Improving Japanese University Students’ Second Language Writing Accuracy: Effects of Languaging

Wataru SUZUKI
Ontario Institute for Studies in Education of the University of Toronto

Abstract

When second language (L2) learners produce and comprehend their target language, they are engaged in *languaging*, “a dynamic, never-ending process of using language to make meaning” (Swain, 2006, p. 96). According to Swain (2006), languaging is a major source of L2 learning. This paper investigates whether individuals learn an L2 more effectively when they language in response to written feedback that they receive than when they do not. I report the data from 24 students who engaged in a three-stage writing task: (1) writing a draft, (2) languaging about specific linguistic errors corrected in the draft, and (3) revising the draft. The average number of linguistic errors significantly decreased from the draft to its revision. Similarly, if an error was explained, it was more likely to be changed, whereas if an error was not explained, it was less likely to be changed. These findings suggest that languaging may have improved L2 writing accuracy. I point out several limitations of this study and conclude this paper by suggesting the need for further studies to examine the role of languaging in L2 learning.

1. Introduction and Literature Review

Recently the roles of languaging (Swain, 2006) in second language (L2) learning have been investigated by several second language acquisition (SLA) researchers (see W. Suzuki, 2009 for a review). Swain (2006) defines languaging as “the process of making meaning and shaping knowledge...through language” (p.89). Languaging that L2 learners engage in while producing and comprehending language is a major source of L2 learning (Swain, 2006). In this paper, my intention is to examine whether languaging plays an important role in L2 learning, particularly in the context of learning from feedback in writing.

Languaging emanates from the perspective of Vygotsky’s sociocultural theory of mind (Swain, 2006). The sociocultural theory explains why languaging occurs in the first place. According to Vygotsky (1987), the earliest speech of a child is essentially social. Through social interaction mediated by speech, the child moves from being regulated by objects in the environment to being regulated by others. This originally social speech splits into communicative speech for others and private speech for oneself. In the latter case, private speech essentially goes
“underground” to become inner speech, functioning psychologically as an internal regulator of behavior and cognition. This process can be applied to adult L2 learners who do not regularly talk aloud to themselves: when faced with complex and demanding L2 tasks, their inner speech may be transformed, externalized, and overtly produced as private speech to self-regulate their cognitive processes.

Negueruela and Lantolf (2006) defined private speech as “the intentional use of overt self-directed speech to explain concepts to the self” (p. 86). Negueruela and Lantolf showed the impact on L2 learning of private speech which focused on grammatical concepts (Negueruela, 2008). After learning grammatical concepts through charts and diagrams, participants explained the concepts to themselves. Although development in internalizing grammatical concepts was unequal, participants performed better at the end of the course in their production (particularly written production) of the grammatical features associated with the target concepts. Negueruela and Lantolf demonstrated that via languaging in the form of private speech, internalization of conceptual understanding about L2 grammar mediated subsequent L2 performance (see also Negueruela, 2008).

Languaging is a broader concept than collaborative dialogue, as the former includes private speech. According to Swain and Lapkin (1998), collaborative dialogue is “dialogue in which speakers are engaged in problem solving and knowledge building” (p. 102). Swain and Lapkin examined the dialogue of two grade eight French immersion students who collaboratively wrote a story based on a set of drawings. Through collaborative dialogue, these students recognized “a hole” in their linguistic knowledge (noticing), formulated and tested hypotheses about how the target language works (hypothesis-testing), and, in doing so, consolidated their existing knowledge or created knowledge that was new for them. Swain and Lapkin demonstrate that languaging in the form of collaborative dialogue mediates L2 learning (see also Swain & Lapkin, 2002). Although collaborative dialogue is different from private speech, its “talking-it-through” aspect is similar to Negueruela and Lantolf’s definition of private speech (Swain, 2006). Therefore, what is referred to as collaborative dialogue may in fact be two individuals appearing to talk to each other, but where at least some of the talk is directed at the self - an overt manifestation of self-regulation.

