Examining the Effects of Written Recasts Determined by Grammatical Difficulty

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Abstract

Previous research has shown the potential advantages of the recast, although some problems have also been suggested (e.g., Ellis & Sheen, 2006; Loewen & Philp, 2006; Lyster, 1998a, 2007). Previous studies reported that recasts to learners' grammatical errors were more frequently provided than to any other error types, but that the success rate in grammatical recast, measured by learners' repair (correct reformulation of an error occurring after recasts), was the lowest (e.g., Kim & Han, 2007; Sato, 2009; Williams, 1999). However, the effectiveness of written recasts given to learners' writings has not yet been fully examined. In this study, grammatical structures were categorized as either early developmental (easy) or late developmental (difficult) referring to a previous study (categorization A) and taking account of Japanese learners' developmental progression (categorization B), and then it was attempted to examine the effects of written recasts determined by grammatical difficulty. Twenty-five Japanese university students revised their texts following teacher feedback in the form of written recasts, and their repair was measured. Students also wrote a comment about how they felt on using written recasts in revising their first draft. The results showed that written recasts were effective for Japanese university students' text revision, irrespective of the degree of difficulty of grammatical features. The results are discussed in the light of the effects of written recasts.

1. Literature Review

The recast, which is defined by Long (1996) as an utterance that rephrases an utterance by changing one or more of its sentence components while still referring to its central meanings, belongs to a type of implicit negative and positive evidence or corrective feedback (Leeman, 2003). Recasts
are "by far the most frequently used feedback across a spectrum of classroom settings" (Lyster, 2007, p.93). The following is an example of a recast (adapted from Sato, 2009, p.202):

Learner: I eat it.
Teacher: Oh, you ate it.
Learner: Yes, I ate it.

A number of previous experimental studies have provided positive reports on the impact of recasts in second language (L2) acquisition. Zyzik and Polio (2008) found that recasts were the most commonly used type of feedback in three university Spanish literature classes and discovered that recasts were the most preferred form of feedback by the instructors, as analyzed by the interviews and stimulated recalls. Some researchers have paid attention to recasts in the Japanese English as a foreign language (EFL) situation. In a study which examined the effects of corrective recasts provided on learners' past or conditional errors, Doughty and Varela (1998) found that an experimental group that was given recasts showed greater improvements in accuracy and a higher total number of attempts at past tense reference than the control group. Muranoi (2000) investigated, in a quasi experimental study, how recasts benefit the acquisition of English articles, focusing on college-level students in Japan, and found that recasts helped learners develop their interlanguage both in written and oral tests.

However, some problems with recasts have also been suggested. Lyster and Ranta (1997) and Lyster (1998b) examined the occurrences of repair, defined as learners' repaired correct utterances of their non-target utterances after receiving recasts, and found that learners did not often show repair. This implies the ineffectiveness of recasts as corrective feedback. Ellis and Sheen (2006) have pointed out problems in recast studies: (1) definitional fuzziness, that is to say, there are many types of definitions for recasts; (2) contextual factors, which means that recast studies in lab settings cannot be equated with those in classroom settings. Sato (2006), in his descriptive small-scale study, examined the effectiveness of recasts among low-level Japanese high school students while they were performing interactive communicative activities with a teacher. The results revealed that only a small proportion of the teacher's recasts was followed by repair from students (16%), and a qualitative analysis of the activities revealed that recasts were provided inefficiently by a Japanese teacher, leading to this poor result. For example, recasts without any corrective purpose confused students making it difficult for them to notice real corrective recasts.
Previous studies reported that recasts to learners’ grammatical errors were more frequently provided than to any other error types such as lexical errors and phonological errors (e.g., Kim & Han, 2007; Lyster, 1998b; Lyster & Ranta, 1997; Sato, 2009). Sato (2009) mentions that in the Japanese grammatical accuracy-oriented English classroom, teachers (interlocutors) feel it important to address grammatical correctness. He also mentions that teachers (interlocutors) feel it appropriate to provide recasts with grammatical errors because modifying students’ grammatical knowledge through negotiation of form requires modifying complex system-driven rules. However, previous studies revealed that the success rate in grammar, measured by learners’ repair, was the lowest (e.g., Kim & Han, 2007; Sato, 2009; Williams, 1999). Trofimovich et al. (2007) found that higher proficiency learners benefited from recasts more than lower proficiency learners. They suggest that in order to notice their own errors through recasts and to reformulate them after recasts, students should already have knowledge of the form. Sato (2009) states that students in his study must have lacked the explicit knowledge to benefit from the enhancing effect of recasts and assumes that learners’ explicit knowledge is a precondition to respond to recasts directed at grammatical errors successfully. He concludes that students should have knowledge about the target form in showing repair. As for the effects of oral recasts according to grammatical difficulty, Sato (2010) conducted a small scale-study with Japanese high school students. In the study, grammatical structures were categorized as easy or difficult referring to previous studies (Krashen, 1982; Shirahata, 1988; Varnofsladran & Basturkmen, 2009). The results implied recasts can be effective for Japanese high school students’ learning, irrespective of the degree of difficulty of grammatical features.

