An Exploratory Study on the Role of L1 Use in Peer Written Feedback of L2 Writing

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ABSTRACT: While research on peer feedback in L2 writing has proliferated in the past two decades, little research has investigated the role of language use in peer written feedback in EFL writing contexts. The existing peer feedback studies have failed to explain how the use of L1 and L2 in peer written feedback can influence the peer feedback practices. Using the peer written feedback on a survey report by Chinese EFL learners as the data, the current study aims to investigate how the use of L1 in the process of giving feedback influences the peer written feedback practices. The findings indicate that L1 could play a mediating role in the written peer feedback process and L1 was found to help mediate the cognitive resources in working memory and bring positive changes to the feedback practices. With the scaffolding role of L1, L2 learners could produce more comments on content and offer more specific feedback. Implications and suggestions regarding the use of L1 in peer feedback activity have been proposed finally.

Keywords: Peer feedback, L1, L2, Mediating

Estudio exploratorio sobre el papel que desempeña la utilización de la L1 en los comentarios escritos por compañeros acerca de la escritura de la L2

RESUMEN: Si bien estudios anteriores han contribuido a que comprendamos la naturaleza de los comentarios que realizan otros compañeros, los efectos mediadores del idioma en los procesos de retroalimentación entre compañeros para alumnos de ESL/EFL no se han investigado lo suficiente. Los estudios actuales en esta materia no han conseguido explicar de qué modo pueden influir la utilización de la L1 y L2 en la comunicación oral y los comentarios escritos que realizan otros compañeros en las prácticas de retroalimentación. Tomando como base los comentarios escritos por estudiantes chinos de EFL en una encuesta, este estudio tiene como objetivo investigar cómo influye el uso de la L1 en los procesos de retroalimentación en el modo en que los compañeros redactan sus observaciones. Los resultados muestran que la L1 podría desempeñar un papel mediador en los procesos de retroalimentación escrita de compañeros, además de que puede ayudar a mediar en los recursos cognitivos en la memoria de trabajo y aportar cambios positivos a las prácticas de retroalimentación. Gracias a la función de apoyo que ofrece la L1, los estudiantes de la L2 podrían hacer más observaciones sobre el contenido y proporcionar comentarios más específicos. Por fin se han tenido en cuenta las implicaciones y sugerencias en cuanto al uso de la L1 en la redacción de comentarios por parte de compañeros.

Palabras clave: Comentarios de compañeros, L1, L2, Mediador

1. INTRODUCTION

The last two decades have witnessed a great deal of research on peer feedback in SLA and second language (L2) writing (see Hu & Lam, 2010 for review). While research on the
mediated effects of the mediators (e.g. written/oral conferencing feedback, online/pen-and-paper feedback, face-to-face/anonymous feedback) on the peer feedback process and the subsequent revisions has contributed to our understanding of the nature of peer feedback from a process perspective (e.g. Jones et al, 2006; Liu & Sadler, 2003; Lin & Yang, 2011; Tuzi, 2004; Yang et al, 2006; Ware, 2004), the mediating effects of language for ESL/EFL learners, in peer feedback are under-explored. Some studies have revealed that EFL writers tend to use both L1 (first language) and L2 in peer feedback activities (Villamil & Guerrero, 1996; Villamil & De Guerrero, 2006; Zhao, 2010; Yu & Lee, 2014). However, the existing peer feedback studies have failed to explain how the use of L1 and L2 in peer written feedback can influence the peer feedback practices – e.g. the types of feedback (grammar, vocabulary, content, etc), the quantity of peer comments, etc.

Since language itself is regarded as “the most essential tool to mediate language development with social interaction” (Lantolf & Thorne, 2006; Lantolf, 2003; Vygotsky, 1978; cited in Zhao, 2010, p.14) and L1 may have a crucial role to play in L2 writing and peer feedback process (Guerrero & Villamil, 1994 & 2000; Wang & Wen, 2002), it is worthwhile to explore the role of L1 in peer feedback process and how it influences the peer feedback practices. Using the peer written feedback on a survey report by Chinese EFL learners as the data, the current study aims to investigate how the use of L1 in the process of giving feedback influences the peer written feedback practices. The findings of the study could help understand the way EFL learners respond to their peers’ essays in L2 writing classrooms. Some suggestions and implications could be proposed for writing teachers to improve their students’ peer feedback practices. Such information is also useful for peer feedback training.

