An Investigation of L2 English Article Substitutions by L1 Chinese Learners

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Abstract

This study investigated L1 Chinese learners' English article substitutions and analyzed possible causes. The participants were 60 Chinese speakers divided into an intermediate and an advanced group, 30 participants each. The instruments were a Fill-in-the-Blank Test, a Grammaticality Judgment Task, and an interview. The instruments were conducted based on the nominal contexts in the English article system, i.e., the [+def, +spec] context, the [-def, +spec] context, and the [-def, -spec] context (Ionin et al., 2004). Results from the tasks showed that both groups had problems of English article substitutions. Both L1 transfer and L2 related factors, i.e., complexity of English articles and false concepts hypothesized played important roles in L1 Chinese learners' English article substitutions. The results contributed to second language acquisition and provided some pedagogical implications.

Keywords: second language acquisition (SLA), Error Analysis, English article substitutions

Introduction

Second language acquisition (SLA) is a sub-discipline of applied linguistics. It is a systematic study of how people learn a second language (L2) after their first language (L1) acquisition is established (Hoque, 2017). It is hard for language learners to attain native-like proficiency levels in an L2 even after years of learning, especially in terms of grammatical competence (Liu, 2009). Many English grammatical features have been found problematic among L2 learners from different L1 backgrounds, such as English reflexive pronouns by L1 Japanese learners (Hirakawa, 1990), English past tense marker by L1 Chinese learners (Sharmini et al., 2009), and English restrictive and non-restrictive relative clauses by L1 Thai learners (Amornwongpeeti & Pongpairoj, 2014).

Among English syntactic features, the English article system is recognized as one of the most difficult challenges faced by many L2 learners. Even non-native learners at the advanced level confront problems with English articles, such as English article omissions and substitutions. This is particularly problematic for L2 learners whose L1 backgrounds have no articles, such as L1 Chinese learners (Han et al., 2006).

There are many studies which have investigated English article substitutions¹ by L2 learners from different L1 backgrounds, for example, L1 Persian learners in Geranpayeh (2000), L1 Pashto learners in Ahmad and Khan (2019), and L1 Thai learners in Pongpairoj (2020). As far as L1 Chinese learners are concerned, there are some studies such as Robertson (2000), Zhou and Du (2015) and Lei (2016). These studies covered errors made by L1 Chinese learners, including English article omissions. To the best of our knowledge, there has been no study specifically focusing on English article substitutions by L1 Chinese learners. Therefore, the present study aimed to fill this gap by investigating L1 Chinese learners' problems of English article substitutions and analyzing possible causes. Two hypotheses were therefore formulated: 1) L1 Chinese learners have problems of English article substitutions, and 2) Based on Error Analysis, both non-existence of articles and complexity of the English article system cause English article substitutions by L1 Chinese learners.

¹English article substitutions refer to the act of using *the* in the contexts where the indefinite article a/an is required and using a/an in the contexts where the definite article *the* is required (Ionin et al., 2004). Other grammatical features like demonstratives and quantifiers were out of the scope of the present study.

Literature Review Error Analysis

In the studies of SLA, analyzing errors made by L2 learners is essential because they can reflect learners' knowledge of the L2 in their learning process. Corder (1974) believed that the study of errors should be included in the process of language teaching and learning. Error Analysis, which is one of the major theories in SLA, was first established by Corder in the late 1970s.

The procedures of analyzing errors include five steps: error collection, error identification, error description, error explanation and error evaluation (Corder, 1974). In the first step, researchers should collect samples of learners' language errors according to the goals of their research. It can be cross-sectional sampling or longitudinal sampling². Once the samples of learners' language errors have been collected, those errors should then be identified. Researchers, in the second step, need to distinguish errors from mistakes. Corder (1967) distinguished errors and mistakes based on the distinction between "competence" and "performance" proposed by Noam Chomsky in the late 1950s. According to Chomsky (1965), competence is speakers' ideal knowledge of their language while performance is the actual realization of their language in production and comprehension. Corder (1974, p. 24) stated that "errors of performance (mistakes) will be characteristically unsystematic and errors of competence, systematic." The third step is error description. Researchers should state the category of errors. One of the most commonly used categories is surface strategy taxonomy, which includes omission, addition, misformation and misordering (Dulay et al., 1982). The fourth step is error explanation, which is the most important step in the procedures. This step aims to explain why certain errors are made. One of the most popular explanations is based on psycholinguistic sources which were distinguished by Richards (1975), i.e., interlingual errors and intralingual errors. While interlingual errors are caused by negative influence of learners' L1, intralingual errors result from faulty or partial learning of the L2, rather than from language transfer (Deng, 2019). More specifically, Richards (1975) subdivided intralingual errors into overgeneralization, ignorance of rules, incomplete application of rules, and false concepts hypothesized. Overgeneralization occurs when the learner creates a

²Cross-sectional sampling is a sampling approach in which data are collected from different participants at a time, while data in longitudinal sampling are collected by observing only one participant over a period of time (Caruana et al., 2015; Olsen & St George, 2004).

deviant structure based on other structures in the target language (Ellis, 1994). *Ignorance of rules* arises when the learner fails to notice the restrictions on grammatical rules. *Incomplete application of rules* is caused when the learner cannot produce acceptable sentences because the required linguistic rule is not fully acquired by him/her. Last but not least, *false concepts hypothesized* results from the learner's incorrect understanding of grammatical rules due to teaching and learning materials and/or faulty teaching. After the fourth step, errors should then be evaluated in the last step. It is a process of measuring how serious the errors are based on their influence on learning.