There is a general agreement that recasts are most commonly employed as oral correction by teachers in EFL or English as a second language (ESL) classrooms (e.g., Lyster, 1998b; Lyster & Ranta, 1997) and several studies showed the beneficial effects in learning (e.g., Ayoun, 2001; Doughty & Varela, 1998; Iwashita, 2003; Leeman, 2003). However, Philp (2003) pointed out the limitations of working memory as one of the factors which hinder the beneficial effect of recasts. Recasts in the form of oral corrective feedback demand an immediate cognitive comparison also requiring learners to be dependent on short-term memory. In the study which compared the effects of face to face communication and computer-mediated communication on L2 development, Payne and Whitney (2002) found greater improvements in oral proficiency in the post-test for learners who were in the computer communication group than those in the face to face communication.
group. They interpreted that computer-mediated communication supported students who were less able to maintain oral information in memory: Interlocutors' feedback was less fleeting as learners were able to trace it by reading. Williams (1999) also suggested that if cognitive comparison is not overtly taxing learners' attentional resources, learners with lower working memory would benefit in feedback. As written feedback is delayed and imposes less cognitive demand without requiring immediate on-line cognitive comparison—as in the case of oral feedback—we could assume that written recasts would be better noticed by learners leading them to L2 development than recasts provided as oral feedback.

This study is designed to examine the effectiveness of written recasts to grammatical errors and whether there is a difference of effects in recasting as written feedback according to grammatical difficulty with university students' text revision.

2. Method

2.1 Participants

This study was conducted in a class which was composed of 27 second-year students, and 12 were male and 15 were female who were between 19 and 21 years old. All of them belonged to the department of teacher training and school education, and their majors were mathematics, science, or pedagogy. Although they were not majoring in English, they could be regarded as at least low-intermediate level students as they would have had to pass the entrance examinations of the national university by attaining relatively high scores on the English portion of the test.

The Japanese EFL teacher, who had taught English for more than 15 years and was in the third year of employment at the university at the time of this study, taught the class. He is the researcher of the study as well. Two students who were absent from either the first or second week of the class were excluded in the study.

2.2 Procedure

In the first class after summer vacation in 2010, students were assigned to write an essay on the topic of "My Summer Vacation." Hughes (2003) states that in measuring writing ability, for the sake of validity, we should not set tasks which measure abilities other than the ability to write, such as imagination, creativity or even intelligent. The topic of the writing for the present study was regarded as valid as it would not require students to exercise abilities beyond English such as creativity, imagination or
intelligence. The task is therefore compatible with the statement that “we should test only writing ability and nothing else” (Hughes, 2003, p. 90). Students were not given any direction on whether they should focus on accuracy or fluency. They were given 30 minutes to complete the essay and were not allowed to use a dictionary. After they submitted the essay, the rest time of the class time was spent with students engaged in listening, reading and speaking activities which were not a part of this study.