2. Literature review

In the past three decades or so, a growing body of research has focused on the use of L1 in L2 writing process and revising process (see for example, Murphy & Roca de Larios, 2010; Stevenson, et al., 2006; DiCamilla & Antón, 2012; Van Weijen et al., 2009; Wang & Wen, 2002; Whalen & Ménard, 1995). While these studies have contributed a lot to a better understanding of L1 use in L2 writing process and provided new insights into the use of L1 to maximize the learning of L2 writing, a review of the literature reveals a scarcity of research on L1 use in peer revising or peer feedback process.

Of the limited research so far, little attention has been paid to the use of L1 in peer responding process although several studies have mentioned its role in peer feedback. Guerrero & Villamil (1994) employed Vygotskyian psycholinguistics theoretical framework to explore the social and cognitive aspects of oral interaction in L2 peer revision. It was found that the majority of the interactions were in students’ native language (Spanish) rather than the target language (English). Spanish was used in the peer feedback process to “retrieve information from memory, generate content, and improve the quality of text and control task” (p. 492). Also, Villamil & Guerrero (1996) investigated the mediating strategies EFL learners used when they engaged in L2 peer revision and confirmed the use of L1 in peer interaction. The study revealed that L1 use was among the five major mediating strategies (e.g. employing symbols and external resources, providing scaffolding, etc.) to facilitate the revision process. Adopting the Vygotsky’s ZPD concept and scaffolding metaphor as the theoretical
basis of peer interaction, Guerrero & Villamil (2000) explored the scaffolding mechanism in L2 peer feedback process. The findings underscored the role of L1 as an instrument of task control, and “the use of the L1 to talk about the task was considered valuable to the extent that it did not inhibit but instead promoted achievement of the goal and stimulated reflection, reconsideration, and restructuring of the L2” (p. 64).

In a recent study conducted by Villamil & Guerrero (2006), students’ native language Spanish was shown to take up 95 percent of the interactions in peer feedback. More instrumental functions of L1 were revealed, like helping retrieve words in the L2, expanding ideas, as well as keeping conversations going and so forth. The facilitative role of students’ first language was also found in a comparative study of teacher feedback and peer feedback (Zhao, 2010). The study indicated that L1 (Mandarin Chinese) was an important factor that contributes to learners’ better understanding of peer feedback. The participants in his study emphasized that L1 use in peer feedback assisted them in understanding peer comments and also helped them produce comments which were easy to understand for their peers.

In summary, the previous studies revealed that: (1) students’ native language is frequently and naturally used in the oral interaction of peer feedback; (2) L1 could play a positive role in the interaction since it could facilitate the peer feedback process and contribute to the undertaking of peer revision. While the role of L1 in peer feedback has been underlined, the existing studies have failed to show the impact of the mediating roles of L1 on peer feedback practices. Since the peer feedback process may involve a lot of revisions, the influence of L1 on peer feedback practices could be examined by drawing upon implications from studies on self-revising practices in L2 writing. As far as the studies on self-revising in L2 writing are concerned, it has been revealed that L2 learners’ revision practices could be influenced by the language use (Barkaoui, 2007). For example, L2 learners could revise more and focus more on linguistic aspects, i.e. form, when writing in L2 than in L1 (Roca De Larios et al., 2002; Stevenson et al., 2006; Whalen & Ménard, 1995). It was also found that students could make more form revisions and conceptual revisions (e.g. content and organization) in L2 than in L1 (Lindgren & Sullivan, 2006). Hall (1990) found revisions in L1 were more time-consuming and numerous, and some revising strategies (e.g., underlining words or phrases to be revised later) were unique to L2 writing. Much is known about the influence of L1 and L2 use on the self-revising practices, but the influences on peer feedback practices exerted by the use of L1 are yet to be explored. In this study, feedback practices include the focus of feedback, the quantity and specificity of feedback, which have been used to interpret ‘feedback practices’ and ‘revising types’ in previous studies (e.g. Zhu, 2001; Jones et al., 2006).

