The Effects of Retelling on Narrative Comprehension:
Focusing on Learners’ L2 Proficiency and
the Importance of Text Information

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Abstract

Numerous studies on retelling have been done in the first language reading area, but there has been relatively little research done in the area of second language reading, where the effect of retelling may be more influential. The present study focuses on retelling effects on narrative comprehension by intermediate and advanced level Japanese learners of English. Attempts were made to examine (a) whether or not retelling facilitates reading comprehension, (b) the effect of language proficiency on retelling performance, (c) how retelling performance reflects the text importance level, and (d) whether or not additional readings can enhance retelling production. The results of this study suggest that the effects of retelling vary with learners’ language proficiency and that retelling reflects the level of text importance, regardless of the individual proficiency level. In addition, the results indicate that comprehension is promoted with additional readings. These findings suggest the importance of retelling as an active procedure which aids reading comprehension.

1. Introduction

The methods of investigating text comprehension are quite diverse (Graesser, Millis, & Zwaan, 1997). One way to elicit text information from students is retelling. Retelling is a task which engages students in the verbal rehearsal of what they have read and has them retell passage information as fully as possible. The underlying notion is that retelling requires organization of text-acquired information and engaging in retelling focuses the reader’s attention on restructuring text (Gambrell, Kapinus, & Koskinen, 1991). Having learners reconstruct a text that they have comprehended is one of the most effective instructional techniques that elicits learner output and eventually promotes language learning (Muranoi, 2007). Brown (1975), for example, suggests that children’s story comprehension is facilitated when they are involved actively in the reconstruction of a story. She showed that children built an internal representation of the story by mentally reconstructing the individual story events and
arranging pictures of the story in sequential order.

In the first language research area, it is believed that retelling is a highly potent generative learning strategy and that retelling has direct, beneficial consequences for children’s processing of subsequent text (Gambrell, Pfeiffer, & Wilson, 1985). Gambrell et al. (1985) compared the effects of two postreading strategies, retelling and illustrating for 93 fourth-grade students, using four expository passages as reading material. The results indicate that children who engaged in retelling performed significantly better than did students producing illustrations on both immediate and delayed comprehension tasks (i.e. immediate free recall, two-day delayed free recall, and responses to literal and inferential questions). Furthermore, Gambrell et al. (1991) investigated the effects of practice in retelling on text comprehension across four sessions. The participants in the study were 48 fourth-grade students and they read four narrative stories. In each of the four sessions, the participants were provided with opportunities to read and retell; however, no explicit teacher instruction was given. Analysis of the free-recall protocols revealed that practice in retelling resulted in significant improvements in the quantity and quality of the retellings of both proficient and less proficient readers.

In the second language research area, however, only one study has examined the effect of retelling on reading comprehension: Shiraishi (1999) investigated the effect of retelling on reading comprehension using Japanese newspaper articles. The participants in her study were 10 native and 20 nonnative readers of Japanese. The L2 Japanese learners were divided into two groups according to their Japanese proficiency level. Shiraishi used both immediate and delayed recall to examine learners’ reading comprehension and showed that the upper proficiency group recalled significantly more information both on immediate and delayed tests when they engaged in retelling. By contrast, the native speakers gained benefit only on the delayed test whereas the lower proficiency group gained no benefit from retelling. These findings indicate that the effects of retelling may vary according to the learner’s L2 proficiency. One limitation of Shiraishi’s study is that learners’ reading comprehension was examined only quantitatively in the form of a free-recall test. Because the fact that retelling enhances recall production is quite natural, it is necessary to use other reading measures to generalize Shiraishi’s findings. Thus, instead of free recall tests, the present study uses open-ended questions as a measure of reading comprehension.

