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A Comparison of Chinese EFL Learners' Listening Comprehension in Dictation and Dicto-comp

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Abstract: Dictation and dicto-comp are two task types which are often used in Chinese EFL listening class. When the effects of task type have been found in some types of listening tasks, little has been known about its effects in the case of dictation and dicto-comp. This study aims to investigate whether Chinese EFL learners achieve a similar level of comprehension of the audio input in dictation and dicto-comp. Sixty-eight students were divided into two experimental groups. The participants first completed a questionnaire on their perception of dictation and dicto-comp, and then each group received the dictation task and the dicto-comp task respectively and had two post-tests: a free written recall and a set of multiple-choice questions. The analysis of the post-test results and the students' response to the questionnaire showed that Chinese EFL learners achieved a similar level of comprehension of the audio input in the aspects of global comprehension, local comprehension, literal comprehension and inferential comprehension. Drawing on the Cognition Hypothesis, the paper discussed the role of task complexity in affecting learners' listening comprehension and it was found that the synergetic effects of the resource-dispersing dimensions and the resource-directing dimensions of task complexity led to the similar level of listening comprehension in these two tasks.

Keywords: dictation, dicto-comp, listening comprehension, task complexity

1. Introduction

In the English as a Foreign Language (EFL) setting, dictation and dicto-comp are among the task types which are often employed in listening class. Both task types require whole reconstruction of the audio input but they differ in task complexity. Although task type effects on listening comprehension have been found among certain types of listening tasks (e.g., Brindley & Slatyer, 2002; Cao, 2017; Cheng, 2004), little has been known about how learners comprehend the audio input in dictation and dicto-comp. Drawing on the Cognition Hypothesis (Robinson, 2003, 2005, 2007; Robinson & Gilabert, 2007), this paper aims to find out whether Chinese EFL learners achieve a different level of comprehension of the audio input in dictation and dicto-comp. It is hoped that this study could give more information on task type effects on listening comprehension.

2. Literature Review

2.1 Dictation and Dicto-comp

Used primarily as a form-based testing device, dictation was criticized and abandoned by communicative methodology (Lado, 1961; Oller, 1971). However, since the late 1980s, it has gained popularity again as a means of promoting necessary accuracy while integrating skills (Johnson & Johnson, 2001). Studies (e.g., Lee, 2010) have shown that students achieved significant gains in listening comprehension through doing dictation practices over a period. The term "dictation" in this paper refers to the traditional format of dictation. The text is read to the participants for three times. For

the first time and the last time, the text is read at normal speed and during the second time, the text is read sentence by sentence or segment by segment.

Dicto-comp is very similar to dictogloss, a popular interactive activity in the language classroom. They differ in that dicto-comp does not involve group work. For some scholars, these two terms can be used interchangeably (Thornbury, 1997; Wajnryb, 1990).

In a dicto-comp task, learners listen as the teacher reads a text to them. The teacher may read it several times. Then, learners reproduce the text in the words of the original or in their own. Dicto-comp is a task of dual-nature.

> To the extent that they reproduce the original passage, the students are writing a dictation. To the extent that they must use their own words to fill in memory gaps, they are writing something akin to a composition. (Riley, 1972, p. 238)

Although originally developed to draw learners' attention to grammatical points, dictogloss or dicto-comp can be used as a listening comprehension activity which helps to improve students' listening comprehension and note taking skills (Prince, 2013; Vandergrift & Goh, 2012).

2.2 Theoretical Framework

Considering the fact that none of the existing models could explain how tasks with varied task complexity affect learners' listening comprehension, this paper situated itself upon the Cognition Hypothesis (Robinson, 2003, 2005, 2007; Robinson & Gilabert, 2007).

The Cognition Hypothesis predicts that increasing task complexity in resource-directing dimensions of tasks benefit accuracy and complexity of production while increasing task complexity in resource-dispersing dimensions of tasks divides learners' attention and decreases accuracy and complexity of production. When both resource-directing and resource-dispersing dimensions are increased, synergetic effects are likely to take place.