All of the existing research has concentrated on the oral interaction of peer feedback when it comes to the use of language in it. Little attention has been paid to the language mediation in written mode of peer feedback. The current study takes a quasi-experimental approach to explore the mediating role of L1 and L2 in peer written feedback and aims to answer the following two research questions:

1. Is there any difference between the written peer feedback produced in L1 and that in L2 in terms of its focus – form, content, organization and genre?
2. Is there any difference between the written peer feedback produced in L1 and that in L2 in terms of feedback quantity and specificity?
3. **The Study**

3.1. Participants

Eighteen students, aged from 18 to 20, participated in this study. They were volunteers from six classes at a key university in China. At the time of this study, all of them had at least several years’ English learning experiences through formal English instruction. In the first one and a half years at university, they were required to attend two types of English language courses – Reading & Writing and Listening & Speaking, with two periods per week and 16 weeks for one term. In the reading and writing class, they were encouraged to involve in peer feedback activities – giving comments to their classmates’ essays either in written or oral form. Their language instructor, Mary, once trained them how to give comments to their classmates when they finished their first essay in the first term. Sometimes they were required to provide written comments on the texts, while sometimes they would work in pairs or small groups to give critique and feedback orally to one another’s writing.

3.2. Written text for peer review

The written essay used for peer feedback in the study was collected from one writing assignment given by the participants’ language teacher. The students in the study were usually required to write about five to eight essays in English for one term. In the period of the current study, they started one writing assignment, which was a survey report. In order to accomplish the writing task, students in one class were organized into several groups to conduct a small survey on a self-selected topic, such as the university students’ consuming situation, the use of computers on campus, and the university students’ opinions about playing computer games. They had two weeks to complete the survey and another two weeks to write the report. Before they conducted the survey, the teachers had trained them how to do a survey and how to write a survey report. Also, teachers were ready to answer questions from students during the survey study. The survey report for peer feedback in the study was entitled *To or not to be, it’s up to you: What self-study at night should be?*, which was drafted by one group of students among the 48 groups in six classes. The report consisted of four paragraphs and 1,044 English words. The report was generally well written but had much room for improvement in terms of genre structure, content, language use, organization, grammar, vocabulary, and so forth. It was felt that a long essay with problems of different kinds may trigger participants to give more comments and revisions. Another reason for the choice of the survey report is that its genre incorporates the features of narration, exposition, description, argumentation and academic writing, and therefore the influence of genre on feedback output could be avoided.

3.3. Data collection

The current study takes a quasi-experimental approach to explore the mediating role of L1 and L2 in peer written feedback practices. The participants were divided into two parallel groups, with one as the control group and the other as the experimental group. At the time of the study, all the 18 participants had taken CET-4 (College English Test, which is divided into two key bands, CET-4 and CET-6. CET-6 is more difficult than CET-4),
which is a large-scale national English proficiency test that assesses the English proficiency of non-English majors at colleges and universities in China. There was no difference between the means of the CET-4 scores in both groups. In each group, there were three high, three mid, and three low proficiency students, with their CET scores ranging from 448 to 571 (426 being the passing score and 750 the highest score).

The data used in the study was based on the survey report collected from a group of students (who were not among the participants of the study). The report was written using Microsoft word 2007 and was sent to the researcher via email. With the permission of the writers of the survey report, the report was reviewed by the two groups of participants in the study, who were required to give their comments online individually. The experimental group could only use Chinese (L1) to give feedback while the control group could only use English (L2). They were required to finish the feedback task in 1.5 hours, during which the participants could refer to dictionaries and the Internet for help.