In the limited number of L2 studies on retelling, the questions of what language proficiency group benefits from the task and how retelling can enhance reading comprehension still remain unsolved. The present study aims to investigate the effects of retelling on narrative comprehension, focusing on learners’ proficiency, the importance of text information and reading trials. As for the importance of text information, previous research has shown that text units that are rated as more important are recalled more than those rated as less important (Brown & Smiley, 1977; Johnson, 1970). With regard to the relation between reading comprehension and reading trials, Millis, Simon, and ten Broek (1998) showed that
comprehension is promoted with additional readings. Taking these previous findings and questions stated above into consideration, the hypotheses (Hs) and research questions (RQs) of the present study were set up as follows:

(H1) Those who engaged in the retelling task will obtain higher scores on the reading comprehension test than those who did not.

(H2) The effects of retelling on reading comprehension will differ according to learners' proficiency; the upper proficiency group will outperform the lower proficiency group in terms of making use of the retelling task as a reading comprehension aid.

(RQ1) Does retelling reflect the importance of text information?
(RQ2) If learners are allowed to read the same text twice, does the amount of their reproduction increase?

2. Method

2.1 Participants

A total of 20 Japanese university students participated in this study, the majority being 20-21 years of age and in the third or fourth years of their courses. They were divided into two groups according to their English proficiency level.

2.2 Materials

a. English Proficiency test  The English proficiency test was conducted in the form of a cloze test consisting of 30 items. The cloze test used was from Bachman (1982). The participants were divided into two different proficiency groups according to the rank order of their scores [Upper (n = 10): M = 13.10, SD = 3.51; Lower (n = 10): M = 5.50, SD = 2.01]. Statistical analysis confirmed that there was a significant difference between the two groups in terms of their English language proficiency [t (18) = -5.93, p = .000].

b. Reading materials  Two narrative stories from previous research (Horiba, 1996) were used in the present study: the Baby text (Passage1) and the Thief text (Passage 2). Table 1 shows the length and readability of the two passages. Two raters divided the passages into idea units (IUs) following Ikeno's (1996) criteria. These IUs were categorized into five levels of importance based on the average score given by five other raters.

<table>
<thead>
<tr>
<th>Passage</th>
<th>Reading Ease</th>
<th>Grade Level</th>
<th>Words</th>
<th>Sentences</th>
<th>IUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passage 1 (Baby)</td>
<td>79.6</td>
<td>4.6</td>
<td>202</td>
<td>21</td>
<td>43</td>
</tr>
<tr>
<td>Passage 2 (Thief)</td>
<td>84.2</td>
<td>3.7</td>
<td>200</td>
<td>22</td>
<td>47</td>
</tr>
</tbody>
</table>

Note. Grade Level: Flesch-Kincaid Grade Levels were calculated using Microsoft Word 2003.
c. Reading comprehension tests  The reading comprehension tests were conducted in the form of open-ended questions. For each reading, 10 items were used. Each test had five story structure questions and five traditional comprehension questions. The story structure questions included three dealing with setting (e.g., Where was the boy at the beginning of the story?), one dealing with theme (e.g., What was the thief's problem in the story?), and one dealing with the resolution (e.g., How did he try to solve his problem?). Three traditional questions dealt with information explicitly stated in the text (e.g., What did the thief do with his bundle?) and two traditional questions dealt with information that was implied but not expressed in the text (e.g., What made the boy climb back into the attic?). These question categories were selected referring Morrow's (1985) work. As for scoring, 3 points were given for the correct answer, based on the discussion of two raters, and partial credits (1 or 2) was given for insufficient answers. That is, two points were given if the answer covered only part of the necessary information (e.g., The villagers started to chase the thief for The villagers grabbed sticks in their hands and started to chase the thief) and one point was given when the answer was too broad (e.g., the building in a village for the mansion in a village).

2.3 Procedures

Participants were tested individually. First, the cloze test was administered for 15 minutes. Then, the participants sat in front of a computer and read the instructions presented on the screen. The instructions told the participant to read each sentence of a passage for comprehension because he or she would be asked later to retell everything they remembered of the passage in Japanese. The order of the passages was counterbalanced for each participant. On the screen, the title and the passage were presented separately and the passage was shown one sentence at a time. Participants read silently at their own pace, advancing through the passage by pressing the arrow key. The retelling condition was a within subject variable: that is, all participants took part in both the with and without retelling conditions; every participant read two passages and retold one of them. The order of the tasks is shown in Table 2.