Although the Cognition Hypothesis does not relate directly to listening tasks, it can be assumed that listening tasks, just like tasks of speaking and writing, also vary in task complexity. As can be seen in Table 1, both dictation and dicto-comp have high task complexity. Both involve multiple tasks of listening such as note taking and reconstruction. Both tasks take several steps in task completion. Despite the similarities, dictation and dicto-comp do display differences in task complexity, although the detailed differences might be unknown. For instance, on the [+/- single task] variable, although both dictation and dicto-comp involve multiple tasks, they might differ in the number of tasks involved. In addition, dicto-comp involves causal reasoning, but it is not clear whether dictation involves causal reasoning. More details of how different task types differ in task complexity are needed. More importantly, it is necessary to find out how task complexity manipulates the listening comprehension of EFL learners.

Table 1

How Dictation and Dicto-comp Differ in Task Complexity

Task type	Dictation	Dicto-comp
-/+ causal reasoning	+/-	+
+/- single task	-	-
+/- few steps	-	-

Note: Here, "+/-" indicates that task complexity on the [-/+ casual reasoning] variable in this task type is not clear according to the researcher's observation.

2.3 Studies on Task Type Effects on Listening Comprehension

Most studies on task type effects on listening comprehension focused on test method effects, i.e., how different test formats influence test scores or task difficulty (e.g., Brindley & Slatyer, 2002; Cheng, 2004; In'nami & Koizumi, 2009). These studies showed that listeners did better in certain task types and some listening tasks were more difficult than the other. Only a few studies looked into task type effects from the perspective of task demands or task complexity. Among them, Wang and Zhen (2014)

investigated the effects of listening tasks with different involvement loads (oral composition, fill-in and multiple-choice questions) on incidental vocabulary acquisition. It was found that tasks with higher involvement load resulted in better incidental vocabulary acquisition. However, the study only explored into task type effects on incidental vocabulary acquisition and did not examine its effects on learners' listening comprehension. Cao (2017) found that task type affected Chinese EFL learners' comprehension of the audio input in the aspects of global comprehension, local comprehension and literal comprehension, but no effect was found with that of inferential comprehension. Cao (2017) only investigated four types of listening tasks (multiple-choice questions, short answer questions, partial dictation and table-format gap-filling). To what extent and how task type affects learners' comprehension of the audio input in other types of listening tasks has remained unknown.

Therefore, the present investigation will examine the listening comprehension of Chinese EFL learners in dictation and dicto-comp so as to provide more information on task type effects on listening comprehension and examine the role of task complexity in affecting learners' comprehension of the audio input.

3. Methodology

3.1 Research Question

Do Chinese EFL learners achieve a different level of comprehension of the audio input in dictation and dicto-comp? If they do, to what extent?

3.2 Research Design

3.2.1 Participants

The participants in the study were 68 freshmen in School of Foreign Languages and Cultures of Nanjing Normal University. Before the experiment was conducted, a pretest was given to the two classes to see whether there were any differences in their listening comprehension ability. The test papers were scored and *t* test results showed that there were no significant differences in the pretest scores among the two classes ($t(66) = .215$, $p = .831$).

3.2.2 Instruments

The instruments of the study included one short listening passage, two treatment tasks, two post-tests and one questionnaire.

The listening material used in the study was one short passage in the listening section of a CET 6 session conducted in December, 2008. The audio material was edited with Adobe Audition and adapted into two audio recordings to fit into the requirements of dictation and dicto-comp.

For the dictation task, the participants listened to the recording three times. At the first reading, the whole passage was read at normal speed. At the second reading, the recording was played with intervals of 20 seconds each between sentences or phrases. Finally, the whole passage was read again at normal speed. The recording lasted for 14 minutes and 50 seconds. After the recording had been played for three times, three minutes was given for the participants to check their work. In all, the dictation task took 17 minutes and 50 seconds.

The dicto-comp group was asked to listen to the recording for three times and was then given 12 minutes and 30 seconds for reconstruction and checking. In all, 17 minutes and 51 seconds was used for this task. Thus, the dictation group and the dicto-comp group had almost the same amount of time in completing their respective listening task.

