	Partial Eta Squared
Feedback (between subjects)	2	11.57	.000	.8
Time (within subjects)	2	15.22	.000	.13
Feedback*time	4	6.17	.000	.12

As the table indicates, there are main effects for time, corrective feedback, and the interaction between feedback and time meaning that the corrective feedback treatments were effective over time, and the groups improved differently over time as a result of treatment.

3.1 Performance of Three Groups in the Immediate Post-Test

In order to examine the performance of three groups in the immediate post-test a one-way analysis of ANOVA was conducted. Table 4 present the results.

Table 4 Immediate Post-Test ANOVA

	Sum of squares	df	MS	F	Sig
Between Groups	578.365	2	14.789	11.77	.000
Within Groups	57.897	87	.699		
Total	632.262	89			

As the table indicates, differences between the groups were significant. One-way ANOVA on post-test scores revealed a significant difference among the groups, $F(2, 90) = 11.77$, $p < .05$, post hoc comparisons revealed that the metalinguistic group outperformed the recast and control group.

3.2 Performance of Three Groups in the Delayed Post-Test

In order to specify the effects of corrective feedback on the performance of three groups in delayed the post-test a one-way analysis of ANOVA was conducted. Table 5 presents the results.

Table 5 Delayed post-test ANOVA

	Sum of squares	df	MS	F	Sig
Between Groups	698.365	2	14.789	8.79	.000
Within Groups	47.897	87	.699		
Total	746.262	89			

As the table shows, the results indicated that in delayed-post-test, the difference among the groups was statistically significant, $F(2, 90) = 8.79$, $p < .05$. Post hoc comparisons also revealed that in delayed post-test, the metalinguistic group outperformed the recast and control group.

In order to examine the performance of explicit feedback group in the pre-test, immediate post-test and delayed post-test a one way within group ANOVA was conducted. The within group ANOVA indicated a significant difference among learners' scores in the three testing periods, $F(2, 30) = 9.26, p < .05$. Post hoc comparisons indicated a significant gain in learners' scores from the pre-test to the post- and delayed post-tests. In order to examine the performance of recast group in the pre-test, immediate post-test and delayed post-test another within group ANOVA was conducted. The within group ANOVA indicated a significant difference among learners' scores in the three testing periods, $F(2, 30) = 10.34, p < .05$. Post hoc comparisons indicated a significant difference between learners' scores in the pre-test and post-test. No significant difference was found between learners' scores in the pre- and delayed post-tests, or between post- and delayed post-test.

4. Discussion

The current study aimed to investigate the effects of two types of corrective feedback on the acquisition of grammar knowledge. The findings suggested that the metalinguistic feedback group is superior to recasts in promoting L2 grammar, although learners who received recasts had also some statistical gains from the pre-test to the post-tests. The results also indicated that the effects of metalinguistic feedback were more enduring than those of recasts.

In the light of the above findings, the research questions posed in the current study can now be answered. The first research question asked was: What are the effects of recasts and metalinguistic feedback on the acquisition of L2 grammar? The results suggested that both metalinguistic corrective feedback and recast was effective in acquisition of L2 grammar knowledge. More specifically, one-way within group ANOVA indicated that learners who received metalinguistic corrective feedback had statistically significant gains from the pre-test to the post and delayed post-test. Regarding recasts, the results indicated that learners who received recasts had statistically significant gains from the pre-test to the post-test and but not to delayed post-test. Thus, the findings suggest that both recasts and metalinguistic feedback may raise the awareness of grammar knowledge, however, the effects of recasts on L2 development are not as stable as that of metalinguistic feedback.

The second research question asked was if recasts and metalinguistic feedback have differential effects on the acquisition of L2 grammar knowledge. The findings of the current study suggested that learners who received metalinguistic feedback had a distinct advantage over those who received recasts in both immediate post-test. In addition, the effect of metalinguistic feedback was more durable than that of recasts as manifested in learners' performance in the delayed post-test.

One possible reason for better performance of the explicit CF may have been that it was more effective in raising awareness of corrected feature in the learners. Carroll's (2001) autonomous induction theory states that feedback is only effective for acquisition if the corrective force of the feedback is recognized by the learner. Explicit types of feedback not only make the corrective force clear to the learner but also make students aware of the location he has done an error. As such, they will make a comparison between their error and the target form. The explicit correction of learners' errors led to much uptake because learners consider it as negative evidence. Carroll (2001) states that it is difficult for learners to get corrective force of recast and find the specific source of the problem with their original utterance since the learners assume that their interlocutors are reacting to the content rather than the form of their utterances. Further, learners may consider recasts as simply another device to express the learners' utterances, rather than an indication that their own

utterance was ungrammatical. The effectiveness of metalinguistic feedback in the current study can be explained with regards to the role and importance of attention in L2 acquisition. Schmidt (1990) states that in order to understand virtually every aspect of second language acquisition attention is necessary. The positive effects of metalinguistic feedback in both posttest and delayed posttest is in line with the above view that attention is an effective instrument in L2 acquisition. Thus, metalinguistic feedback prompted learners to pay more attention to the errors they commit and also to the metalinguistic information that they received from interlocutors.

There is evidence suggesting that when recasts are salient to learners they are effective in promoting L2 knowledge. Some studies like Han (2002) employed a more explicit type of recasting, which was made salient to learners by being phonetically emphasized by interlocutors. Furthermore, the recasts were provided to learners over an extended period of time. In addition, Effectiveness of recasts varies in different learners. Panova and Lyster (2002) stated that recasts are beneficial to students who are developmentally ready for this type of CF and less advanced learners benefit from more explicit types of feedback. Thus, it can be argued that due to the implicitness of recasts, several factors may affect the saliency and therefore the effectiveness of recasts on L2 acquisition. They include learners' proficiency level and developmental readiness, the length of instruction, the saliency of recasts. Thus, the effectiveness of recasts is hinged on their ability to present negative evidence to learners. Metalinguistic feedback, on the other hand, is quite salient and noticeable to learners as it explicitly locates source of error. Thus, we can argue that while the corrective function of metalinguistic feedback was inevitably noticeable to learners in the present study more implicit type of recasts was employed where their saliency wasn't emphasized phonetically which in turn made the corrective function of some recasts unnoticeable.

5. Conclusion and limitations, and future directions

The current study indicated that corrective feedback in the form of recasts and metalinguistic feedback can be effective in promoting grammar L2 knowledge. The results also indicated that metalinguistic feedback is more effective and salient in L2 development. Analysis of the findings of the current study and previous research indicates that metalinguistic feedback has a distinct advantage over recasts in both post- and delayed post-tests because it is more evident and salient to learners and it enable learners to notice gap between their error utterance and target-like form. Findings also suggested that recasts can be made more effective in developing L2 knowledge when their corrective force is evident to the learners.

Several factors in the effectiveness of corrective feedback should be subject to empirical investigation. Follow-up research may provide several avenues for a better insight. One avenue which merits further attention is the comparison of learners' perceptions via different introspective methods in order to investigate the role of noticing in CF. while focus of this study was metalinguistic feedback and recast and learners in low-intermediate level a broader range of CF techniques and learners at different stages of development shed more light on the efficacy of corrective feedback.

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