The teacher-researcher wrote written recasts in the blank space of each essay. On average five recasts were given to each of the students with a minimum of two (two students) and a maximum of nine (one student). There was no target focus in providing recasts in the study. Though Bitchener (2008) argues that there should be only one or a few categories for providing feedback to prevent information overload, it was assumed that this would be impractical in actual classroom settings: Students, in general, want to improve overall accuracy in writing (Hartshorn et al., 2010): Focusing on one or a few error categories may lead to students neglecting other areas (Xu, 2009). Written recasts were provided randomly depending mainly on the teacher’s common sense intuitions and experience so that students could revise the first draft well enough to improve the overall quality of the writing as is usually done in EFL classroom settings.

In the second class, one week after the first class, each of the essays was given back to the students. Students were asked to read through the feedback for the text revision and given 20 minutes to revise the essay. They were not allowed to use a dictionary this time, either. After they completed the second draft, they were given a B5 size white paper and were asked to write a comment freely about how they felt written recasts and on using them in revising their first draft. This was aimed at providing an in-depth exploration into the effects of written recasts.

2.3 Data analysis

Varnosfadrani and Basturkmen (2009) coded structures as either early developmental or later developmental, regarding the former as easy, and the latter as difficult. Their categorization (p.5), based on previous empirical studies, is as follows.

Early developmental (easy):
1. Definite article (the)
2. Irregular past tense
3. Plural ‘S’
Late developmental (difficult):
1. Indefinite article (a, an)
2. Regular past tense
3. Relative clauses
4. Active & passive voice
5. Third person singular S

We decided to use this categorization, and termed it as "Categorization A".

Krashen (1982) proposed ranks for structures from early-mastery to later-mastery: Progressive (-ing), Plural S, Be copula → Be auxiliary, Articles (a/the) → Irregular past tense → Regular past tense, Third person singular S, Possessive -s.

However, as it is generally observed that Japanese learners acquire possessive -s earlier than articles (e.g., Shirahata, 1988), we decided to change the positions of the two structures: Progressive (-ing), Plural S, Be copula → Be auxiliary, Possessive -s → Irregular past tense → Regular past tense, Third person singular S, Articles (a/the). As there are eight grammatical structures in this category, the first four structures were coded as early developmental (easy) and the rest of the four were coded as late developmental (difficult). This category was termed as "Categorization B":

Early developmental (easy):
1. Progressive (-ing),
2. Plural S, Be copula,
3. Be auxiliary,
4. Possessive -s

Late developmental (difficult):
1. Irregular past tense,
2. Regular past tense,
3. Third person singular S,
4. Articles (a/the)

Categorizations A and B were used for the analysis. The following are examples of grammatical recasts according to early (easy) or late (difficult) development.

**Example 1**  Definite article, the (early in A, late in B)
S1: I belonged to team.
→ (written recast) Oh, you belonged to the team.
→ (Student's revision) I belonged to the team. (successful)
Example 2  Irregular past tense (early in A, late in B)
S2: I take many pictures in Hokkaido.
  → (written recast) Oh, you took many beautiful pictures.
  → (Student’s revision) I take many beautiful pictures in Hakodate. (failed)

Example 3  Plural S (early in A and B)
S3: There were many elementary school student in the camp.
  → (written recasts) You had a lot of students.
  → (Student’s revision) I had a lot of student in the camp. (failed)

Example 4  Indefinite article, a, an (late in A and B)
S4: Every morning we ate apple because it is healthy.
  → (written recasts) You ate an apple every morning.
  → (Student’s revision) I ate an apple every morning. (successful)

Example 5  Regular past tense (late in A and B)
S5: In Tokyo, my friend and I watch the movie.
  → (written recasts) Oh, you watched the movie.
  → (Student’s revision) In Tokyo, my friend and I watched the movie.
    (successful)

