Effects of the Comparative Continuation on L2 Writing Performance

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Abstract

This study is a follow-up study of the continuation task, aiming to investigate the long-term alignment effects of the comparative continuation on L2 writing performance. The research lasted for a period of 16 weeks and employed a pretest-treatment-posttest research design. Two comparable groups of fifty-five Chinese undergraduate EFL learners participated. Both groups were assigned the same writing tasks i.e. writing an argument essay of the same topic within 30 minutes. One group was given an input text with comparative ideas before writing, while another group did not have any reading materials. After 8-week treatment, both groups received a posttest, in which the data were compared and analyzed with those of pretest. Results showed that (i) the comparative continuation task resulted in greater improvement in EFL learners' writing performance than topic-writing task. (ii) the comparative continuation task was superior to the topic-writing task in incurring less meaning-based errors, but there was no difference in form-based errors between the two groups. The results can provide some enlightenment for teaching and research of foreign language writing.

Keywords: the continuation task, comparative continuation, writing performance, sustainability

1. Introduction

Interaction and learning are inseparable, and interaction can promote learning (Eskildsen, 2012). Interaction plays a critical role in promoting foreign language learning. In the context of foreign language learning in China, learners lack the real context to use foreign languages and the opportunities to interact with native speakers. At the same time, large-class teaching leads to relatively limited opportunities for teacher-student interaction and student-student interaction in class, which greatly affects the efficiency and quality of foreign language learning of Chinese students.

Based on interactive alignment model, Wang C. (2012) proposed the continuation task which requires learners to read and continue an incomplete text. It differs substantially from other commonly used second language writing tasks (Plakans & Gebril, 2013) and offers unique opportunities for language learning. When continuing an incomplete text, second language learners tend to repeat some of its expressions and language structures (Wang & Wang, 2015). This process is dubbed alignment. By combining the input and output closely, the continuation task can effectively solve the problem of the lack of foreign language context in China.

At present, some Chinese scholars have conducted in-depth empirical studies on the alignment effect of the continuation task, which have confirmed its language learning promoting potential (Jiang L. & Chen J. 2015; Miao H. 2017; Peng H. 2017; Rassaei 2017; Xin S. 2017; Wang C. 2015; Wang & Wang 2015; Zhang X. 2016; Zhang X. & Zhang Q. 2017). This study attempts to integrate comparative continuation into the classroom writing practice of non-English major undergraduate students and study the sustainability of comparative continuation on L2 learners' writing performance.

2. The Continuation Task

Dialogue is the most basic and natural way of using language, and it should contain the mechanism of language use. To explore this mechanism, Pickering & Garrod (2004) proposed the interactive alignment model. According to this model, alignment originates from interaction and is the key to smooth interpersonal dialogue. In the process of dialogue, the two sides of the conversation cooperate with each other, adapt to each other, and dynamically adjust each other, so that the brain representations of the two sides appear convergence or alignment. Such alignment occurs not only at the linguistic level (phonetics, lexis, syntax, etc.), but also at the situation models. The process of structure initiation in dialogue is essentially an implicit learning process in which the

speaker's language ability can be developed by reusing his or others' language structures (Pickering & Ferreira 2008). Therefore, interactive alignment is not only the cognitive mechanism of interpersonal dialogue, but also an important mechanism to promote language development.

As a universal psychological mechanism, the alignment effect in language use has aroused great interest among researchers in the fields of psycholinguistics and second language acquisition. Some scholars have conducted in-depth theoretical discussions and exploratory empirical studies on it (Atkinson et al., 2007; Barr & Keysar 2002; Costa et al., 2008; Pickering & Garrod,2004). Their research results have deepened the academic understanding of alignment and highlighted its important role in second language acquisition. Atkinson (2002) explained the phenomenon of alignment from the perspective of social cognition, believing that alignment is a process in which human beings coordinate and interact with the outside world and dynamically adapt to the external environment. Alignment occurs not only between people, but also between people and interaction variables such as environment, situation and tools. According to the social cognition theory of second language acquisition, learning is a process of continuous alignment between learners and social cognition environment, and alignment is a necessary factor for language use and acquisition.