3.4. Coding of peer feedback

To answer the research questions, the feedback data was analyzed from three perspectives, including feedback type, feedback specificity and feedback quantity. We looked at feedback type by referring to what the feedback focused on – that is, whether the focus was on form, content, organization, or genre. The specificity of comments is meant whether the reviewer specifically and explicitly pointed out the merits or the problems of the essay. The feedback I think this sentence is good would be regarded as general because it does not state why the sentence is well written. However, the feedback This sentence is grammatically correct and could express your idea clearly is considered a specific comment. The feedback quantity was measured by the number of feedback points, which refer to a written intervention by the feedback given (Hyland, 2003), like any comment, underlining, or correction, which constitutes a meaningful unit rather than a word or a sentence. Concrete examples that illustrate the coding of feedback could be seen in Table 1. The coding

<table>
<thead>
<tr>
<th>Peer feedback practices</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Focus                  | 此处应用动词原形 [You should use the verb stem here.] (form)  
|                        | You can give some examples to support your idea [content] |
|                        | 总的来说，这一段显得有点乱，转折得不是很好 [Generally, this paragraph is not well organized. A good transition is needed.] (organization)  
|                        | 如果有图表的帮助，数据的分析会更清晰明了。[The data analysis would have been clearer if there were some tables or figures.] (genre) |
| Specificity            | 这句多快好省，应该介绍一下问卷的设计，问卷的整容内容等。 [This sentence should be deleted. You should introduce the questionnaire design and what the questionnaire is about.] (specific)  
|                        | I don’t feel this way of saying is suitable [general]. |
| Quantity               | Use “forward” here (one feedback point)  
|                        | 感觉可以有一些主观的调查问题，比如有关学习的感受，对参加活动的看法等。如果仅是问卷的单选选择会使项目枯燥无味，也不利于结论的得出。If I think you had better add some items to investigate the students’ perceptions, like their feelings about self-study at night and their attitudes towards attending social activities. Otherwise, the multiple choice items seem pretty boring and it may not be useful for you to get the conclusion.] (one feedback point) |

Table 1. Feedback coding scheme
task was done by the researcher and another language instructor who holds a MA degree in English, and intercoder reliability (based on the percentage of agreement) reached 0.96. Where problematic coding was involved, the two coders negotiated with each other until agreement was reached.

3.5. Data analysis

Data analysis involved the calculation of the total amount of each feedback type, the number of specific feedback points, and the total feedback points for each participant. Then the quantitatively counted data was processed with the Statistical Package for Social Science (SPSS) 18.0 for a multiple-faced analysis. Since the sample size of the study was small, the descriptive analysis such as frequencies, percentages, mean values, standard deviations, and nonparametric test - Mann-Whitney test were used to analyze the data and answer the research questions-

4. Findings

In this section we present the major findings of our study to address each of the research questions in turn.

4.1. Research question one: Is there any difference between the written peer feedback produced in L1 and that in L2 in terms of its focus – form, content, organization and genre?

The first research question aimed at exploring the differences between the types of written peer feedback produced in L1 and L2. Feedback types observed in this study include form, content, organization and genre. As Table 2 indicates, the mean percentage of the

<table>
<thead>
<tr>
<th>Feedback type</th>
<th>L1 Group (N=9)</th>
<th>L2 Group (N=8)</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Mean Ranks</td>
</tr>
<tr>
<td>Form</td>
<td>74.77</td>
<td>17.35</td>
<td>60.00</td>
</tr>
<tr>
<td>Content</td>
<td>19.32</td>
<td>13.00</td>
<td>110.00</td>
</tr>
<tr>
<td>Organization</td>
<td>2.01</td>
<td>3.04</td>
<td>76.00</td>
</tr>
<tr>
<td>Genre</td>
<td>3.90</td>
<td>4.59</td>
<td>80.00</td>
</tr>
</tbody>
</table>

Note: * p<.05; ** p<.01
feedback points on content in the L1 group (M=19.32) is higher than that in the L2 group (M=4.51), and there was a significant difference between them using the Mann Whitney Statistical Test at two-tailed significant level (p=.004<.01). However, the mean percentage of the feedback points on form in the L1 group (M=74.77) is lower than that in the L2 group (M=88.13), and their difference was also significant (p=.046<.05). The results suggest that students could give more feedback on content when they are using their mother tongue but they gave more feedback on form when L2 was used.

