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An analysis of Chinese EFL students' use of first and second language in peer feedback of L2 writing



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ABSTRACT

While previous studies have contributed to our understanding of the nature of peer feedback, for ESL/EFL learners the mediating effects of language in peer feedback process are under-explored. Using the peer written feedback on an essay by 22 Chinese EFL learners and interviews with them as the data sources, the current study aims to investigate the use of L1 and L2 in peer written comments and the factors that may influence students' switch between L1 and L2. The results show that EFL learners did use L1 to give peer feedback, which focused more on content and organization than that in L2. The study reveals a number of interacting factors that affect L2 learners' utilization of L1 and L2 as major mediating artifacts during peer feedback, such as L2 proficiency, student beliefs, learning goals, teacher requirements, teacher feedback practices, and power relationship between reviewers and writers. Implications for L2 writing instruction and future research are provided in the paper.

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1. Introduction

As a form of formative assessment and collaborative learning in L2 writing curricula and courses, peer feedback can scaffold students' writing process, engage learners in meaning negotiation, and facilitate students' writing development (Gielen, Peeters, Dochy, Onghena, & Struyven, 2010; Guerrero & Villamil, 2000; Hu, 2005; Zhao, 2014). Therefore, the last two decades have witnessed a significant growth of research on peer feedback in L2 writing (see Hu & Lam, 2010; Zhu & Mitchell, 2012 for review). Among the existing studies, some research has investigated the mediating effects of the different means of feedback delivery (written/oral conferencing feedback, online/pen-and-paper feedback, face-to-face/anonymous feedback) on the peer feedback process and subsequent revisions (Guerrero & Villamil, 2000; Lin & Yang, 2011; Tuzi, 2004). While these studies have contributed to our understanding of the nature of peer feedback and informed peer feedback training from a process perspective, little attention has been paid to the role of language(s) as a mediating tool in peer feedback.

In ESL/EFL contexts, language has an important role to play in the peer feedback process. Compared with native speakers, ESL/EFL learners have at least two languages at their disposal when they are involved in peer reviewing. L1 is considered "an essential tool for making meaning of text, retrieving language from memory, exploring and expanding content, guiding their action through the task, and maintaining dialogue" (Villamil & Guerrero, 1996, p. 60). In contrast, L2 may pose difficulties for

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L2 learners especially EFL learners as they may lack communication and pragmatic skills for successful interaction (Hyland & Hyland, 2006). Although several studies have examined the use of language in peer oral interaction, existing peer feedback studies have not examined the use of L1 and L2 in peer written feedback and the factors that account for students' switch between L1 and L2 (Guerrero & Villamil, 2000; Storch & Aldosari, 2010; Zhao, 2010). Since both L1 and L2 may have a crucial role to play in L2 writing (Guerrero & Villamil, 1994, 2000; Wang & Wen, 2002), especially in EFL contexts, the role of L1 and L2 in the peer written feedback process and the factors that influence their use are worthwhile areas of research.

The present study is anchored by sociocultural theory (SCT), which sees language as the most essential artifact to mediate language learning through social interaction (Lantolf & Thorne, 2006; Vygotsky, 1978) and as a cognitive instrument that mediates the peer reviewing task. Such a sociocultural perspective, as expounded in a subsequent section, is useful in illustrating students' choice of language during peer review. Drawing on data gathered from a peer review task and interviews that involved 22 EFL university students in China, this study investigates the use of L1 and L2 in peer written comments and the factors that may influence the switch between L1 and L2, filling an important void in current peer feedback research.

2. L1 and L2 use in peer interaction of L2 learning

In recent years, a growing body of research has been carried out to explore L1 use in pair or small group work of L2 learning (Musk, 2010; Muthwii, 2004; Spernes, 2012; Storch & Wigglesworth, 2003; Swain & Lapkin, 2000; Yang, 2006, 2014). While the use of L1 varies in different contexts, these studies conclude that L1 is routinely observed in EFL contexts during pair or small group work (Hamid & Honan, 2012; Ngwaru, 2011). Early studies, conducted primarily within the second language acquisition framework (Leeming, 2011), argue that the use of L1 would interfere in the development of the L2 and it should be discouraged in L2 classrooms (Gass & Selinker, 1983; Storch & Aldosari, 2010). This perspective, however, has failed to highlight the role of language as a cognitive tool in L2 teaching and learning (Swain & Lapkin, 2000). SCT provides a theoretical perspective in which language is understood as a mediating tool in all forms of higher-order mental processing (e.g., planning, and reasoning) (Cole, 1996; Lantolf & Thorne, 2006; Vygotsky, 1978, 1987). As a central construct of SCT, mediation suggests that our relationship with others and the world is mediated by physical tools (e.g., paper, machine, clocks, and computer) and symbolic artifacts (e.g., language, religion, and sign) (Vygotsky, 1978). As the most important cultural artifacts, L1 and L2 can mediate human development during the process of social interaction and play a central role in human cognitive development (Lantolf & Thorne, 2006).