Based on the interaction alignment model and social cognition theory, Wang C. (2009) proposed that there is also alignment in written language. He comprehensively analyzed the relevant mechanism of language learning potential of alignment and proposed the continuation task theory. It is a new form of reading-writing integrated task in which test-takers read an incomplete story and continue it coherently. The continuation task provides an effective path for foreign language learning: interaction → understanding → alignment → output → acquisition. According to the path, input and output are closely combined, which encourages learners to interact with the original text. Although it is a one-way process, the interaction between learners and input text is very intense so that it can help learners to notice the gap between their interlanguage and the input text, producing "leveling effect" (Wang C., 2014:46).

Language needs to be imitated through interaction in a rich context so as to strengthen the combination of language output and language understanding. When meaning is understood and expressed in the specific context of interaction, the language form, as the carrier of meaning, is noticed by learners and may be reactivated under certain context (Long 1991). In China, English learning lacks context, and there is often no channel to communicate with native speakers. Therefore, using the continuation task to promote the occurrence of interaction alignment is a good way to learn second language (Wang C., 2012).

Since the continuation task was formally put forward, Chinese scholars have carried out a series of relevant empirical studies. Some scholars have studied the alignment effect of the continuation task from the perspectives of linguistic errors, grammatical structures, vocabulary acquisition, textual cohesion and coherence, and rhetoric. Wang & Wang (2014) found that alignment manifested itself in the continuation. Learners, who performed the English-version task, used more lexical items in the original story and committed significantly fewer errors in comparison with their performance on the Chinese-version task. Jiang L. & Chen J. (2015) examined the effect of the continuation task on second language learners' written accuracy, complexity, and fluency by comparing the performance of continuation task and topic-writing task. The comparison revealed that the continuation task generated more gains on accuracy and complexity. Jiang L. & Tu M. (2016) investigated the effectiveness of the continuation task on L2 vocabulary learning and found that both the continuation task and summary task could facilitate L2 vocabulary learning, with the continuation task outperforming the summary task, especially in terms of meaning and use.

In addition, some scholars have begun to explore various factors influencing the alignment effect of the continuation task, such as, linguistic complexity and genres of input text, task conditions, and learners' English levels and learning motivation. Xue H. (2013) found that text-based interest has a positive influence on the alignment effect in story continuation. Her study showed that learners who write after reading an interesting story would align more and better with the original story than those who write after reading an uninteresting story. Peng J. (2015) examined the relationship between linguistic complexity variable and L2 learners' writing of the continuation. Results showed that linguistic complexity appeared to have no effect on the magnitude of alignment with the language use of the input text. However, while aligning with the given text, participants continuing the simplified version improved significantly in their writing fluency and accuracy. Zhang & Zhang (2017) investigated the continuation tasks of different genres in terms of their effects on alignment. Her study showed that the argumentation writing produces more alignment in vocabulary and phrases and fewer language errors than the narration writing. Xin S. (2017) explored L2 learners' acquisition of subjunctive mood under two different conditions of the continuation task.

Notably, most of the previous studies on the continuation task generally examined the short-term alignment effect, overlooking the sustainability of alignment effect and could not provide sufficient evidence for language learning potential of the continuation task on second language acquisition. The key to the acquisition of language knowledge is whether learners can effectively apply the language knowledge they have mastered in the current task to the new task (Luria, 1961). It is a reliable way to evaluate the effect of the continuation task to make long-term tracking in learners' language development and measure their language level with new tasks. In addition, most current studies focus on narrative genres with the exception of Zhang & Zhang (2017), whose research adopted an argumentative essay with incomplete end for the subjects to continue.

3. Methods

3.1 Research Question

The research attempts to examine the comparative continuation of argumentative essays among non-English majors at a university in northern China. The comparative continuation, proposed by Wang C. in 2016, refers to a task in which test-takers are asked to write an argumentative essay with comparative viewpoints to the input text after reading a complete essay. In this study, we examine the effect of comparative continuation on the interactive alignment effect, investigate the error types and frequency in the output of contrastive continuation task, and test the effectiveness of contrastive continuation on Chinese college EFL learners' writing performance. Specifically, we seek to address the following research questions:

1) Does comparative continuation task significantly reduce the language errors of second language learners?