However, the two groups of participants made similar number of feedback points on organization (M=2.01 for L1 group and M=3.17 for L2 group) and genre (M=3.90 for L1 group and M=4.18 for L2 group). There were no significant differences using the Mann Whitney Statistical Test at two-tailed significant level (p=.673) for organization and genre (p=.963). The results show that the use of language in the peer feedback process did not have any influence on the written feedback types in terms of organization and genre.

**4.2. Research question two: Is there any difference between the written peer feedback produced in L1 and that in L2 in terms of feedback quantity and specificity?**

The second research question was designed to observe whether the use of language in the peer feedback process influenced the peer feedback quantity and specificity. As shown in Table 3, the mean percentage of the specific feedback points given by participants in the L1 group (M=91.77) is higher than that in the L2 group (M=71.18), and the Mann Whitney Statistical Test indicates that the difference between them is strongly significant (p=.004<.01). It suggests that the students could give more specific feedback when they were using their mother tongue to give feedback.

<table>
<thead>
<tr>
<th>Feedback</th>
<th>L1 Group(N=9)</th>
<th>L2 Group(N=8)</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Mean Ranks</td>
</tr>
<tr>
<td>Quantity</td>
<td>39.00</td>
<td>15.24</td>
<td>86.00</td>
</tr>
<tr>
<td>Quality</td>
<td>78.54</td>
<td>11.93</td>
<td>93.00</td>
</tr>
<tr>
<td>Specificity</td>
<td>91.77</td>
<td>7.95</td>
<td>110.00</td>
</tr>
</tbody>
</table>

Note: ** p<.01

Overall, the results reveal that students could produce more specific feedback when they were using L1 to make comments on their peers’ essay. However, the quantity of the feedback given in L1 and L2 did not show any difference.
5. DISCUSSION

This study demonstrates several differences between the written peer feedback given in L1 and L2. The first difference lies in the influence of the use of language on peer feedback types – form, content, organization and genre. While the two groups of participants gave a similar amount of feedback on organization and genre, compared with the L2 group, students in the L1 group could divert some of the attention from the form (vocabulary choice, grammatical errors, etc.) to the content (the background, significance and findings, etc.) of the survey report when they made comments in their mother tongue.

This result could be approached by the inhibitory hypothesis, which claims that “attention to linguistic processes inhibits attention available for higher level conceptual processing” (Broekkamp & van den Bergh, 1996; Chenoweth & Hayes, 2001; Whalen & Ménard, 1995) and “the large amount of attention devoted to linguistic revising is thought to detract from the attention FL writers devote to higher level revising” (Stevenson, et al., 2006, p.202). With regard to peer feedback, the inhibitory effect could be revealed by the types of feedback. As found in this study, greater attention to form when L2 was used in the feedback process could have an inhibitory effect on feedback at higher levels, say, feedback on content. The cognitive load theory and working memory provide another perspective in interpreting the result. The basic idea of cognitive load theory is that “cognitive capacity in working memory is limited, so that if a learning task requires too much capacity, learning will be hampered” (Jong, 2010, p.105). In the cognitive load theory, the load is related to the executive control of working memory, which provides the framework for investigations into cognitive processes (Sweller et al. 1998). Like the writing process, the peer feedback process also has a cognitive cost and consumes cognitive resources. As students are required to give comments on an essay written in L2, a language they are still learning, the use of L2 in the peer reviewing process may increase the consumption of the cognitive resources. That is because a few chunks of information are processed simultaneously when students are giving feedback in L2. The information processing in this situation involves not only giving comments but also writing comments in L2, which results in the overloading of working memory (Baddeley, 1992; Cowan, 2001), and hence a larger amount of feedback form. However, as peer feedback requires the use of working memory, and this working memory is of limited capacity, the decreased cognitive effort devoted to writing comments in L1 and giving comments on form may lead to an increase in the remaining resources available for reading essays and giving comments on content. From this perspective, the cognitive load theory and working memory could explain the difference between feedback types in L1 and L2.