The sociocultural perspective has boosted subsequent research on language use in peer interaction, which has found that L1 can play a facilitating role in collaborative learning activities, including peer feedback (Brooks & Donato, 1994; Yang, 2006, 2014). For example, Yang (2014) explored the mediational means in collaborative writing and found that L1 mediated the process of collaborative writing and "allowed the students to generate ideas and [...] facilitate their writing in L2" (p. 83). L2, on the other hand, can provide students with opportunities for 'verbalization' or 'languaging', that is, working together to solve linguistic problems and co-construct new knowledge of or about language (Swain, 2006; Swain, Lapkin, Knouzi, Suzuki, & Brooks, 2009).

Several studies have focused on L1 use in peer oral feedback. Villamil and Guerrero (1996) observed the interactions of 54 Spanish-speaking EFL learners when they engaged in peer revision activities and found L1 to be a major mediating strategy that served multiple functions, such as "making meaning of text, retrieving language from memory, exploring and expanding content, guiding their action through the task, and maintaining dialogue" (p. 60). Guerrero and Villamil (2000) analyzed the peer feedback interaction produced by two intermediate ESL college students and found similar results in the use of L1 as a scaffolding mechanism that facilitated peer interaction. Zhao (2010) examined Chinese EFL learners' use and understanding of peer and teacher feedback on writing and found that the use of L1 in peer interaction could enhance learners' understanding of their peers' comments.

Another strand of research has explored the factors that may influence the use of L1 in L2 collaborative learning activities, such as learners' L2 proficiency and task type (Storch & Aldosari, 2010). Swain and Lapkin (2000) investigated the effect of task type (a dictogloss and a jigsaw) and L2 proficiency on L1 use in eighth-grade French immersion classes. L2 proficiency was found to influence L1 use in peer interaction. The pairs with lower L2 proficiency employed more L1 on the jigsaw task than the more proficient pairs. However, the impact of L2 proficiency on the amount of L1 used on the dictogloss task was not significant. Storch and Aldosari (2010) examined the use of L1 by EFL learners in Saudi Arabia as they engaged in pair work and found that the amount of L1 use was related to the task type rather than L2 proficiency level. DiCamilla and Antón (2012) investigated the effects of EFL learners' level of L2 competency on the extent to which L1 and L2 served cognitive and social functions during collaborative L2 writing tasks. Their study revealed that while the first-year university students heavily relied on L1 to perform various language functions in peer interaction, the fourth-year students primarily deployed L2 in collaborative interactions. These findings show that L2 might take the place of L1 as a mediating tool for more advanced language learners. Apart from the task type and L2 proficiency, some other factors have been found to influence the use of L1. Yang (2006) found that L2 students' goals for content-oriented L2 tasks can influence the use of L1 and L2 in collaborative writing. While the groups of students who focused on task completion used much L1 in peer interactions, those who wanted to complete the task and practice English as well used L2 exclusively in their oral discussions and written communication.

While previous studies about L2 collaborative learning activities (including peer feedback) have focused on peer oral interactions, the use of L1 and L2 in peer written feedback has been under-explored. Also, previous research has not given due attention to language learners' agency, that is, "the capacity to establish personal goals, set up conditions, and choose the

means that best suit their motives or needs in learning" (Villamil & Guerrero, 2006, p. 25), which can account for the choice of and/or switch between L1 and L2 during peer feedback As previous research has produced inconsistent findings about the factors that affect language use, further inquiries along this line of research are needed (DiCamilla & Antón, 2012). To fill these research gaps, the study set out to investigate the use of L1 and L2 in peer written feedback and the factors that influence students' choice of language. The research questions that guided the study are:

- 1. To what extent do EFL learners use L1 in contrast to L2 to mediate the peer written feedback activity?
- 2. What types of written feedback are given in L1 in contrast to L2 during peer feedback?
- 3. What factors may influence the choice of L1 or L2 in peer written feedback?

3. Methods

3.1. Participants and written text for peer review

Since we aim to elicit the factors that influence students' use of first language in peer feedback from participants of different backgrounds and different learning experiences, the peer feedback task in the study was set up as a research task rather than as a regular classroom activity. The participants of the study are twenty two (14 males and 8 females) Chinese-speaking EFL university students, aged 19–22, referred to as A–T. They were volunteers from eight English classes at a key university in Mainland China, taught by eight different teachers. They came from various areas of the country, such as Henan, Gansu, Beijing, and Guangdong, possibly with different prior language learning experiences and feedback experiences in English writing classes. Although they speak different dialects of Chinese, Mandarin is the main communication tool in the university. These participants had varied English language proficiency levels with CET-4² scores ranging from 435 to 648. They had learned English as a foreign language for at least eight years through formal English instruction, and at least one and a half years at university where they had been taught by different English instructors (all native Chinese speakers). Such a varied range of participants was chosen to provide useful data regarding the possible individual and contextual factors that may exert influence on students' use of L1 and L2 during peer feedback.

The primary medium of instruction of the English courses in the participants' university was English, with occasional use of Mandarin. In the English reading-writing class, students were required to participate in peer feedback activities in pairs or small groups. Some teachers required the use of English in peer feedback while others did not.

The written essay used for peer review in the study was collected from one writing assignment for the reading—writing classes in which the participants enrolled. It was an argumentative essay entitled *Is happiness Equal to Wealth?* The written essay was drafted by a student (not among the 22 participants) attending one of the eight classes. The essay, consisting of 714 words, was chosen for peer review as it had much room for improvement in terms of genre structure, content, language use, organization, grammar, and vocabulary.