<table>
<thead>
<tr>
<th>Table 2 Order of the Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
</tr>
<tr>
<td>with retelling</td>
</tr>
<tr>
<td>without retelling</td>
</tr>
</tbody>
</table>

*Note. The number in the parentheses indicates the frequency of reading or retelling.*

With regard to the with-retelling condition, after reading an entire text, participants were asked to retell everything they remembered about the story in Japanese. This read-and-retell procedure was repeated twice as shown in Table 2. At the end, they took reading comprehension test. As for without-retelling condition, participants were simply asked to take the comprehension test.
after reading. Note that all the participants read the same passage twice, regardless of their retelling condition. No time limit was placed on either the reading or retelling attempts. The investigator was present in the room during the experiment and assisted with the procedures.

2.4 Scoring

All the retelling protocols were recorded with an IC recorder and transcribed by the investigator. The retelling protocols were scored based on IUs, referring to Ikeno’s (1996) criteria. The unit was counted as correct only if the information was included in the retelling protocol. If information from two units was combined during retelling, both were counted as correct. In scoring procedures, one graduate and one undergraduate student majoring in English language education marked 30% of the retelling protocols independently. The inter-rater reliability was sufficiently high (Passage 1: \( r = .92 \); Passage 2: \( r = .95 \)). Based on the marking criteria established by the two raters, the investigator marked 70% of the remaining retelling protocols.

3. Results and Discussion

3.1 Overall Retelling Reproduction

Table 3 shows the means and standard deviations of reading comprehension test scores by group (upper and lower), passage (Passages 1 and 2) and retelling condition (with and without retelling). In both proficiency groups, those who read Passage 2 produced more correct answers than those who read Passage 1, indicating the fact that Passage 2 was easier than Passage 1. The following statistical analyses were conducted, treating Passage 1 and Passage 2 separately.

<table>
<thead>
<tr>
<th>Passage</th>
<th>Retelling Condition</th>
<th>Upper ((n = 10))</th>
<th>Lower ((n = 10))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passage 1</td>
<td>With Retelling</td>
<td>5 25.40  2.70</td>
<td>5 16.60  3.71</td>
</tr>
<tr>
<td></td>
<td>Without Retelling</td>
<td>5 22.60  2.70</td>
<td>5 20.00  5.15</td>
</tr>
<tr>
<td>Passage 2</td>
<td>With Retelling</td>
<td>5 27.20  2.49</td>
<td>5 25.60  3.36</td>
</tr>
<tr>
<td></td>
<td>Without Retelling</td>
<td>5 24.80  3.83</td>
<td>5 23.20  4.27</td>
</tr>
</tbody>
</table>

*Note.* Full score = 30.

3.2 Effects of Retelling and Learners’ English Proficiency on Narrative Comprehension

First, to examine whether each language proficiency group obtained different scores depending on retelling conditions, a 2 (retelling condition: with and without) × 2 (language proficiency: upper and lower) ANOVA was conducted. Second, in order to examine to what
extent each factor can affect comprehension, the effect size was obtained. Among several indices of the strength of relationship between variables, the present study uses omega squared ($\omega^2$). The mean scores of the comprehension test by group and retelling condition are shown in Figures 1 and 2 below.

![Figure 1](image1.png)  
*Figure 1. Mean scores of the comprehension test for Passage 1 by group and retelling*  

![Figure 2](image2.png)  
*Figure 2. Mean scores of the comprehension test for Passage 2 by group and retelling*  

As for Passage 1, the interaction between readers’ language proficiency and retelling condition was marginally significant [$F(1, 16) = 3.50, p = .080$]. In addition, the effect size indicated that the interaction had a moderately large effect ($\omega^2 = .077$) on narrative comprehension. In sum, the analysis revealed that the effects of retelling on reading comprehension varied between the two proficiency groups.

