

On-Time and Immediate Recasts, Aptitude and L2 Accuracy

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Abstract: This study reports a quasi-experimental study that examined the moderating effect of L2 learners' aptitude level on L2 development induced from on-time and immediate recasts. To discover such a potential effect, 60 Azari learners of English were assigned to on-time and immediate recasts groups homogeneous in terms of their L2 proficiency. To gain aptitude indices for every single individual, Grammar Sensitivity and Paired Associates, two subtests of MLAT, were given to the participating groups. Along with communicatively-run classes, the erroneous utterances of learners were recast instantly or with delay depending on the experimental condition specified. The items of the post-test for checking L2 accuracy improvement were sampled from a pool of erroneous utterances produced by participants and recast in either way by one of the researchers during the treatment period. Then both groups were divided into two high- and low-aptitude subgroups based on their aptitude indices already available. A two-way ANOVA run on the data showed: I- the effect of recasts on L2 accuracy improvement was moderated significantly by the aptitude level of L2 learners ($F = 28.86, p < .0001$), II- the participants in the on-time group noticed L2 forms significantly more than those in the immediate recasts group ($F = 16.60, p < .0001$), but III- the interaction between the aptitude level and the recast type didn't reach statistical significance ($F = .00, p = .97$).

Key words: Recast • Aptitude • L2 accuracy

INTRODUCTION

Every single year a good number of students enroll as candidates for English programs at different universities here in Iran. They spend a significant amount of budget and time (say 4 years) to bring the program to its end with a certificate in hand, but with little, if any at all, satisfaction of early ambitions of majoring in English at heart. Should this much dissatisfaction and failure on the part of Iranian learners of English be attributed to the courses offered as disqualified for fulfilling L2 teaching objectives set? Should the poor aptitude of students in picking up a foreign language particularly when they come to deal with it beyond the critical period be taken responsible? Or should failure to tailor teaching materials according to "variational accounts" of L2 learning of different individuals be blamed? The present study endeavors to explore the moderating effects of aptitude on the effectiveness of recasts on L2 development and examine the differing effects of on-time and immediate recasts on L2 accuracy.

As a widespread feedback technique, recasts have invited a good deal of attention and research in second

language acquisition. Recasts are defined as "implicit negative feedback that reformulates learners' non-target-like utterances toward second language (L2) norms" [1, (1)].

Due to the ambiguity associated with recasts, which are usually rendered as a natural discourse move in response to the learner's erroneous utterances, there is little certainty as to the effectiveness of this feedback on noticing and L2 development. Some studies [e.g. 2]) give support to the claim that recasts might be ambiguous as feedback. Since recasts serve a dual function, as both feedback and conversational response, learners might not always interpret them as feedback. As such the significance of the present study is partially associated with the difference which it purports to draw between 'on-time', which are predicted to get recasts out of ambiguity and 'immediate' recasts.

On the other hand, L2 learners are usually provided with different types of feedback irrespective of their aptitude level which might be a source of difference regarding the effects of materials offered and feedback types provided on L2 development. This study is hoped to shed some light on any possible contribution which

might be made by the variational accounts of individual differences in terms of aptitude to recasts which are provided in language classes.

Aptitude is not hypothesized as a unitary construct, but rather a cluster of different cognitive traits that are advantageous as far as foreign language is concerned [3]. It calls for language programs to be adapted to learners' cognitive abilities for L2 learning so as to minimize weaknesses and maximize learning strengths for L2 learners.

The position that learners differ in the degree to which they possess a special talent for L2 learning has traditionally been associated with John B. Carroll. Carroll [4] put forward what has now become the standard four-component view of language aptitude. The components postulated are:

Phonemic Coding Ability, which is defined as the capacity to discriminate and code foreign sounds in such a way that they could be recalled later, 2. Grammatical Sensitivity, through which the grammatical functions that words fulfill in sentences can be recognized, 3. Inductive Language Learning Ability, which is defined as the ability to notice patterns of correspondence and relationships involving either meaning or syntactic form and 4. Rote Memorization Ability, which refers to the ability through which native and target language words can be "bonded".

The Abilities Measured by the Five Sections of the Mlat Could Be Described as Follow: Part I. Number Learning.