3.2. Data collection

Data collected from the participants include their (1) written feedback and (2) stimulated recall interviews. Although the think-aloud verbal protocol could provide more in-depth data to answer the research questions, it was not adopted in the study for several reasons. First, since peer written feedback is a highly cognitive demanding activity, the use of think-aloud would probably impose a heavy cognitive load on the participants, thus influencing the use of L1 and L2 in the peer reviewing process. Second, the think-aloud is not entirely suitable for the peer feedback task used in the study as it was designed as a research task rather than a naturally occurring peer feedback task. Third, as the study did not examine the effects of different kinds of feedback in L1 and L2 on subsequent revisions, introspective data from think-aloud are deemed unnecessary.

To gather data from the participants, we first sent them the written essay with detailed written instructions. In the instructions, we clearly stated that the essay for review was written by one of their classmates and invited them to comment on it in the way they usually did in their classes, including the choice of language in writing their feedback. We also assured them of the confidentiality of the data collected, which would be exclusively used for academic research. Informed consent was sought. The 22 participants were gathered together to complete the peer feedback task within 45 min. Upon the completion of the task, 20 of the participants (as two of them were unavailable for the interview) were interviewed in their mother tongue (a language they were most comfortable with) to elicit in-depth data on their perceptions of L1 and L2 use in peer feedback activities. Each stimulated recall interview lasted 30–45 min and was audio-recorded. During the interview, the first researcher invited the participants to read their own written peer feedback, stimulated them to recall their thoughts with regard to the use of L1 and L2 during peer feedback. Information was also elicited concerning the participants' beliefs and practices regarding language use in peer feedback, their feedback experiences and the reasons why they used L1 and L2 in their written comments.

² The College English Test (CET) is a large-scale national English proficiency test in China, aiming at assessing the English proficiency level of non-English majors at colleges and universities. It is mainly divided into two key bands, CET-4 and CET-6. CET-6 is more difficult than CET-4. The full score of CET-4 is 710.

3.3. Data analysis

Data analysis mainly included (1) analysis of peer written feedback, and (2) coding and summary of the stimulated recall interview data. The written feedback analysis was performed by the first researcher and checked by another language instructor with eight years' language teaching experience and an MA degree in English applied linguistics. The feedback analysis was based on meaningful units, which could be in the form of a word, a phrase, a sentence, a string of sentences, or even a paragraph. For example, *manifesting* is a feedback point and *Some ideas are not well developed due to errors* is also regarded as a feedback point.

To answer research questions one and two, we used a multifaceted analytical framework which covered the following areas (Ferris, 2003; Lee, 2008):

- (1) Language use in peer written feedback: whether the feedback point was given in Chinese, English, both Chinese and English, or other signs and symbols (e.g., color, underline).
- (2) Focus of feedback: whether the feedback point was on form (i.e., grammar and vocabulary); content (i.e., ideas); organization (i.e., paragraphing, and structure); or others (e.g., genre, overall evaluation).
- (3) Written corrective feedback or written commentary: whether the feedback point was error correction or written commentary.

The stimulated recall interview data, triangulated with the feedback data, were mainly used to answer research question three. The interview data were transcribed and then analyzed according to Miles and Huberman's (1994) qualitative data analysis scheme. Open and axial coding was used to analyze the data (Yin, 2011). We first attended to "anything pertinent to the research question or problem, also bearing in mind that new insights and observations that are not derived from the research question or literature review may be important" (Mackey & Gass, 2005, p. 241) and then started "examining the data for emergent patterns and themes" (Mackey & Gass, 2005, p. 241) by recursively reading through the interview data. Based on preliminary reading of the data as well as data reduction, recurrent and salient themes were identified to discover the factors that might have influenced the use of L1 and L2 in peer written feedback.

4. Findings

4.1. Use of L1 and L2 in peer written feedback

The feedback analysis yielded a total of 444 feedback points (321 written corrective feedback and 123 written comments), with 22.3% delivered in L1, 48.65% in L2, 12.61% in both L1 and L2, and 16.44% using signs and symbols (e.g., color, underline). Table 1 shows that L1 was involved in 155 feedback points (i.e., 99 in L1 and 56 in L1 & L2), accounting for 34.91% of the total feedback. Among the 321 written corrective feedback points, only 22 (6.86%) were in L1 while 198 (61.68%) were in L2. It indicates that the majority of students just used English to give corrective feedback, but sometimes they also used Chinese — e.g., in categorizing the error type. Additionally, 10.59% written corrective feedback points were in mixed codes — both L1 and L2 (e.g., 改为 [change it to] from; 主语是 [The subject should be] families) and another 20.87% were given by means of symbols (underline and colors). There were altogether 123 written comments given by the 22 participants (see Table 1). Among the 123 written comments, 62.60% were in L1 and 17.89% in both L1 and L2language. This finding indicates that learners preferred to employ L1 to give overall comments, provide suggestions, and summarize the problems.

Moreover, a scrutiny of the feedback data indicates that the use of L1 and L2 varied a great deal among different students. Two out of the 22 participants used English only to give written feedback. Several students used fairly limited L1 (less than 5%) in their feedback and more than half of the participants used their native language extensively while giving feedback. These results show that while EFL learners do use both L1 and L2 to give peer feedback, the L1 and L2 quantity varies considerably among different language learners. Reasons and factors that caused the variations will be discussed in Section 4.3.