In a recent study, Swain, Lapkin, Knouzi, Suzuki, and Brooks (2009) developed a text explaining the concept of voice in French and asked their participants to read the text aloud and then explain it. Swain et al. categorized what their students explained into five languaging units: analysis, inference, re-reading, self-assessment, and paraphrase. They then divided their participants into high, middle, and low languagers based upon the number of languaging units. Via pretests, posttests, and delayed posttests, Swain et al. demonstrate that by languaging, the students came to understand the concept of voice in French, and were able to transfer what they had learned to new contexts.
Several sociocultural SLA studies have investigated whether languaging plays a role in L2 learning (e.g., Neguerela & Lantolf, 2006; Swain et al., 2009). However, there is a restricted range of studies that explore the role of languaging in L2 learning (see W. Suzuki, 2009 for a review). In this paper, I attempt to expand the scope of sociocultural SLA by investigating whether individuals learn an L2 more effectively when they language about written feedback that they receive than when they do not. This study is designed to answer the following research question: Is students’ languaging in response to teacher-written feedback on L2 writing a source of improved accuracy measured by subsequent revision?

2. Method

2.1. Participants
Participants were 24 native speakers of Japanese enrolled in an English composition course at a public university in Japan during the spring semester from April to July, 2006. The course was designed to help first-year university students improve their writing skills in English. Participants had been studying English for at least six years and were judged to have achieved a low-intermediate proficiency level. They passed the standardized national university entrance examinations (mainly grammar-and reading-focused) administered by the National Center for University Entrance Examination in Japan. All participants had a similar first language (Japanese), age (18-20), culture (Japanese), and amount of education (university-level).

2.2. Experimental Procedure
The three-week sequence of this experiment is illustrated in Table 1 (below).

Week 1. Participants were given 30 minutes to write a first essay based on a written prompt (see Section 2.4.1. below). Participants wrote an essay based upon a written prompt (30 minutes). At the end of the 30-minute composition stage, their instructor collected their essays. During the first week, I made extra copies of participants’ original essays and asked a second university instructor to underline incorrect words and phrases on those copies in red-colored ink (i.e., indirect feedback). The second instructor was a native speaker (NS) of English who had been teaching English at the university for about 30 years.

Week 2. After receiving a copy of the first essay with the indirect feedback, participants performed a written languaging task in Japanese. They read the languaging prompt (see Section 2.4.2. below) and then explained, in writing on a separate sheet, why their linguistic forms (e.g., grammar, lexis) had been incorrect/wrong. It took participants 25 minutes to complete the languaging task. At the end of the task, the languaging sheet was collected along with the copy of their original essay with the indirect feedback.

Week 3. Participants received a clean copy of their original essay and were asked to revise the first essay on a separate sheet of paper in 20 minutes.
During the course of this experiment, participants were not allowed to use dictionaries. I wanted to ensure that participants worked through their linguistic problems with language production on their own while writing and revising. Second, I felt that 30 minutes was too short a time to write an essay with dictionaries. I noted that the 30-minute essay-writing task in the TOEFL also prohibited dictionary use.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing essay (30 min)</td>
<td>Languaging (25 min)</td>
<td>Revising essay (20 min)</td>
</tr>
</tbody>
</table>

2.3. Written Feedback

I asked the NS instructor to provide indirect feedback on all linguistic errors that he noticed (e.g., verb tenses, articles, prepositions, lexical choice). Two examples are given about how error correction was done.

Original version 1: On the person who is famous in the history, ...
Indirect feedback 1: On the person who is famous in the history,

Original version 2: I have two reason for this.
Indirect feedback 2: I have two reason for this.

Although for inter-rater reliability it may be advisable to ask two NS speakers to code errors on students' essays, I asked only one instructor. The reason for this decision was that the NS instructor had about 30 years of EFL teaching experience with Japanese university students in the targeted population and was accustomed to giving written feedback on a range of linguistic errors in students' essays. Also, a second teacher may have introduced undue variability to the procedure.