This seems to measure one aspect of the memory component of foreign language aptitude, but the part also has a fairly large specific variance, which one might guess to be a special auditory alertness factor which would play a role in auditory comprehension of a foreign language.

Phonetic Script: This appears to measure what we have called sound-symbol association ability. It may also measure a sort of memory for speech sounds and it tends to correlate highly with the ability to mimic speech sounds and sound combination in foreign languages.

Spelling Clues: Scores on this part depends to some extent on the student's English vocabulary knowledge.

Word in Sentences: This part is thought to measure sensitivity to grammatical structure and may be expected to have particular relevance to the student's ability to handle the grammatical aspects of a foreign language.

Paired Associates: This part measures the rote memory aspect of learning foreign languages.

The parts of the MLAT that were thought to suit the purpose of the present study are Words in Sentences and Paired Associates. As mentioned earlier, they are thought to measure grammar sensitivity and rote memory of language learners.

In his revised interaction hypothesis, Long [5] contends that recasts can be effective in promoting second language development because they juxtapose the learner's incorrect rendition and the teacher's or native speaker's reformulation. This juxtaposition is thought to create an optimal condition to attend to the formal properties of the utterance because the meaning originally expressed by the learner is kept constant [6].

As it was mentioned in passing there is no consensus upon the effectiveness of recasts. Whereas some research studies have shown that recasts facilitate L2 development [e.g. 7 and 8], some others [e.g. 9] have downplayed the role of recasts in making L2 learners uptake the feedback provided.

The effectiveness of recasts, however, appears to be qualified by several factors. One factor could be the linguistic structure targeted by recasts. Thus learners (particularly those at a lower proficiency level) have been shown to notice fewer morphosyntactic than lexical errors targeted by recasts [10] and to benefit more from recasts targeting some L2 structures than others [11]. Another factor is the learner's L2 proficiency level. Learners with high and intermediate proficiency levels appear to notice recasts more than the low proficient learners [12] and to modify their production in response to them [10]. The present study relates the effectiveness of recasts to the aptitude level of L2 learners. If grammar sensitivity and rote memory have a role to play in L2 interaction, they might define learners' capacity to identify and focus on the structural properties of their own speech and the speech addressed to them in the form of recasts. This capacity may affect learners' success in noticing the elements targeted by a recast and, ultimately, in benefiting from this information. Research findings to date underscore the importance of research into the effectiveness of recasts as a function of individual differences, not only differences in learners' age and proficiency but also possibly those in learners' language aptitude. This research is compatible with recent emphasis placed upon relating L2 development to cognitive processes underlying it.

What is special about this study is the difference which it purports to draw between on-time and immediate recasts in the course of getting recasts out of ambiguity as much as possible. On-time recasts could arise when the learners' erroneous utterances are treated with instant

reformulation made by the teacher keeping meaning constant. That is to say, every single utterance or sentence that is erroneous in the chain of learners' speaking will be reformulated with as soon as the utterance or sentence comes to the end. This form of recast is going to oppose the other one called immediate recasts, in which the learner is allowed to finish his or her speaking and then is provided with reformulation. It is predicted that on-time recasts would get recasts out of ambiguity more than immediate recasts.

It is worth noting that in any group of L2 learners some learners' aptitude or sets of abilities may be more prone to benefiting from one focus on form technique than others. Two studies to date have indicated this to be so with regard to recasts. Robinson [13] and Robinson and Yamaguchi [14] found significant positive correlations of measures of phonological sensitivity and also rote memory with learning from recasts during task-based interaction over a five-week period. Similarly, Mackey *et al.* [15] found significant positive relationship between measures of phonological working memory capacity and noticing of information targeted by recasts, delivered over three weeks during communicative L2 interaction and subsequent interlanguage development.