4.2. Types of feedback in L1 and L2

Table 2 shows the relationship between language use and focuses of peer feedback. Of the feedback points in L1, 61.61% focused on form, 21.22% on content, 12.12% on organization, and 5.05% on others such as genre and general comments on the essay. The following excerpts show how students used Chinese to give feedback on language form, content and organization, and genres.

Table 1Language use in peer written feedback.

	Written corrective feedback	Written comments	Total
L1	22 (6.86%)	77 (62.60%)	99 (22.30%)
L2	198 (61.68%)	18 (14.63%)	216 (48.65%)
L1 and L2	34 (10.59%)	22 (17.89%)	56 (12.61%)
Symbol	67 (20.87%)	6 (4.88%)	73 (16.44%)
Total	321	123	444 (100%)

Table 2Language use and focuses of peer feedback.

	Form	Content	Organization	Others
L1	61 (61.61%)	21 (21.22%)	12 (12.12%)	5 (5.05%)
L2	206 (95.38%)	6 (2.78%)	2 (0.92%)	2 (0.92%)
L1 and L2	46 (82.15%)	8 (14.29%)	1 (1.78%)	1 (1.78%)
Symbol	71 (97.26%)	0 (0%)	0 (0%)	2 (2.74%)

Language form:

- a. 感觉这个谓语用得不好 [I think this predicate was not appropriately used.]. (])
- b. 文章有一些比较明显的缺陷, 之一就是在开头犯了比较多的语法错误和表达错误 [There are some obvious problems with this essay. One problem is that there are many grammatical errors in the beginning paragraph.]. (I)
- c. 应该用完成时要好一些吧 [It would have been better to use the present perfect tense]. (C) Content and organization:
- d. 结构不太明晰、精炼, 开始叙述事件之后的评论过多, 可以合并在后面的几段 [The structure is not very clear. In the beginning paragraph, there are too many comments from the author. I think some of them can be used in the following paragraphs.] (F)
- e. 这句话不能理解。感觉作者要表达的是, 3个月前被发现没有捐款使她成为了全国公敌 [I cannot understand this sentence. I guess the author seems to say that she had become a public enemy since she was found not to donate money.]. (S)
- f. 这是什么话?有人想扔钱?是不是夸张了? [It's ridiculous! Someone wants to throw money? Isn't it an exaggeration?] (K)
- g. 郭美美事件只应该作为一个方面,而另一个方面就是那些幸福的有钱人,比如说歌手韩红筹集大量的金钱来帮助少数民族的小孩儿,她自己也乐在其中。不能只看到事物的一个方面,应该要放长眼光从全局的角度来写。[The Guo Meimei incident can only reflects one side of the thing. The other side is that some wealthy people like the singer Han Hong often raise money for the poor children from ethnic minorities. She enjoys herself by doing so. Please don't only see one side of this matter.] (Q) Genre and general comments:
- h. 第一人称主观判断不如第三人称客观评述更有说服力 [Use 3rd person instead 1st person in your text since the 3rd person is more objective and convincing.] (F)
- i. 这篇文章整体来说是一篇佳作,尽管出现了许多小错误。给分14 (满分15) [This text is well-written despite some minor errors. It deserves 14 out of the total 15 points.] (U)

An observation of these L1 feedback points show that students not only used L1 to point out the problems but also provided reasons and explanations (e.g., b, f) and offered instructions about how to make further revisions (e.g., d, f, h). Also, students used L1 to express their views on the arguments in the essays and offer suggestions with reference to English writing criteria (e.g., b, e, f, g). Similar functions can be found in the feedback points in both L1 and L2, 14.29% of which focused on content (e.g., j and k). For instance,

- j. 最后, 作者说很多有钱人都不幸福来draw a conclusion, 不够有说服力 [Finally, the author used "a number of wealthy people are not happy at all" to draw a conclusion. I find it unconvincing.]. (Q)
- k. 还有就是作者文章重点是[The key point of this text is] wealth flaunting 和[and] students should not flaunt money, 虽然把题目缩小范围是个很好的策略, 但是作者在转化话题上做到并不是很好 [Although it is good strategy to narrow the topic, the writer failed to provide a good transition.], 也就是说 [That's to say,] It's hard to find strong connections between wealth flaunting, students should not flaunt money and is happiness equal to wealth. 所以作者给了我一种偏题的印象 [So I feel that this essay is a bit off the point.]. (I)

The majority of the feedback points in L2 (95.38%) focused on form and only 2.78% focused on content, 0.92% on organization and others respectively. Most of the L2 feedback points were about grammatical errors and word usage, mostly without any explanations (e.g., i, l). When corrective feedback was followed up, students used English to explain their feedback (e.g., k, m and n). For example,

Language form:

- l. from now on (provide correct language) (E)
- m. close (instead of sincere, sincere is perhaps okay but sounds a bit weird) (O)
- n. This word should be replaced by "manifest" (K)

Content and organization:

- o. 4) Stick to the main topic and develop it logically. (O)
- p. Money doesn't mean everything. (T)

To sum up, the findings reveal that L1 and L2, as important mediating tools, have different roles to play in peer written feedback activities. In contrast to feedback in L2 and symbols, feedback points in L1 took up more or less one third of the total feedback. When peer feedback on content and organization was involved, the participants tended to switch to L1. L2 was

mainly used to deal with form-related problems such as usage of vocabulary, grammatical errors, and sentence-level errors. The findings also show that students used L1 to explain their feedback with reference to the English writing criteria and to communicate with the essay writer regarding the arguments in the essay.