In addition, it was not possible to investigate learners' prior knowledge of their linguistic errors because this study adopts an extensive approach to the provision of written feedback on the grammar and lexis of various linguistic forms. Thus, an error could be a competence error or a performance error. If the error was a performance error, giving indirect feedback only or time to self-correct might be enough for linguistic accuracy improvement during the revision phase (Itagaki & MacManaus, 1998; Polio et al., 1998; M. Suzuki, 2008). Further, revision followed by corrective feedback (i.e., uptake) may not differentiate between the acquisition of new forms and the consolidation/restructuring of prior knowledge. Nevertheless, the fact that participants make
errors in meaning-based tasks such as L2 writing indicates that (a) they are experiencing difficulty with that item and (b) further consolidation of learning might be necessary (Loewen, 2005).

2.4. Materials

2.4.1. Written Prompt. The prompt, taken from the ETS, was “if you could travel back in time to meet a famous person from history, what person would you like to meet? Use specific reasons and examples to support your choice.” I chose this prompt because it was used in M. Suzuki (2008) with participants similar to those of this study. Participants in M. Suzuki seemed to have no difficulty writing essays based upon the prompts.

2.4.2. Languaging prompt. To encourage participants to fully engage in the languaging task, I used the following prompt: “Why is this linguistic form incorrect/wrong? Why did the instructor give feedback on this form? Please write your explanation in Japanese.” Students were allowed to write “I do not know” if they could not tell what was wrong with the form.

An example of languaging is exemplified below. I have translated it from Japanese to English. The example represents languaging episodes including word choice and word meaning. Student #1 wrote, “…what I know about history is small” for the first essay, and received indirect feedback on the use of adjective (small). The student then explained, in writing, “small may not sound good when we say sukunai (= small) in this context.”

The first essay with indirect feedback:
…what I know about history is small.
Languaging episode:
…small may not sound good when we say sukunai (= small) in this context.

It is important to note three reasons for using written data. First, written languaging may have a similar cognitive function to private speech in that written languaging helps learners to self-regulate their L2 learning. Second, written languaging is a form of metalinguistic reflection, which may play a role in L2 learning (Simard, French, & Fortier, 2007; Suzuki & Itagaki, 2007). Third, oral data represent the primary source for languaging; very few studies within the sociocultural SLA paradigm have asked participants to write explanations (see W. Suzuki, 2009 for a review). Therefore, exploiting written data could provide a valuable opportunity to gain fuller insights about the role of languaging in L2 learning.

2.5. Scoring

I obtained two types of student writing samples: essay writing in week 1 (first draft) and its revised version in week 3 (revision). I calculated a normalized error score for one composition written by each participant, using the procedure outlined by Bibler, Conrad, and Reppen (1998). To calculate the normalized error score, I first counted the number of words and the number of
errors (as identified by the NS instructor). Then, I divided the number of errors by the number of words in a composition and multiplied that number by the average number of words in the sample. Finally, I calculated the average means of the normalized error scores for draft and revision. This procedure was adopted because I assumed that there would be a large variation in the number of words produced and the number of errors committed by each participant.

3. Results and Discussion

3.1. Summary of findings

Table 2 (below) shows descriptive statistics of the average number of words and errors in each composition. As Table 2 shows, participants produced 138.8 words ($SD = 33.4$) for the first draft and 140.9 words ($SD = 37.2$) for its revision. Participants made 11.8 errors ($SD = 5.1$) for the first draft and 5.9 errors ($SD = 3.3$) for its revision. Paired-sample $t$-tests revealed that the difference between the average number of errors on the first draft and those of its revision were statistically significant, $t (23) = 8.85$, $p < .01$. That is, the average number of errors decreased considerably from the first draft to its revision.