However, we have not found any significant effect of L1 and L2 use on peer feedback about organization and genre. Again, the inhibitory hypothesis and the cognitive load theory may explain this result. Compared with form and content, organization and genre feedback demands a macro evaluation of the whole essay, which needs more cognitive resources and higher language competence. According to the inhibitory hypothesis, the attention to feedback on form and content in the peer feedback process may have an inhibitory effect on giving feedback at higher levels like feedback on organization and genre. Even if the use of the first language could help reduce the cognitive load required in peer reviewing, its role is still limited due to the limited working memory capacity. The results show that while L1
could help L2 learners give more feedback on content, it failed to exert any influence on feedback about organization and genre. It suggests that the use of the first language could play a certain role in mediating the peer feedback process, but the extent of influence may hinge upon other factors, such as language competence and knowledge of writing and genre.

The second difference caused by the use of language is the specificity of the feedback points. It was found in the study that although the quantity of the feedback given by the L1 and L2 groups showed no difference, students could give more concrete feedback when they were using their mother tongue – i.e. Chinese. This result echoed Zhao (2010)’s finding that the use of L1 in peer feedback could help learners better understand the other peers’ comments. It suggests that the use of L1 could help produce more specific feedback, which may facilitate subsequent revisions. Thus, more specific peer feedback may bring more benefits to L2 students in terms of their language acquisition and writing development. Since L1 was found to produce more concrete comments in the study, it could play an important role in the peer feedback process in improving writing and learning.

However, the use of language did not significantly influence the quantity of peer feedback. The reason may be related to our research design. In this study, participants were given 1.5 hours to review the essay and they could use dictionaries and Internet resources to facilitate the feedback process. The time constraint imposed on the peer feedback process might have led to the lack of significant difference. It is possible that when students are not given a time limit, they may produce a larger amount of feedback in L1 than L2. This may probably mediates the gap caused by the language use.

In summary, previous studies, based on the socio-cultural theory of learning, have confirmed the mediating function of L1 in peer oral interactions (e.g. Guerrero & Villamil, 2000; Villamil & Guerrero, 1996). Similarly, this study reveals the mediating role of L1 in the written peer feedback process. The findings show that the use of L1 could reduce the cognitive load caused by the consumption of the limited cognitive resources and help produce higher-level feedback, like content, and more specific peer feedback. Consistent with the finding of Zhao (2010) suggesting that the first language could contribute to students’ understanding of peer feedback, the findings of the study further suggest that L1 has good potential to help facilitate the process of peer feedback and may have an important role to play in enhancing students’ L2 writing development.

6. CONCLUSION, IMPLICATIONS AND LIMITATIONS

The present study investigated the mediating effects of the use of L1 and L2 on EFL learners’ peer written feedback practices. The findings indicate that L1 could play a mediating role in the written peer feedback process. L1 was found to help mediate the cognitive resources in working memory and bring positive changes to the feedback practices. With the scaffolding role of L1, L2 learners could produce more comments on content and offer more specific feedback. The findings of the study suggest that it may be a good idea to allow the use of L1 in L2 writing classrooms, especially when peer feedback is involved.

The study also implies that L1 could be used in peer response training programmes, and writing teachers could consider encouraging students to make good use of L1 to enhance their feedback practices. Future research can investigate how L1 can be best utilized
to maximize the effectiveness of peer feedback in L2 writing classes. Finally, although it is not the purpose of the current study to explore the influence of the genre of writing on the peer feedback practices, whether genre may influence the feedback process and practices and how it may interact with the use of L1 and L2 are interesting areas for further research.

While the study provides some implications for peer feedback in L2 writing classrooms, it has also some limitations. First and foremost, the study solely used a quantitative method to collect data, which may be insufficient to answer the research questions and interpret the findings. Future studies could employ a mixed methods approach to explore the topic. Such an approach has good potential to produce more comprehensive data to reveal the role of language use in peer feedback. Secondly, the small sample size of this study not only influenced the use of inferential statistics but also rendered generalization difficult. A larger sample may be used in future studies to present a more comprehensive picture of L1 and L2 use in peer feedback.

7. References