4.3. Factors that mediated the use of L1 and L2 in peer feedback activity

Based on the interview data, and drawing upon sociocultural theory, this section presents five factors that appeared to have influenced students' language use: student beliefs and goals; linguistic and affective factors; teacher requirement and teacher feedback practices; and ease of communication and power relationship between reviewers and writers.

(1) Student beliefs and goals

Students' beliefs and goals were found to be a major factor that influenced their language use in peer feedback. The majority of the participants used both Chinese and English in peer feedback. Among the 20 interviewees, 14 students thought that it was necessary to use L1 in peer feedback (both written and oral). For example, student J provided 27 feedback points with 10 in L1 (37.1%), 12 in L2 (44.4%) and 2 in both L1 and L2 (7.4%), and all of the feedback focused on language form. When asked whether L1 should be used in peer reviewing, student J replied:

J. I think it is necessary to use Chinese. Although we students should try to use English in peer reviewing as English is the language that we are learning and we need to practice it, it is still necessary to use our native language because our English proficiency varies a lot and it is impossible even for those students with high English proficiency to use English only in our communication.

However, six students held that they should not use Chinese in peer feedback since it is an L2 learning task and three of them exclusively used English when they gave peer feedback. For example, student D gave 15 peer feedback points altogether and he only used English to provide written feedback. He explained:

D. I think we should try to use English as much as possible and use little or never use Chinese. In this way, we can create more opportunities to practice our English.

While student S also thought that L1 should not be used in peer feedback, she produced 26 feedback points with 9 in Chinese (34.6%). She believed that occasionally L1 was necessary to help her express herself more clearly due to her limited L2 proficiency:

S. We shouldn't use Chinese. As an English learner, we should try to use more English. However, sometimes we have to use Chinese since our English is not good enough.

Thus, students held different beliefs about the use of L1 in peer feedback activities, which had probably influenced their practices. This also explains why there were great variations in students' use of L1 in peer written feedback.

The interview data showed that students' goal is also an important factor underlying language choice. Some students only wanted to finish a peer review task, while some of them not only aimed to complete the task but also wanted to practice their English. Those who wanted to practice their English tended to use more L2 than L1 to give feedback. For instance, student O only used English in his written feedback. He provided 60 feedback points with 40 (66.7%) in L2 and 20 (33.3%) in symbols. When asked why he used English to give feedback, he responded,

O. I used English because I think peer feedback provides me with a good opportunity to practice my own English. I can try to communicate with the writer in English. Thus, I tried my best to use English only to give comments in order to enhance my English proficiency as well.

(2) Linguistic and affective factors

Linguistic and affective factors were also revealed in this study to influence students' use of L1 in peer feedback. When student reviewers with different L2 proficiencies (their CET-4 scores ranged from 435 to 648) were required to conduct peer review, their L2 proficiency could become a constraining factor. Almost half of the participants regarded their L2 proficiency as an important factor that influenced their use of L1 and L2 in peer feedback. For example, student E gave 12 feedback points and 9 (75%) of them were in L1. While student N used English to give feedback (18 out of 19 feedback points in total – 94.7%), all of the feedback focused on language form, mainly corrective written feedback. He did not draft any written comments in English, either. Students E and N with low proficiency (their CET scores are 435 and 460, respectively) said:

E. If I can use English to point out the problems, I would use English. But I usually use Chinese since my English vocabulary size is rather small.

N. I prefer to use Chinese since my English is not that good and sometimes I cannot fully express my opinions in English.

The affective factor may also influence the use of L1 in written feedback. Five students said that they did not use much English to give comments because they lacked confidence in their English ability and were afraid of making mistakes. For instance,

- C. I usually use Chinese since I am afraid of making mistakes in using English.
- H. I wanted to use English, but I finally used more Chinese because I was worried about the written accuracy in English.

Interestingly, both C and H are advanced L2 learners, as revealed in their CET scores -582 and 611, respectively, but chose to give feedback mainly in L1. C gave 6 feedback points with 4 (66.7%) in Chinese. For H, there was a total of 30 feedback points and 17 (56.7%) of them were in L1. While most of his feedback in L2 was related to language form, H switched to Chinese when he drafted written comments (4 written comments) at the end of the essay. This indicates that L2 students' use of L1 is not necessarily constrained by their L2 proficiency. The affective factors like confidence and anxiety could also influence their choice of language in peer communication.

(3) Teacher requirement and teacher feedback practices

Another important factor relates to the teachers, including their requirements about peer feedback and their own feedback practices. When the data were collected, the participants had been taught by at least five different language teachers from secondary schools to universities. As shown in the interview data, for most students their previous teachers encouraged them to use English to give comments, they did not forbid the use of L1, and there was no explicit requirement about the use of language in peer feedback. Only three students mentioned that some of their teachers did not allow them to use L1 in L2 classes. This can explain why most of the participants had used both L1 and L2 to give written feedback. For example, student J responded,

J. For both written and oral peer reviewing tasks, the teacher does not say that we can only use English to give peer comments. We often use both Chinese and English to review our classmates' essays. We try to use more English but sometimes we still use Chinese since it is really difficult for us to use English only to write down our comments.