Example 6  Relative clause (late in A)
S6: We went to Hokkaido where had a lot of delicious foods.
  → (written recasts) Yes. It is a nice place that has delicious foods.
  → (Student’s revision) We went to Hokkaido that had a lot of delicious foods.
    (successful)

Example 7  Active and passive voice (late in A)
S7: The tall building constructed 30 years ago.
  → (written recasts) Oh, it was constructed 30 years ago!
  → (Student’s revision) The tall building constructed 30 years ago. (failed)

Example 8  Active and passive voice (late in A)
S8: The dog was had by his family.
  → (written recasts) His family had the dog.
  → (Student’s revision) His family had the dog. (successful)

Example 9  Third person singular S (late in A and B)
S9: My father always ask me to study hard.
(written recasts) Oh, he asks you to study harder.
(Student’s revision) My father always asks me to study harder. (successful)

Example 10  Progressive (ing) (early in B)
S10: I slept when she telephoned me.
→ (written recasts) Oh, you were sleeping when she called you.
→ (Student’s revision) I was sleeping when she called me. (successful)

Example 11  Be copula (early in B)
S11: My friend and I was very tired.
→ (written recasts) Oh, you were very tired.
→ (Student’s revision) My friend and I was very tired. (failed)

Example 12  Be auxiliary (early in B)
S12: We must kind to children.
→ (written recasts) Yes. You must be kind to children.
→ (Student’s revision) We must be kind to children. (successful)

Example 13  Possessive -s (early in B)
S13: The bike of Daisuke is nice.
→ (written recasts) Daisuke’s motor bike is nice?
→ (Student’s revision) Daisuke’s motor bike is nice. (successful)

In examples 1, 4, 5, 6, 8, 9, 10, 12, and 13, students successfully repaired their errors referring to written recasts. However, in examples 2, 3, 7, and 11, they failed in revising errors. The former was regarded as repair (successful) and the latter as needs repair (failed). Some may argue that this measurement may not be valid: Long (2007) mentions that recasts do not always have immediate corrective effects and that learners’ repair is unreliable as an indication of learning since it might be just a “language-like” behavior (p.99). However, as at least written recasts led students to correct their errors producing grammatical forms, it was decided to take this measurement in the current study (e.g., Lyster, 1998b; Lyster & Ranta, 1997; Sato 2006, 2009).

One rater conducted categorization of written recasts. A week after the first categorization, the same rater conducted it again. This method of classification follows Alderson et al. (1995), which explains that multiple rating sessions increases the reliability of the rating. Where there were discrepancies between the two ratings, a second rater was invited to rate them. After discussion the disagreement was solved.
3. Results

In total, 125 written recasts were recorded. Grammatical recasts were made 81 times: lexical recasts, 17 times; recast to unsolicited use of the Japanese language, 11 times; recasts to spelling error 6 times; recasts to content, 10 times. Among 81 grammatical recasts, 44 recasts belonged to categorization A, and 22 were categorized as early development or easy structures and 22 were as late development or difficult structures. Among 81 grammatical recasts, 56 belonged to categorization B, and 26 were categorized as early development or easy structures and 30 were as late development or difficult structures. In measuring the effectiveness of written recasts determined by grammatical difficulty, proportion of their repair (success rate) was calculated. In a situation where students did not use or avoided using the same structure in their revision, it was excluded in the analysis.

Table 1 shows the number of recasts, repair, needs repair, avoided move and success rate for early developmental or easy structures in categorization A. Table 2 shows the same for late development or difficult structures in the categorization. Table 3 shows the number of recasts, repairs, needs repair, avoided move and success rate for early developmental or easy structures in categorization B. Table 4 shows the same for late development or difficult structures in the categorization.