In his study, Robinson [16] examined the evidence for the claims of Krashen [17], Reber [18] and Reber *et al.* [19] that unconscious learning under implicit and incidental condition is insensitive to measures of individual differences in cognitive abilities, in contrast to learning under conscious rule-research and instructed conditions. He assessed individual differences of 104 learners of English as a second language using two subtests of the MLAT. Following the participants' exposure to sentences illustrating easy and hard second language rules during training, he assessed their learning through a grammaticality judgment test. He assessed rule awareness on the basis of responses to a debriefing questionnaire which asked if learners had noticed rules, were looking for rules and could verbalize the rules. Only in the incidental condition was the extent of learning and awareness unrelated to individual differences in aptitude. Awareness at the level of noticing did not accompany superior learning in any condition, but at the level of looking for rules, awareness accompanied superior learning for implicit learners. At the level of ability to verbalize, awareness accompanied superior learning for both implicit and rule-search learners.

These findings suggest that learners may differ in their aptitude for learning from one technique for focus on form versus another. Therefore, it could be of paramount importance to match L2 learners to conditions of exposure

and practice. To address these issues, the following research questions were posited:

- Would aptitude level of L2 learners moderate the effect of recasts on L2 accuracy?
- Would L2 learners benefit from on-time and immediate recasts differently?

MATERIALS AND METHOD

Participants: Participants for the study were 60 Iranian learners of English (27 females, 33 males). They were between 17 and 25 years old. Group A (n = 30) received corrective feedback in the form of immediate recasts and group B (n =30) was provided with the corrective feedback in the form of on-time recasts. Data necessary for the purpose of this study, were collected in 20 sessions and each session was run for one hour and a half totaling 150 hours. The participants attended the classes three times a week.

Materials: The materials used in this study consisted of Preliminary English Test (PET), two subtests of the MLAT, i.e. Words in Sentences and Paired Associates and a post-test which we developed based on the course book activities and the errors committed by the learners during the study.

We chose 50 erroneous sentences produced by the participants. The sentences were exactly the same as those which the learners had made during the study, but some of them had to be manipulated to contextualize the sentences. Words in Sentences and Paired Associates of the MLAT were given to the participants in the 7th session. In Words in Sentences, part IV of the MLAT, the learners answered 45 items by marking their answers properly on the answer sheet. In this part of the MLAT the learners were provided with 45 pairs of sentences, in the first sentence of each pair, which was called the key sentence, a word was printed in capital letters; the learners were to mark the word in the second sentence that functioned as the capitalized word in the key sentence. Following the Words in Sentences sub-test, which was meant to test the grammatical sensitivity of the learners, learners were provided with 24 pairs of Kurdish-English vocabulary items to study in 2 minutes, who were then asked to start filling in the blanks in the lower half of the practice exercise sheet. They were allowed to look back at the vocabulary items when they were filling in the blanks on the practice exercise sheet. After filling the blanks they had a short chance to study the vocabulary items again and then we took the practice exercise sheet

from the learners and gave them the Paired Associates sub-test of the MLAT for testing the rote memory. The learners had 4 minutes to answer 24 items of the Paired Associates by making the letter of the English words which were associated with the Kurdish equivalents.

Treatment started in session 8 during which the participants were provided with corrective feedback in the form of on-time and immediate recasts on errors which occurred in classroom interactions. The learners' classroom interactions were recorded in 45 sessions, 9 sessions each class. A total of 67.5 hours of recordings were obtained. The classes were run by Communicative Language Teaching (CLT) in which the learners first were led by the teacher's instruction to do the task in their course book through the pair and group work. Then the individual learners were asked to present the task to the class and it was the time when they were provided with on-time and immediate recasts on the errors they committed during the presentation. Almost all of the learners were involved in classroom interaction in order to elicit data from nearly all who participated in this study.

It was session 20 when the post-test was ready to be given to the participants after a pilot of it had been given to the learners with almost the same proficiency level and same background concerning the course books they were studying and the place they were learning English. The learners had one hour and a half to answer a fifty-item test by rewriting the erroneous sentences in each test and check-marking the correct sentences.

RESULTS

A two-way between-groups analysis of variance was conducted to explore the impact of recasts in the form of on-time and immediate and foreign language aptitude measured by Grammar Sensitivity and Paired Associates subtests of the MLAT on L2 accuracy. Levene's test for the homogeneity of variances was performed to observe if the variance in scores was the same for all the four groups involved. The significance value (Sig.) for Levene's test was .36 which is much larger than .05, indicating that we have not violated the assumption of homogeneity of variances.

To determine if there was a main effect for each independent variable, tests of between-subjects effects were conducted. The results are displayed in Table 1.