In addition, students' previous and current language teachers' feedback practices could have influenced their language choice in peer feedback. When asked what language their teachers used in giving feedback, students' answers differed a lot. While four students replied that their teachers only used English in both written and oral feedback, the others stated that their teachers used English in written feedback but both Chinese and English in oral feedback. However, several students recalled that some of their teachers used both English and Chinese in written feedback. Overall, the diverse teacher feedback practices could probably result in the varied extent of L1 use in peer feedback.

(4) Ease of communication and power relationship between reviewers and writers

The final factor was related to the ease of communication and the power relationship between the reviewer and the author of the text. In students' choice of language in giving feedback, they also attended to the needs of the writers. The majority of students believed that L1 was a better tool than L2 in enhancing communication, given that the recipient of peer feedback is an EFL learner. For instance, student M gave 7 written comments altogether and all of them were in Chinese. He explained:

M. I usually use Chinese to point out the problems or write comments in my classmates' essays because this can save my time and the author's time. Using Chinese can help us finish the task more quickly and efficiently.

As shown in the interview data, students frequently used "more convenient, more direct, much clearer, more explicit, and more appropriate" to emphasize the role of L1 in pointing out and analyzing problems in the essay.

Several students stated that whatever language was used in peer feedback, the final purpose was to enable the writers to understand the feedback and facilitate successful revisions. Some students, therefore, used both L1 and L2 to achieve effective communication during peer feedback. For example, student J explained:

J. As to what language should be used in peer reviewing activity, I think the crucial principle is to express my views in a clear way and enable the author to understand and incorporate my comments. We should use the language that can enhance the effectiveness of the communication between the reader and the writer. As far as I am concerned, I usually use both Chinese and English to point out the mistakes in the essay and use Chinese to write comments at the end of the essay. That's because the combination of Chinese and English can help forward my opinions to the author more effectively. Actually inaccurate English translations of terms may confuse the writer.

The power relationship between the peer reviewer and the writer with regard to L2 language proficiency also influenced the use of L1 in peer feedback. Although students did not know the identity of the author, they could tell the language proficiency from the writing and chose the language that best suited the author. For instance, student O only used English in his written feedback as he thought that the writer's English proficiency was good:

O. I considered the language proficiency of the author when I chose what language to use when commenting on his/her essay. The most important thing is that the author could understand my feedback and comments.

Overall, the students' role as a reviewer made them pay attention to the effectiveness of communication and the needs of the peer writer in terms of language proficiency, which in turn governed their choice of language during peer feedback.

While a number of factors have been identified from the interview data, it is noteworthy that they do not operate in isolation but are closely related with each other. For example, Student G provided 26 feedback points including 9 written comments. Chinese was involved in 10 (38.5%) out of the 26 feedback points and all of the written comments were in Chinese. The examination of her written feedback shows that she used some grammatical terms such as 连词 [conjunction], 虚拟语气 [subjunctive mood], 词性 [part of speech], 定语从句 [attribute clause] and从句 [subordinate clause] in Chinese, which are not easy for students to express in English. She explained:

. We students often use Chinese in our discussion of peer reviewing but for written feedback I mainly use English. That's because firstly it is homework for an English course and secondly my English teacher would collect our essays with peer comments and check our written feedback. However, I think there is still a need to use Chinese to produce comments. For some grammatical items, it is rather difficult to describe in English. What's the point if I wrote feedback in English and the text writer couldn't understand it? That cannot achieve the final purpose. ...

This quote shows that Student G's switching between L1 and L2 can be attributed to her personal belief of the peer feedback task and the role of Chinese in providing comments, as well as the ease of communication during peer feedback. She also considered her teacher's requirement when she decided which language to use.

Student F gave 9 feedback points with 5 (55.6%) in L1 and 4 (44.4%) in both L1 and L2. All of the feedback points were written comments (100%). For example,

一些地方接近口语, 不太书面化 [Some expressions look like oral English rather than written English.], 如 [such as]I feel very happy as well, How sad it is, 以及缩写 [and the abbreviation] hasn't等.

无需使用 [There is no need to use] subjunctive mood.

He used both L1 and L2 because he believed that English should be used in peer feedback in L2 learning. He also considered other students' feedback practices and ease of communication. In the stimulated recall interview, he said:

F. We should not use Chinese in peer feedback activities as we need to practice our English while doing English-related tasks. However, I still used much Chinese in my written feedback because many of my classmates do in this way. If I give English comments, my classmates would consider me as 'abnormal'.