Table 2 Descriptive Statistics of the Average Number of Words and Errors in Each Composition

<table>
<thead>
<tr>
<th>Task</th>
<th>Average number of words</th>
<th>Average number of errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st draft</td>
<td>138.8 (33.4)</td>
<td>11.8 (5.1)</td>
</tr>
<tr>
<td>Revision</td>
<td>140.9 (37.2)</td>
<td>5.9 (3.3)</td>
</tr>
</tbody>
</table>

Note) Parentheses show standard deviations

Table 3 Descriptive Statistics of the Relationship between Error Types and Revision Types

<table>
<thead>
<tr>
<th>Errors</th>
<th>Successful Revision</th>
<th>Unsuccessful Revision</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explained</td>
<td>107 (53.5)</td>
<td>93 (46.5)</td>
<td>200 (71.2)</td>
</tr>
<tr>
<td>Not Explained</td>
<td>34 (42.0)</td>
<td>47 (58.0)</td>
<td>81 (28.8)</td>
</tr>
<tr>
<td>Total</td>
<td>141 (50.2)</td>
<td>140 (49.8)</td>
<td>281 (100.0)</td>
</tr>
</tbody>
</table>

Note) Parentheses show percentages

Table 3 (above) shows descriptive statistics of the relationship between error types and revision types. As illustrated in Table 3, participants explained 200 of their errors and did not explain 81. Participants made 141 successful and 140 unsuccessful revisions. When participants explained teacher feedback on their linguistic errors, 107 out of 200 explanations (53.5%) were successfully incorporated into their subsequent revision and 93 out of 200 explanations (46.5%)
were not. On the other hand, 47 out of the 81 linguistic errors participants did not explain (58.0%) were not successfully revised, while 34 out of the 81 linguistic errors participants did not explain (42.0%) led to successful revision.

To recap, I found a statistically significant decrease in the average number of errors from the first draft (about 12) to its revision (about 6). Similarly, if an error was explained, it was more likely to be changed in revision (53.5%), whereas if an error was not explained, it was less likely to be changed in revision (42.0%). Taken together, languaging may have resulted in improved accuracy. Two points are worth highlighting. First, revision was conducted one week after the treatment, but not immediately after the treatment. Second, students engaged in revising with a clean copy of their original essay (which means that they did not have access to teacher feedback when revising their essays).

The findings of the present study can be related to previous SLA research. For example, in the absence of feedback in the revision task, Itagaki and MacManus (1998) found that Japanese learners of English in the same institution were able to correct only 6% of the errors in their compositions. This sharply contrasts with findings from other SLA studies (e.g., Polio et al., 1998) that linguistic accuracy greatly improves from draft to revised essay. This difference can be explained by the fact that the ESL participants in Polio et al. ’s study were more proficient than the EFL learners in Itagaki and MacManus’s study. The very low rate of Japanese EFL learners’ self-revision in Itagaki and MacManus suggests that self-revision is a difficult task for less proficient learners, and that some kind of intervention is necessary. One way in which teachers can intervene in the development of L2 writing accuracy is to encourage learners to language about linguistic problems by themselves or with peers (e.g., Swain et al., 2009; Storch & Wigglesworth, 2007; M. Suzuki, 2008; Swain & Lapkin, 1998, 2002).

3.2. The Present Study and Previous SLA Research on Languaging

This study may make three possible contributions to SLA. First, participants in previous sociocultural SLA studies primarily engaged in oral modes of languaging (e.g., Negueruela, 2008; Negueruela & Lantolf, 2006; Storch & Wigglesworth, 2007; Swain & Lapkin, 1998, 2002; Swain et al., 2009), whereas those in this study engaged in written form of languaging (see also Simard et al., 2007; Suzuki & Itagaki, 2007). Written languaging may serve a similar cognitive function to private speech in that writing helps learners to self-regulate their L2 learning. Clearly, further empirical research is needed in this area.

Second, while previous SLA studies (e.g., Sachs & Polio, 2007; Qi & Lapkin, 2001) asked participants to verbalize after receiving direct feedback (i.e., reformulation, direct correction), those in my study did so after receiving indirect feedback (i.e., underlining). The present study thus provides empirical evidence that learners improved their linguistic accuracy by languaging about indirect feedback on their linguistic errors. We might assume that direct feedback would lead learners to engage in shallower processing than indirect feedback. However, the participants
in this study sometimes had difficulty identifying, correcting, and explaining their errors. This ambiguity, inherent in indirect feedback, has been reported as blame assignment in previous SLA studies (Loewen, 2005). Future studies need to explore the effects of written direct feedback on languaging (see W. Suzuki, 2009).