There were two post-tests: a free written recall and a set of multiple-choice questions. The free written recall aimed to test the participants' attention to details and the seven multiple-choice question items were designed to test the participants on their comprehension of the passage. The seven questions could be categorized following two dimensions: global vs. local and literal vs. inferential. There were 4 global questions and 3 local questions, while there were 3 literal questions and 4 inferential questions.

The questionnaire was designed by the researcher and aimed to examine how the participants perceived the two listening tasks. It involved three aspects: 1) the difficulty level of the two listening tasks; 2) the characteristics of the two tasks; and 3) the specific skills required in completing the two tasks. The questions in the questionnaire took two formats: multiple-choice questions and open-ended questions. Most of them were open-ended questions.

3.2.3 Data Collection

There were three steps in collecting the data.

(1) Pretest and Questionnaire

Two weeks before the experiment, a pretest was delivered to see whether the participants were of the same level of listening comprehension. After that, the participants were asked to complete the questionnaire concerning their perception of dictation and dicto-comp.

(2) Conditioning

The experiment was conducted in the language lab, the naturalistic class setting. The two experimental groups were conditioned to the task they would receive in the experiment. One week before the experiment, at the end of the listening class, each experimental group received two practice tasks. The dictation group practiced the dictation task and the dicto-comp group practiced the dicto-comp task. Each practice task took around 15 minutes.

On the day the experiment was conducted, the participants in each group had a second round of conditioning. Each of them had one practice task (about 20 minutes). The purpose was to secure that in the formal experiment, the participants could keep using the same types of strategies employed in the most recent listening task (Nix, 2016).

(3) Collection of the data

When the second round of conditioning was over, each group received their own task. First the participants in the two groups listened to the recording for three times and completed the dictation task and the dicto-comp task. After that, all the materials including the notes were collected and the participants had two post-tests. They first did a free written recall. Then the recall was collected and all of them were asked to complete Post-test 2, i.e., the seven multiple-choice questions.

3.2.4 Data analysis

The participants' overall scores in Post-test 2 were calculated and compared and their scores in the two dimensions of questions were scored and compared. Then, the scoring rubrics of the written recall in Post-test 1 were designed and the participants' scores in the recall were calculated and compared. Finally, the participants' questionnaires were coded according to the key terms which emerged in the answers. Students' answers in the questionnaires served as a supplement to the quantitative data.

4. Results and Discussion

4.1 Task Type Effects on Listening Comprehension

In order to examine whether learners achieved a different level of listening comprehension in dictation and dicto-comp, we first examined the two groups in terms of overall comprehension. "Overall comprehension" refers to the participants' scores in the seven multiple-choice questions in Post-test 2.An independent samples *t* test was run and it was found that the two groups did not differ significantly in the aspect of overall comprehension ($t(66) = -.191$, $p = .849$), which indicates that learners achieved a similar level of overall comprehension in dictation and dicto-comp.

In addition, independent samples *t* tests were also run to find out whether there existed differences between dictation and dicto-comp along two dimensions of listening comprehension: (1) global comprehension vs. local comprehension and (2) literal comprehension vs. inferential comprehension. In order to examine this, we further compared the scores of the six groups in these four aspects. Local comprehension had two indicators, marked as "local comprehension 1 (LC1)" and "local comprehension 2 (LC2)" respectively. LC1 refers to the participants' scores in answering the local questions in Post-test 2 and LC2 refers to the participants' scores in the written recall in Post-test 1.

The independent samples *t* tests results (See Table 2) showed that dictation and dicto-comp did not differ significantly in any aspect of comprehension. Therefore, when doing dictation and dicto-comp, learners had similar levels of comprehension concerning the gist and details of the text, the literal meaning and the inferential meaning, showing that dictation is just as an effective listening task as dicto-comp.