In the context of the study, English was encouraged in English classes and some teachers had set rules regarding the use of English in peer feedback activities. However, students had different beliefs about language use and they might also take into consideration the English proficiency of the student writer (i.e., recipient of peer feedback). The case of Student K can illustrate how these factors interacted to influence his peer feedback practices. Student K was a sophomore majoring in material science. He used both Chinese and English to give peer feedback. While his previous university English teacher required him to use English only to comment on their classmates' English essays, the current English teacher did not state clearly which language should be used. Student K said that he would try to use English to write his comments even if his teacher allowed him to use Chinese. For him, English should be used since peer reviewing is a collaborative learning task in English classes. In this way, he could practice his written English. However, he mentioned that sometimes he had to use Chinese when he did not know how to express his ideas in English. As a reviewer, he also believed that it was sometimes more helpful to give comments in Chinese as the use of English might cause ambiguities. The interacting factors described above made student K use both English and Chinese to give feedback. Among the 23 feedback points produced by K, 4 (17.4%) were in Chinese, 6 (26.1%) in English, and 13 (56.5%) in both Chinese and English. For instance,

从这句可以看出 [This sentence shows], feeling和 [and] friends都是没有 [neither of them] no, 而 [but] wisdom用的却是 [is used with] less, 这个多出来的比较级显得不伦不类 [The comparison seems weird.].

Chang the word into "complaints".

在这里表示的不是所有格的形式, 应为who [It should be 'who' since it's not the possessive case.]

The above findings show that students' choice of L1 and L2 in peer feedback is not subject to one single factor but the result of the interaction of various factors, deepening our understanding of the use of L1 and L2 in peer feedback activities.

5. Discussion

This study has addressed whether, how and why EFL learners use L1 and L2 in peer written feedback and found that the university students in the study used both L1 and L2 to give peer feedback. While previous studies reveal that students used either much or fairly limited L1 (Guerrero & Villamil, 2000; Storch & Aldosari, 2010; Swain & Lapkin, 2000; Villamil & Guerrero, 1996), the present study found that the L1 quantity varied among different language learners but generally feedback points in L1 took up more or less one third of the total feedback in contrast to the feedback in L2.

The reason underlying such a discrepancy may lie in the measurement of the proportion of L1 use. In our study, we calculated the percentage of feedback points in L1 based on meaningful units. However, Swain and Lapkin (2000)'s unit of analysis was the language turn. Storch and Aldosari (2010) used word count to measure the amount of L1 produced. The different measurements would probably produce the varied amount of L1 use in the peer activities.

Our study also found that while feedback in L1 focused more on content and organization, feedback in L2 focused more on form. The primarily form-focused L2 feedback could be explained by the inhibitory hypothesis, which claims that "attention to linguistic processes inhibits attention available for higher level conceptual processing" (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, Schoonen, & de Glopper, 2006, p. 202). Although the inhibitory hypothesis is generally used for discussion about writing and revising in an L2, it can be applied to the findings of the study to suggest the role of L1 as a useful cognitive and social mediating artifact to reduce the consumption of cognitive resources and the inhibitory effect of L2 during peer feedback. As is the case with writers who are composing or revising in their L2, reviewers who are giving feedback in their L2 may find it harder to focus on content and form at the same time.

From a sociocultural perspective, the findings also reveal the different mediating roles of L1 and L2 in peer feedback activity (Yang, 2014; Zhao, 2010), enabling students to give different types of feedback and to focus on various aspects of writing like language form, content, organization, and genre. Given that research has indicated a strong tendency among L2 students to focus on surface language features during peer feedback (Leki, 1990; Mendonca & Johnson, 1994; Nelson & Murphy, 1993), the use of L1, as suggested in our study, can allow students to attend to global areas of writing and enhance their peer feedback practices.

L2, on the other hand, was found to play another mediating role in peer written feedback, drawing students' attention to the language form, which is beneficial since EFL learners "are constantly grappling with English in expressing their ideas while composing academic essays" (Min, 2005, p. 305). Additionally, our findings indicate that students used English in peer feedback because they wanted to practice their English. This suggests that the benefits of using L2 for peer feedback also accrue to the feedback giver, apart from the feedback receiver (see Lundstrom & Baker, 2009). Together the findings suggest that through using L2 during peer feedback, students engage in 'verbalization' or 'languaging' (Swain, 2006; Swain & Lapkin, 2000; Swain et al., 2009) which benefit their language development.

The study also provides insights into the factors that influence students' switching between L1 and L2 in L2 learning. While previous research mainly examined the influences of students' L2 proficiency and task type on the L1 use in pair or small group work (Storch & Aldosari, 2010; Swain & Lapkin, 2000; Storch & Wigglesworth, 2003; Thoms, Liao, & Szustak, 2005), our study shows that a number of factors can exert influence on the use of L1 in peer written feedback. Factors such as student beliefs and goals point to L2 students' agency in the peer feedback activity, suggesting that with two language resources (L1 and L2) at their disposal, students' choice of L1 is not merely constrained by the cognitive or linguistic factor. Peer feedback is a contextualized activity and students' use of L1 and L2 is embedded in their individual belief systems and sociocultural context, influenced by a range of factors such as students' prior and current learning experiences, their own linguistic proficiency, and teachers' requirements and feedback practices. Overall, the multiple factors that influence students' choice of language in peer feedback can provide us with a better understanding of the peer feedback process and the use of L1 in L2 learning in the writing classroom (DiCamilla & Antón, 2012).