The results demonstrated that there was a significant main effect for aptitude ($F = 28.86, p < .0001$) and recasts ($F = 16.60, p < .0001$). But the Sig. value .972 reveals that the interaction effect is not statistically significant.

The first research question asked if aptitude would moderate the effects of recasts on L2 accuracy. The ANOVA run revealed a significant effect for the main effect for aptitude. The second research question asked about the differing effects of on-time and immediate recasts. As it is obvious in the results obtained the main effect for recasts is also significant implying that the two types of recasts compared exercised differing degrees of effect on L2 accuracy. Comparing the mean scores of the learners in all groups revealed that the learners with high aptitude in on-time group outperformed the others. At the same time, the learners with high aptitude in the immediate group performed better than the learners with low aptitude. Another look at the differences between the mean scores in four groups demonstrated the significant gain made as a result of on-time recasts compared to the immediate ones.

The results confirm that there is a significant difference between the mean scores on the dependent variable for each of the two groups. Mean comparisons of the immediate group ($M = 13.53, SD = 8.26$) and the on-time group ($M = 21.90, SD = 9.31$) proves that on-time recasts are subject to L2 development more than the immediate ones. The effect size of the differences in the mean scores was very large ($d = .18$).

In sum, it could be claimed that firstly, learners' grammar sensitivity and rote memory play highly important roles in helping them to notice recasts. In other words, learners with high grammar sensitivity and rote memory are capable of noticing recasts more than the ones with low grammar sensitivity and rote memory. Secondly, on-time recasts are much more noticeable than the immediate recasts. In particular, grammar sensitivity is much more effective in helping the learners to notice recasts in comparison with the rote memory and on-time recasts are much more noticeable than immediate recasts even for the learners with low aptitude.

Table 1: Tests of between-subjects effects

Source	Type III sum of squares	df	M S	F	Sig.	Partial Eta Squared
APT	1510.71	1	1510.71	28.86	.000***	.34
REC	869.25	1	869.25	16.60	.000***	.22
APT x REC	.06	1	.06	.00	.972	.000

DISCUSSION

The research questions are now addressed in light of the results gained from the two-way ANOVA run on the data obtained from the study. The statistical results of the study confirmed the prediction that aptitude would moderate the effectiveness of recasts. This finding is in line with Robinson's [16] Aptitude Complex Hypothesis which takes grammar sensitivity and rote memory as the main factors that might affect learners' ability to notice one form of corrective feedback rather than some others, but in this study rote memory turned out to be less effective than grammar sensitivity. Advocating recasts, VanPatten [20] argued that learners cannot attend to process both meaning and form at the same time. He showed, however, L2 learners can consciously focus on the form if the input is easily comprehended. The findings of the present study show that through on-time recasts we might free up processing resources by allowing the learners to attend to the form of the utterances. It should be said in passing that his idea might be true for the beginners or learners with low grammar sensitivity and rote memory. It does not seem logical to generalize it to all learners with different levels of proficiency and learners with high aptitude in grammar sensitivity and rote memory.

The results also confirmed the prediction that on-time recasts would be more effective than the immediate ones for L2 accuracy. Almost 90% of the on-time recasts were repeated immediately by the learners. One feature associated with on-time recasts is eliminating the ambiguity which has always diminished recasts compared to the other corrective feedbacks. It is through on-time recasts that learners are likely to think of them as corrective feedback and not to interpret them as responses to content, negative evidence, positive evidence, or a combination of both negative and positive evidence.

CONCLUSION

The results give support to the claim that aptitude and recasts have an influence on learners' L2 accuracy and learners' ability to notice recasts is triggered by different components of aptitude such as grammar sensitivity and rote memory. In other words, the learners draw on their memory and grammar sensitivity to notice recasts. Learners' ability to notice the erroneous utterances in the on-time group was also different to a great extent from those in the immediate group.

That is to say, learners were capable to notice on-time recasts much more than the immediate ones. Learners with high grammar sensitivity and rote memory noticed both types of recasts better than the learners with low grammar sensitivity and rote memory. The results also showed that even the learners with low grammar sensitivity and rote memory were able to notice on-time recasts more than the immediate recasts.

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