By contrast, Passage 2 showed a different tendency from Passage 1. Descriptively speaking, those who retold the story obtained higher scores than those who did not. In other words, regardless of their language proficiency, retelling enabled readers to obtain higher comprehension test scores with Passage 2. Although the statistical results did not show any significance [$F(1, 16) = 2.29, p = .150$], the effect size indicated that retelling condition had a moderately large effect ($\omega^2 = .063$) on narrative comprehension. Furthermore, there was no significant interaction between group and retelling condition [$F(1, 16) = .00, p = 1.000$ $\omega^2 = -.049$] and no main effect for language proficiency [$F(1, 16) = 1.02, p = .329$, $\omega^2 = .001$].

Comparisons of the retelling performances across learners’ proficiencies revealed that the effects of retelling on reading comprehension varied with learner proficiency and also with passages. Hence H1 was partially supported whereas H2 was proven. While retelling facilitated the reading comprehension of both proficiency groups with Passage 2, retelling facilitated only the upper proficiency group’s performance and hindered that of the lower proficiency group with Passage 1. Comments made by participants in retrospective interviews indicated that this discrepancy may possibly be explained by unknown words contained in Passage 1. Passage 1 contained a few words unknown to many participants (e.g., attic, rooster) that were seemed to
be important to understand the setting of the story. A closer look at the reading comprehension test scores reveals that the question which required test takers to include the unknown word (i.e. attic) in their answers had the lowest proportion correct (35%) while the mean proportion correct was 69.8%. Therefore, for learners who failed to grasp the meaning of these words, Passage 1 became more demanding compared to Passage 2, which may have caused a discrepancy in the results.

3.3 Retelling Protocol
3.3.1 Information Importance

The relation between the importance level of an IU and the probability of that IU being recalled was examined. Table 4 shows the mean proportions of IUs recalled on first and second reading. Figures 3 and 4 illustrate the results for each passage on the first time reading.

<table>
<thead>
<tr>
<th>Repetition</th>
<th>Importance Level</th>
<th>Upper Passage 1</th>
<th>Lower Passage 2</th>
<th>Upper Passage 1</th>
<th>Lower Passage 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Passage 2</td>
<td></td>
<td>Passage 2</td>
<td></td>
</tr>
<tr>
<td>First Reading</td>
<td>1</td>
<td>.10</td>
<td>.53</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.29</td>
<td>.45</td>
<td>.29</td>
<td>.24</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>.56</td>
<td>.58</td>
<td>.48</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>.42</td>
<td>.78</td>
<td>.42</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>.52</td>
<td>.92</td>
<td>.48</td>
<td>.76</td>
</tr>
<tr>
<td>Second Reading</td>
<td>1</td>
<td>.20</td>
<td>.60</td>
<td>.15</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.34</td>
<td>.66</td>
<td>.43</td>
<td>.44</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>.72</td>
<td>.72</td>
<td>.57</td>
<td>.52</td>
</tr>
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<td></td>
<td>4</td>
<td>.58</td>
<td>.91</td>
<td>.50</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>.72</td>
<td>.96</td>
<td>.52</td>
<td>.72</td>
</tr>
</tbody>
</table>

Figure 3. Mean proportion of correct retelling by group and importance level of Passage 1 for the first reading.

Figure 4. Mean proportion of correct retelling by group and importance level of Passage 2 for the first reading.
To examine whether each IU is reproduced differently according to its importance level, a 2 (language proficiency: upper and lower) × 5 (levels of importance) ANOVAs were conducted separately across the reading trials. In addition, \( \omega^2 \) was obtained as an index of effect size.

The most important and interesting aspect of the results is that idea units that were rated more important were included more often in the retelling protocols than those rated less important. The statistical analysis revealed that the main effect of importance level was reliable across the passages for the first reading [Passage 1: \( F(4, 32) = 6.89, p = .000, \ \omega^2 = .072 \); Passage 2: \( F(4, 32) = 22.54, p = .000, \ \omega^2 = .126 \)] and also for the second reading [Passage 1: \( F(4, 32) = 13.63, p = .000, \ \omega^2 = .106 \); Passage 2: \( F(4, 32) = 12.02, p = .000, \ \omega^2 = .064 \)]. This tendency was seen in both language proficiency groups and the statistical results reported here clearly indicate that retelling reflects the importance of text information, regardless of the learners' English proficiency and number of reading trials. These results are consistent with previous research which showed that text units that are rated more important are recalled more often than those rated less important (Brown & Smiley, 1977; Johnson, 1970).