6. Conclusions and implications

The present study reveals that L1 and L2 are two important tools that mediate EFL students' written peer feedback practices. While L2 is mainly used to deal with form-related problems, L1 feedback is more focused on content and organization. L1 is also used to explain feedback with reference to the English writing criteria and to communicate with the essay writers regarding the arguments in the essays. Further, the study shows that a number of factors such as students' beliefs and goals, teachers' feedback practices, ease of communication, and the power relationship between reviewers and writers could influence L1 and L2 use in the peer feedback activity.

Before discussing the implications of the study, it is important to mention its limitations. First, the peer feedback task in the study was designed as a research task involving 22 participants from eight different classes, and hence artificial to some extent. The findings could have been different if the study had been conducted in a natural classroom setting where all participants studied in the same class and engaged in authentic peer review activities. Second, the study relied on only two types of data (i.e., students' peer feedback and stimulated recall interviews) without using other sources like the thinkaloud method (reasons provided in Section 3.2). Nonetheless, important implications can be drawn from the study, which lends support to the role of L1 in L2 learning. The findings suggest that "to restrict or prohibit the use of L1 in L2 classes is to deny learners the opportunity of using an important tool" (Storch & Aldosari, 2010, p. 372) since L1 can help enhance students' peer feedback practices. In peer response training, teachers can explain the different roles of L1 and L2 and their potential benefits in peer written feedback or online peer feedback (e.g., using wikis). In terms of research, intervention studies can be carried out to explore the impact of L1 use on students' peer feedback. Ethnographical studies can also be carried out to investigate how L1 and L2 could be best utilized to maximize the effectiveness of peer feedback in L2 writing, and how language use in peer feedback influences students' subsequent revisions. Lastly, multiple data sources including document analysis and think-aloud protocols could be adopted to generate richer findings on the use of L1 and L2 in peer feedback.

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Appendix A. The written text for peer review

Is happiness Equal to Wealth?

The past dacades have witnessed an increase in the number of rich families, which gradually draws more public attentions. Maybe this have no alternative but to say is social progress manifesting, while it also has an great and serious effect in our society, and has triggered a large-scale wealth flaunt campaign.

Recently, "GuoMeiMei" has become a very hot topic. Although Guo is a name, in fact, it is a symbol of the young woman whose online displays of luxury severely damaged the credibility of the Red Cross Society in China. Her experiences in the past three mouths have caused her "Enemy of the state" because of being found donating no money. There is no doubt that Guo has been seriously impacted by her bahaviors. Whenever and wherever her name or image appears, it provokes an outpouring of invectives.

From the event of Guo, I think we should rethink ourselves profoundly. All things seem weigh money in this economic society. In this situation, flaunt wealthy has become a trend which most students feel obliged to follow. But I set myself against them. In my opinion, as for a student who hasn't right to flaunt wealthy, we are only consumers and all of our money is from our parents' hard working .I'm not a wealthy person, but I feel very happy as well, while some really wealthy person often feel alone and vacuous. I have several sincere friends and a good part-time jod to earn money by myself. Though sometimes I am surrounded by exhaustion and complants, I still feel very happy and am firmly convinced that it is the life I want to experience. If I were old, I would have a good memory about my life and have no pity for not dreaming away my life. I believe, by that moment, I will appreciate it for making my life fulfilling.

The reasons that I am against wealth flaunt are mainly as follows:

First of all, wealth flaunt is a waste of money and life. The wealthy people may spend a lot of money buying several expensive things to show off their wealth. As far as I can see, the things is not necessary and there is no point in buying so expensive things. What's more, the money they spend often is not earned by themselves, which is the disrespect for the person who earns money.

Secondly, wealth flaunt sets a bad precedent on campus .Several students follow the trend to show the wealth of their family blindly. As a result, they attaches more importance to their clothes and daily life, which has a bad effect on their study and growing up, and makes the school out of control.

What's the most important, they only persue the satisfaction materially, while their spirit is empty. Wealth doesn't mean that you have everything. If you only have large amounts of money, but have no feeling, less wisdom and no friends, would you be really happy? The answer may be different. However, my answer is "no". Money is not everything, and we should not be the slave of money while we should make most of it to do some significant things as long as we can.

As we can see, a lot of rich people are not really happy. They also have their own sadness. Although they have a lot of money, they don't know how to spend so much money, and even feel the money is their burden so that sometimes they want to throw them away forever. A lot of rich couple have so much work to do that they even don't have time to have dinner together, which makes them alone. I ever heard a rich person said that he often envied the couple who sell vegetables in the market together and they can have dinner together everyday at least. How sad it is!

In conclusion, richness doesn't stand for happiness, and meantime poverty doesn't mean unhappiness. Each matter has two sides, and everyone has his own opinion. Maybe someone likes to flaunt his or her wealth and someone don't like. So no comment, that's all depends on the way they look at things! The better we can take care of ourselves and the more successful we can be, the more proud our parents will be. We must do away with something .Otherwise, we may never appreciate the good value of money and an independent way of life.

For the person who flaunt wealthy, please stop doing that from now. Study or work hard to become the useful person and contribute for our society, you'll find your real value, but money never can't.

Appendix B. Guiding interview questions

- 1. What is your experience with peer feedback?
- 2. How do you comment on your classmates' writing?
- 3. How do your teachers teach you to do peer feedback tasks?
- 4. How do your teachers comment on your essays?
- 5. Why do you use Chinese/English/both to give comments?

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