2) Does long-term comparative continuation task produce sustainable learning effect on second language learners' writing performance?

3.2 Participants

Fifty-five freshmen non-English majors at a university in northern China participated in this study. They were from two parallel intact classes with 27 and 28 students, respectively. Both classes took Comprehensive English course undertaken by the researcher and the teaching content is consistent and carried out simultaneously. At data collection time, they had no experience with English continuation tasks. One week before the experiment, all participants took a level test equivalent to CET-4. Independent sample t test results of English proficiency test shows that the English proficiency of the two groups of subjects is equivalent, there is no significant difference (t= 0. 192, df=73, p = 0. 846>0. 05). In the study, one class was assigned to take the continuation task treatment (i.e. the continuation group, N=27), while the other took the traditional topic-writing task treatment (i.e. the topic-writing group, N=28).

3.3 Procedure and Materials

The study took place in the autonomous learning classes of the participants' College English course. It spanned 16 weeks, consisting of a pretest, 6 writing trainings and a post-test. Pretest was administered on the first week, followed by six writing trainings from 2nd to 13th week and posttest conducted on the 16th week. In order to improve the test validity and effectively reveal the sustainable learning potential of the continuation task, the pre-test and post-test adopted freewriting to measure the writing performance of participants. The requirements for freewriting were consistent with CET 4, that is, to complete an essay of at least 120 words within 30 minutes.

During the writing training sessions, the continuation group wrote essays with comparative points to the input text after reading, while the topic-writing group performed the traditional writing task without reading materials. Both groups have the same topic and the requirements were the same. In reading, the subjects may consult the dictionary or the researcher if he/she meets some difficult words. Before writing, the continuation group was asked to read the input text carefully and highlight the wonderful words or sentence structures. In the continuation process, the input text remained accessible to the participants, so that they could imitate its structures and linguistic expressions, and apply them in their own continuation.

The input texts were selected from some English newspapers and magazines in four dimensions, that is, interestingness, genre, length and linguistic complexity. All the argumentative essays were suitable for freshmen to read with a length of about 500 words. The linguistic complexity of the input texts matched and exceeded the participants' production ability. The writing quality could be affected by subjects' familiarity and interest in the topics (Applebee 1982; Freedman, 1983); therefore, the writing topics were closely related to their study and life, such as, education, love view, sports, employment, and education.

3.4 Data Collection

Participants' writings were collected and typed into the computer to yield a small-size corpus. Two types of analyses were performed on the data: composition rating and error frequencies counting.

3.4.1 Composition Rating

Two English teachers experienced in rating CET-4 writing scored the subjects' continuations with reference to the CET4 test rating criteria, grading range of 0 to 15 points. If there is a difference of 3 points between the two raters on the same composition, the composition will be returned to the two raters for re-grading. For the individual composition whose difference is still above 3 points, the two graders consult the grading criteria together. Inter-rater reliability, assessed using Pearson's correlation analysis, was high (r = .78 --- .806, p < .01). When the two scores were no more than five points apart, the average score was taken as the final score. The independent sample and paired sample T test of SPSS17.0 statistical software were used to compare and analyze the composition scores of the two groups.

3.4.2 Error Frequencies

To investigate the alignment effect of the continuation task, the frequencies of errors were counted. The statistical analysis of error types and frequency refer to the six categories of errors typical of Chinese EFL learners made by Wang & Wang (2014), including number agreement errors, misuse of articles, misuse of copula, misuse of non-finite verbs, tense errors, and Chinglish. The first five categories were concerned with language forms, for which they were regarded as form-based errors. Chinglish is that misshapen, hybrid language that is neither English nor Chinese but that might be described as 'English with Chinese characteristics'(Joan Pinkham, 2003). As Chinglish pertains to the meaning expression and is closely related to the conceptual level, they were regarded as meaning-based errors. The six categories are illustrated as follows:

- *… as a clerk who are mainly responsible for … (number agreement errors)*

- *There is a interesting phenomenon in education in China. (misuse of articles)*

- *…they just too shy to speak out.   (misuse of copula)*

- *When walked in the yard, he found …(misuse of non-finite verbs)*

- *In primary school, my teacher give me some chances to learn by myself. (tense errors)*

- *… the Christmas song rang out …(Chinglish)*

Errors in participants' writings were identified and coded manually by two researchers. The inter-rater reliability obtained by Pearson Correlation SPSS 17.0 reached .90 (significance level is 0.05). All the disagreements were resolved through negotiation. Since the length of the writings varied across participants, raw frequencies of errors were converted into proportions, that is, mean frequencies of errors of different categories per 100 words to make the statistics comparable.

4. Results

4.1 Writing Performance

In order to see whether the comparative continuation can improve the writing performance of learners, the data of pretest and posttest of two groups were compared and analyzed. As shown in Table 1, the

Table 1. Descriptive statistics of composition scores

group	pretest		posttest	
	Mean	SD	Mean	SD
continuation	7.1479	1.7952	9.1132	1.6298
Topic-writing	7.1541	1.7604	8.4003	1.7396

posttest results of continuation group and topic-writing group were both higher than the pretest results. Paired sample *T* test showed that there were significant differences in the scores of the two groups (continuation group, t=-5.064, df=61, p=.000; topic-writing group, t=-5.053, df=59, p=.000). It can be seen that after medium and long term writing training, comparative continuation task and topic-writing task showed great improvement in participants' writing performance. In addition, the mean difference of the posttest (0.7129) between continuation group and topic-writing group was larger than that of the pretest (0.0062). The conclusion can be drawn that comparative continuation can exert greater influence on the learners' writing performance than topic-writing task.

4.2 Alignment Effect on Error Types and Frequencies

The present study statistically analyzed the language errors in the pretest and the posttest of continuation group and topic-writing group, in order to further investigate the alignment effect of comparative continuation on learners' language errors. Table 2 listed the frequency of various language errors per 100 words of the two groups in the pretest and the posttest. It can be seen that the total number of errors measured in the posttest was lower than that of pretest. Independent sample *T* test showed that there were significant differences in the total number of errors and errors measured before and after the two groups (P = 0.046 < 0.05). The form-based errors in continuation group were almost the same as those in topic-writing group, but the meaning-based errors or Chinglish were less than those of topic-writing group. In continuation group, the frequency of form-based errors was 2.38 and the frequency of meaning-based errors was 0.36. Meanwhile, the frequencies of form-based and meaning-based errors of topic-writing group were 2.43 and 1.32, respectively. The independent sample *t* test showed that there was no significant difference in the frequency of form-based errors between the two groups (p > 0.05), while the frequency of meaning-based errors was significantly different (p = 0.035 < 0.05). This manifested that language input cannot reduce linguistic form-based errors, but can reduce the occurrence of Chinglish. Compared with topic-writing task, comparative continuation can significantly reduce the frequency of language errors and promote the accuracy of language use.

Table 2. Mean frequencies of errors (per 100 words)

Test	Group	Form-based M/ SD						Meaning-based M/SD
		Number agreement errors	Misuse of articles	Misuse of copula	Misuse of non-finite verbs	Tense errors	total	Chinglish
Pretest	Continuation	0.89	0.60	0.05	0.74	0.51	2.79	1.45
	Topic-writing	0.87	0.44	0.07	0.78	0.49	2.65	1.48
Posttest	Continuation	0.76	0.53	0.06	0.62	0.41	2.38	0.36
	Topic-writing	0.84	0.39	0.04	0.73	0.43	2.43	1.32

5. Discussion

To sum up, the study yielded the following major findings: (i) comparative continuation task can significantly improve learners' writing performance in medium and long-term. (ii) The amount of meaning-based errors used in continuation group was less than that in topic-writing group, but the difference of form-based errors was not significant. These findings have provided affirmative answers for the aforementioned research questions.