Table 1 Categorization A (early development or easy structures)
The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite article (the)</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Irregular past tense</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Plural S</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>12</strong></td>
<td><strong>7</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

Success rate=63%
Table 2 Categorization A (late development or difficult structures)
The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indefinite article (a, an)</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Relative clauses</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Active &amp; passive voice</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Third person singular S</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>13</strong></td>
<td><strong>6</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

Success rate = 68%

Table 3 Categorization B (early development or easy structures)
The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive (-ing)</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plural S</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Be copula</td>
<td>13</td>
<td>7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Be auxiliary</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possessive -s</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td><strong>15</strong></td>
<td><strong>10</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

Success rate = 60%

Table 4 Categorization B (late development or difficult structures)
The number of recasts, successful moves and success rates

<table>
<thead>
<tr>
<th>Type</th>
<th>Recast</th>
<th>Repair</th>
<th>Needs repair</th>
<th>Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irregular past tense</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Regular past tense</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Third person singular S</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Article (a, the)</td>
<td>11</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>17</strong></td>
<td><strong>8</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

Success rate = 68%

In the categorization A, success rate of recasts to easy structures (63%) was lower than that of difficult ones (68%). In categorization B, which has taken some account of Japanese learners' developmental progression, success rate was higher in more difficult structures (68%) than in easy ones (60%).
4. Discussion and Conclusion

It was found that students were more likely to show repair to written recasts than not. Success rates (the lowest, 60% and the highest, 68%) are higher than those of oral recasts examined previously (e.g., Lyster & Ranta, 1997). It is assumed that written recasts are more effective than oral recasts in leading learners to repair their erroneous production. Eleven students mentioned in the free comments that they found they had made mistakes or errors when they read written recasts and revised their work. Six students wrote in the comments that they found they had not yet learned the correct grammatical knowledge about the structures and that by reading the recasts they learned the grammatical rules correctly. From this, we could say that written recasts activated students’ previously existing learned systems and partially acquired knowledge whether it is about knowledge for easy structures or difficult structures. In addition, in some cases, written recasts provided students with opportunities to learn structures they had not yet learned. Four students wrote in their comments that by reading a recast they learned how to write what they had wanted to write but could not. In the situation, the students were able to fill the gap between what they wanted to write and what they actually wrote, after referring to the written recasts.

It was revealed that recasts to difficult structures showed higher success rates. This implies written recasts are effective both to easy and difficult structures. As to the possible reasons for this, it is interpreted that even written recasts to difficult structures can let learners repair their previous erroneous production regardless of their limitation of working memory and current level of grammatical knowledge. Unlike oral feedback, written feedback was not fleeting and thus enabled students to trace it back by reading (Payne & Whitney, 2002). This nature of written feedback was beneficial enough for students with shorter working memory and less grammatical knowledge. A student’s comment that she repeatedly read the written recasts to repair her errors confirms this interpretation.

Findings of this research offer an implication for writing teachers. As the results showed the effectiveness of written recasts regardless of the degree of difficulties of grammatical structures, it is assumed that teachers can utilize written feedback in the form of written recasts in teaching writing. It is true that it takes time and energy to give written feedback, but it is worthwhile in improving students’ writing skills.

However, a number of limitations should be noted. The sample size was small with only 25 students who were in a national university. Ideally we should have more participants from different schools with different English
proficiency levels. In the current study, retrospective interviews were not conducted. To examine whether recasts were noticed leading students to repair in the text revision, retrospective interviews should have systematically been done with all the students. In analyzing the results, statistical measurements were not taken in the study. Statistical analyses with more samples should certainly be taken in a future study. As for the categorizations of grammatical structures as easy or difficult for Japanese learners, structures were divided into two groups with the first half of four structures termed as easy and the second half of the four structures termed as difficult. However, as this categorization might be considered insufficient, we will need to establish more valid categorizations.

This small-scale study, as the first study to attempt to examine the effectiveness of written recasts with particular focus on grammatical difficulty, should be seen as preliminary. To confirm the findings of the study, further research which can overcome the given limitations is needed.

References