Table 2

Independent Samples t Test Results of Dictation and Dicto-comp

DV	*t*	*p*
GC	.720	.474
LC1	-1.019	.312
LC2	-.978	.332
LC	-.814	.419
IC	.407	.685

Note: GC=global comprehension, LC1=local comprehension 1, LC2=local comprehension 2, LC=literal comprehension, IC=inferential comprehension

The above results were consistent with the participants' answers to the questionnaire. Generally speaking, in both the dictation task and the dicto-comp task, the students paid attention to the main idea of the text, especially during the first listening, so they did not differ significantly in global comprehension. As for local comprehension, students doing dictation had to write down every word in the passage and the second reading allowed them to attend to the details. Students doing dicto-comp reported that this task type required them to reconstruct the whole text, so they had to note down as many details as possible. That is why the participants achieved a similar level of local comprehension. In the aspect of literal comprehension, according to the student reports, they only had to take down what they had heard and sometimes the comprehension did not take place until they read back what they had written down. The dicto-comp task was more challenging since they had to figure out the causal relationships between different parts of the text. This was very pressing, which led to their failure to comprehend some parts of the text. In terms of inferential comprehension, the participants of this study were EFL learners in the same university and their ability to make inferences might be stable. They had the similar level of ability to make inferences and this ability was not susceptible to task type.

These results provide more information for task type effects on listening comprehension. In Cao (2017), although it was found that task type effects did exist, but no significant differences were found between the multiple-choice question task and the table-format gap-filling task in any aspect of listening comprehension. Here, again, no significant differences were found between dictation and dicto-comp in the four aspects of listening comprehension concerned.

Besides, the results indicate that dictation, just like dictogloss (dicto-comp), focuses on both form and meaning, quite opposite to Prince's (2013) belief that in dictation, learners focus only on form while dictogloss ensures that learners "focus not just on form but on meaning" (p. 488).

4.2 The Role of Task Complexity in Listening Comprehension

The results of the study lend support to the Cognition Hypothesis, showing that this hypothesis might not only apply to oral tasks and writing tasks, but also to listening tasks.

Based on the learners' response in the questionnaire and their listening comprehension in dictation and dicto-comp, it can be predicted that increasing task demands on the [+/- single task] variable impedes learners' listening comprehension. Both dictation and dicto-comp consist of several

sub-tasks. The participants' answers in the questionnaire revealed that dicto-comp involves more sub-tasks than dictation. It includes the following subtasks: word spelling, note taking, reconstructing meaning from notes taken and organizing answers. Dictation also involves word spelling, note taking, reconstructing meaning from notes taken, but task takers do not have to organize the answers. Similarly, dicto-comp has higher demands on the [+/- few steps] variable and this also impedes their comprehension of the audio input.

In addition, it can also be predicted that increasing task demands on the [-/+ causal reasoning] variable in the resource-directing dimensions might improve learners' listening comprehension. Dictation does not seem to have very high requirements on clarifying the logical relationships in the text. Dicto-comp, instead, does have very high demands on the [-/+ causal reasoning] variable. Many students regarded understanding the causal relationship between different parts of the text as essential in completing the dicto-comp task. The higher task demands on the [-/+ causal reasoning] variable help improve learners' listening comprehension.

According to the Cognition Hypothesis, increased complexity in both resource-dispersing and resource-directing dimensions of task complexity leads to synergetic effects. The result that dictation and dicto-comp did not differ significantly in any aspect of listening comprehension well demonstrates such synergetic effects. Dicto-comp has higher task complexity in the resource-dispersing dimensions of [+/- single task] and [+/- few steps] and the resource-directing dimension of [-/+ causal reasoning] and this results in a similar level of listening comprehension in the two listening tasks.

5. Conclusion

The results of this study show that Chinese EFL learners achieve a similar level of comprehension of the audio input in dictation and dicto-comp.

The findings of this study lend support to the Cognition Hypothesis. They show that increasing task demands on the resource-dispersing dimensions might impede learners' listening comprehension and increasing task demands on the resource-directing dimensions might improve their listening comprehension. Increased task demands in both resource-dispersing and resource-directing dimensions of task complexity lead to synergetic effects. The findings also have pedagogical implications. They show that both dictation and dicto-comp are effective listening tasks but dicto-comp is more challenging and might be suitable for junior and senior college students.

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