The above findings show that the alignment effect of the comparative continuation comes about largely due to the intimate coupling of production with comprehension. It is more consistent with the law of language learning and had sustainable learning effect. In the current study, the participants were non-English majors, and due to low language proficiency, they had to read the input text repeatedly in order to fully understand it. In the process of understanding, they constructed the situation models consistent with the original text, and then continue it, leading to alignment at the language level. The participants also made up the gap of linguistic expressions by repeating the words of input text, so as to produce a strong alignment at language level and promote their language ability. The results not only supported the ideas of Wang (2016), concerning alignment effect of comparative continuation, but confirmed the findings of Jiang & Tu (2016) that learners had clear reading objectives and would consciously repeat the words of input texts in their own continuation tasks.

Another finding of this study was that comparative continuation was more effective than topic-writing in reducing language errors and promoting writing accuracy. With language input, the use of Chinglish in continuation group was greatly reduced, and the meaning-based errors were significantly lesser than those of topic-writing group. This finding was consistent with the study of Jiang L. & Chen, J. (2015) who found that both continuation and topic-writing tasks could promote the development of language accuracy, but the former had more obvious long-term effect. Another study conducted by Yang M. (2015) also proved that the activation of learners' L2 related knowledge caused less Chinglish errors among learners of low L2 proficiency.

The two groups of participants in this study had the same writing topic, and the situation models should also be similar. Why did Chinglish errors appear significantly different? In my opinion, although the two groups constructed the same situation models, topic-writing group had no English input and could only create their own expressions according to the needs of meaning expression. On the contrary, with input text, continuation group

could avoid using of Chinglish expression in terms of wording. Continuation after reading English can restrain native language transfer, prevent Chinese context knowledge from being filled up, and made English writing more authentic (Wang C., 2012). To promote learning, language imitation should not be simply repeated or recited mechanically, but organically integrated with content creation. Although topic writing can release learners' creativity, it is easy to activate the knowledge of mother tongue and produce Chinglish due to the lack of alignment with input text (Wang C., 2013). In contrast, the continuation task not only can increase learners' motivation to create, but also provide high-quality language input for imitation, which provides a favorable condition for the development of language accuracy and complexity.

Compared with the existing findings, continuation group and topic-writing group showed no significant difference in form-based errors. One reason is genre differences. The linguistic accuracy of argumentation continuation is higher than that of narrative continuation (Zhang & Zhang, 2017). The other reason is that the subjects are non-English majors. Their English level is lower and their awareness of grammar is not strong enough. As a result, language input cannot reduce linguistic form errors. In the process of writing, learners establish situation models prior to linguistic expressions, while the lack of noticing to the form of language, coupled with the lack of external hints, makes it difficult for learners to pay attention and cooperate effectively. The limitation of their cognitive ability leads to language errors (Xin S., 2017). In addition, conscious noticing to these forms of language was not emphasized during the study. Noticing is a prerequisite for acquisition, the key to converting input into absorption (Schmidt, 1990). Due to the insufficient noticing of the subjects, they failed to effectively coordinate with the correct language form of the original text.

6. Conclusion

The results of this study verified the sustainable learning promoting effect of comparative continuation and provided empirical support for "continuation theory". Similar to the task of continuing incomplete stories, the comparative continuation can significantly reduce the number of meaning-based errors and improve the writing performance of learners.

Like other empirical studies, this one has its limitations as well. One limitation is that we have only examined the learners' data of errors. There is a need to look into alignment at other levels, such as, the lexical and syntactic level to further verify the findings of the present study. Another limitation involves the assessment on the continuation task. Since the continuation group was not monitored by the researcher in the reading process, they may deliberately avoid using the complex language forms of the input text, which greatly weakened the alignment effect of continuation. Researchers should combine the continuation task with explicit teaching to promote its effectiveness.

In order to obtain more scientific and convincing research conclusions, the future study should not only carry out dynamic monitoring of implementation process, but investigate the sustainability of implementation effect; at the same time it should focus on the short-term and long-term sustainability effect of alignment as well, so as to realize the investigation of the whole process of "continuation theory" and its learning promotion mechanism after reading.

Acknowledgments

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