3.3.2 The Rereading Effect

To examine whether multiple readings facilitate reproduction of the text information, the participants in this study were asked to read and later reread narrative stories. Table 5 shows the mean numbers of IUs recalled on the first and second readings, respectively.

<table>
<thead>
<tr>
<th>Group</th>
<th>Repetition</th>
<th>Passage 1</th>
<th></th>
<th>Passage 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( n )</td>
<td>M</td>
<td>SD</td>
<td>( n )</td>
</tr>
<tr>
<td>Upper (( n = 10 ))</td>
<td>First Reading</td>
<td>5</td>
<td>18.80</td>
<td>6.69</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Second Reading</td>
<td>5</td>
<td>24.80</td>
<td>5.07</td>
<td>5</td>
</tr>
<tr>
<td>Lower (( n = 10 ))</td>
<td>First Reading</td>
<td>5</td>
<td>17.40</td>
<td>2.19</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Second Reading</td>
<td>5</td>
<td>21.00</td>
<td>3.87</td>
<td>5</td>
</tr>
</tbody>
</table>

In order to measure the IU reproduction separately for each passage, a 2 (reading times) × 2 (proficiency level) ANOVA was carried out. As for Passage 1, there was no significant interaction between reading times and proficiency. However, the main effect of reading times was significant \( [F(1, 8) = 10.64, p = .011, \ \omega^2 = .190] \). As for Passage 2, there was no significant interaction between reading times and proficiency. By contrast, the main effects of reading times \( [F(1, 8) = 25.68, p = .001, \ \omega^2 = .175] \) and proficiency \( [F(1, 8) = 13.22, p = .007, \ \omega^2 = .390] \) were significant. These data shows that comprehension is promoted with additional readings and the results are consistent with previous research (Millis et al., 1998). This can be attributed to the enhancement of resource allocation during the second reading. Another
possibility is that the participants might have spent additional time rehearsing the text information during the second reading. EFL students have difficulty comprehending texts written in English, and therefore if they are given more than one opportunity to acquire information from texts, they will probably benefit from additional readings.

4. Conclusion

The results of this study provide important evidence that retelling facilitates L2 learners’ narrative comprehension; however its effect may differ according to learners’ proficiency and also to the degree of passage difficulty. The finding that less skilled readers did not always gain benefit from the retelling task may be related to the particular vocabulary used in this study. Skilled readers always made use of the retelling task, whereas less skilled readers did not, especially with Passage 1. For Passage 1, the resource demands of producing an organized and causally coherent story may exceed the resource available to less skilled readers. This finding indicates that when teachers introduce a retelling task, they need to consider their learners’ language proficiency and they also need to control the use of words unknown to the readers. When they find that the task is too demanding, then they can give additional reading opportunities to enhance their learners’ reading comprehension.

Retelling protocols produced by Japanese EFL learners in this study illuminated the processes involved in their reading comprehension. A closer look at the retelling protocols reveals that retelling reflects the importance of text information, regardless of learners’ proficiency. This finding clearly indicates that learners’ reading processes are strategic and learners seem to decide what information is important and what is not in order to process and comprehend the story. In this way, they seem to succeed in reconstructing what they gained from their reading. Future research needs to address whether the present results obtained for narrative passages can be generalize to other text genres (e.g., expository texts) and also to other EFL learners with different language proficiencies.

Notes

1 A modified version used in Horiba (1996) with fewer causal connections was used in the present study.
2 This is because while Eta squared and partial Eta squared are estimates of the degree of association for the sample, Omega squared is an estimate of the degree of association in the population. The present study has adopted Cohen’s guidelines for effect size. Cohen (1988, pp. 280-287) suggests that values of .01, .06, and .14 be used to indicate small, medium, and large associations between the variables, respectively. Effect size of .009 and below is regarded as having no effects.
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References