Third, in previous sociocultural SLA studies, participants articulated their knowledge with peers (e.g., Storch & Wigglesworth, 2007; Swain & Lapkin, 1998, 2002), while those in my study did so individually. As Swain et al. (2009) and Negueruela and Lantolf (2006) show, languaging can be regarded as private or intrapersonal speech (Negueruela, 2008). It is important to note that this definition is similar to what cognitive scientists such as Chi (2000, p.164) call self-explaining: “the activity of explaining to oneself in an attempt to make sense of new information, either presented in a text or in some other medium”. Typical examples of self-explanation during reading may include “I am having trouble understanding this” (self-monitoring) and “this is confusing” (text-monitoring). A substantial body of research associated with the concept of self-explaining from the perspective of information processing has provided evidence that self-explaining enhances the learning of non-L2 knowledge domains such as physics, biology, and mathematics (see W. Suzuki, 2009 for a review). Therefore, it is important to examine the extent to which the effect of self-explaining can be generalizable to the learning of an L2. This line of examination, which helps SLA researchers reconceptualize the important roles of languaging in L2 learning, has just started in SLA (Swain, 2006, Swain et al., 2009).

3.3. Limitations, Further Inquiries, and Pedagogical Implications

The current study was limited in many ways. First, to claim that languaging plays a significant role in learning, I would have had to incorporate a comparison group which did not engage in languaging. With languaging and no-languaging groups, however, I would likely have faced the difficulty of equalizing time on task for both groups. Second, to claim that languaging results in long-term learning or transfer, I would have needed to incorporate a new piece of writing or a delayed posttest measure (see W. Suzuki, 2009). Third, the current research design did not separate the effects of languaging from those of indirect feedback on L2 learning. These effects should be teased apart in further studies. Fourth, I described the participants’ proficiency levels as low-intermediate, judging from years of their English studies in Japan. Therefore, a more rigorous definition should be needed (e.g., standardized tests or in-house assessment tests). In this study, I aimed to demonstrate whether languaging resulted in improved accuracy but not how languaging impacts L2 learning. Therefore, the next phase of my research includes identifying the cognitive mechanisms of learners as they engage in languaging (see W. Suzuki, 2009). Sociocultural SLA will benefit from research based on an information processing approach which documents cognitive processes within the heads of individuals during self explaining (see Chi, 2000). In this way, different paradigms or methods might further current approaches to L2 learning and teaching.
Pedagogical implications of this line of investigation include that L2 teachers may wish to ask their students to reflect, in diaries, journals, and portfolios, on the linguistic problems they have encountered during classroom activities. Pedagogical tools such as diaries, journals, and portfolios do not merely provide learners with learning opportunities. What students reflect on in diaries and journals also provides teachers with valuable information: (a) what aspects of language students have paid attention to, (b) students’ interpretation of teacher feedback, and (c) overlaps between teacher intent and student interpretation of corrective feedback. I hope that teachers find it beneficial to give their learners opportunities to engage in languaging about the target language.

Acknowledgments

This research was supported, in part, by (a) Humanities and Social Sciences Research Grant 2006-2007 from the Matsushita International Foundation and (b) the Tohoku University CIR Grant for Research Program in Computational Neurolinguistics Modelling Second Language Acquisition. I would like to thank Linda Borer, Lindsay Brooks, Nobuya Itagaki, Paul Quinn, Manami Suzuki, and Merrill Swain for their insightful comments on earlier versions of this paper. As always, all errors are mine. Also, I would like to thank Miwa Takeuchi for her help with data analysis. Finally, my sincere thanks go to the students who participated in my study. Earlier versions of this paper were presented at the annual meeting of the American Association of Applied Linguistics in California on April 23, 2007; and at the annual meeting of the Japan Society of English Language Education in Oita on August 4, 2007.

Address correspondence to Wataru Suzuki, Second Language Education Program, Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education of the University of Toronto, 252 Bloor Street West, Toronto, Ontario, M5S 1V6, Canada; email: wsuzuki@oise.utoronto.ca.

References