Errors are beneficial to both language learners and instructors. For language learners, errors exist as evidence of their active contribution while learning a new language (Ellis, 1995). For language instructors, errors made by language learners provide data about what errors learners have made in the process of learning, and show instructors whether learners have achieved the goals of learning (Corder, 1967; Dulay et al., 1982).

Definiteness in English and Chinese

Definiteness is a grammatical category featuring formal distinction whose core function is to mark a nominal expression as identifiable or nonidentifiable (Chen, 2004). According to Pongpairoj (2020), definiteness can be categorized into grammatical and conceptual definiteness. Definiteness in English is grammatical, because it is expressed through the English article system. Conceptual definiteness is in articleless languages, such as Mandarin Chinese, because there is no article in those languages. For those articleless languages, definiteness is inferred through context.

English is an inflectional language³. English articles indicate whether a noun is definite or indefinite. The definite article *the* in English can be used in two domains: situational/cultural reference and textual co-reference (Zhang, 2018).

In terms of situational/cultural reference, it includes three classes, i.e., general knowledge which both speakers and listeners know, knowledge that is known within a country or a small area and the extra-linguistic situation (Zhang, 2018). For example,

³Other terms include a flectional language and an inflected language.

- (1) *The earth* moves round *the sun*.
- (2) Let's go to the playground.
- (3) *The roses* are very beautiful.

In (1), *earth* and *sun* are definite because they are the nouns which everyone knows without any explanation. In (2), *playground* is definite because the speakers and hearers involved in the sentence are at the same school. That is to say, they all know which playground the speakers are talking about. Similarly, when the speakers and hearers are looking at the same objects in an immediate situation, *roses* in sentence (3) is definite in this case.

Textual co-reference can be subdivided into anaphoric reference and cataphoric reference (Zhang, 2018). Anaphoric reference refers to the entity that is mentioned again in the text, while cataphoric reference usually appears in postpositive attributes, which are put right after the nouns they modify. For example,

- (4) I received a letter yesterday. The letter was written by John.
- (5) *The house* on the corner is mine.

In example (4), when *letter* is mentioned again, *a letter* and *the letter* represent the same thing. Therefore, the hearers can understand what *the letter* refers to. In example (5), *house* is definite because it is modified by the prepositional phrase *on the corner*.

Chinese is different from English because it is an isolating language. It does not have articles. Definiteness in Chinese is expressed through word order and context (Chen, 2004; White, 2008; Wong & Quek, 2007). For instance,

- (6) lǎoshī lái le teacher come ASP⁴ The teacher(s) came.
- (7) lái le lǎoshī come ASP teacher (Some) *teachers* came.

⁴ASP refers to 'aspect', which shows whether an action is completed or still continuing.

In (6), the noun $l\check{a}osh\bar{\imath}$ 'teacher' is definite in the subject position. But when it is changed to the postverbal position, $l\check{a}osh\bar{\imath}$ 'teacher' in (7) is indefinite. Nouns appearing in subject positions are usually known to the speaker and the hearer, because Chinese is a topic-prominent language where the topic of a sentence often comes first (Wong & Quek, 2007).

In addition to word order, definiteness can be expressed through context in Chinese. For example,

- (8) lăoshī shì xuéxí de yǐndǎozhě teacher is learning POSS facilitator *Teachers* are facilitators of learning.
- (9) lǎoshī ānpái de rènwù wŏ yĭjīng wánchéng le teacher assign POSS task I **ASP** finish **ASP** I have finished *the task(s)* assigned by *the teacher(s)*.

While *teachers* in the sentence (8) refers to all teachers, teacher(s) and task(s) in (9) are definite, because in the context, the tasks are what the subject I have done, and *the teachers* are the persons who assigned the tasks.

Previous Studies

English learners from different L1 backgrounds have been found to have problems with English article choice in a number of studies. A significant study is Huebner (1983), which has been widely mentioned by later researchers on English article substitutions. Adopting Bickerton's (1981) semantic wheel model, Huebner categorized English noun phrases into four semantic categories: [±Specific Referent (±SR)] and [±Assumed Known to the Hearer (±HK)]. In his longitudinal study on a Hmong native speaker, Huebner (1983) found that there was a systematic variability in the learner's English article choice. The Hmong speaker in his study gradually decreased the use of the definite article *the* in the [-SR, -HK]⁵ and the [+SR, -HK] contexts and began to retain *the* in the [+HK] contexts. Ahmad and Khan (2019) investigated the difficulties in the acquisition of English articles by 75 L1 Pashto adult learners, whose L1 does not have an article system. Definiteness in Pashto is expressed through demonstratives (e.g. /da/ 'this' and /dwi/ 'these') and numerals (e.g. /yaw/ 'one'). According to Ahmad and Khan (2019), demonstratives in Pashto are used in the [+referential,

⁵[SR] refers to 'Specific Referent', and [HK] refers to 'Assumed Known to the Hearer'.

+definite] contexts, while the numerals in Pashto are used in the [+referential, -definite] contexts. Results from a gap-fill task showed that the Pashto learners fluctuated between selecting the English articles based on definiteness and specificity and made more errors in using *a/an* in place of *the*. Geranpayeh (2000) analyzed the L1 Persian learners' performance on two article elicitation tasks. Although Persian has articles, the article system in Persian and English are different because the former has specific markers, while the latter uses definite markers. Geranpayeh (2000) found because of the difference between English and Persian, the L1 Persian learners had problems in identifying the English article marker when it was in the subject position.

Some studies also included participants from different L1 backgrounds, e.g. Ionin et al. (2004), Schönenberger (2014), and Pongpairoj (2020). The participants in the study conducted by Ionin et al. (2004) consisted of adult speakers from two articleless languages: Russian and Korean. Results from the force-choice elicitation task and the written production task in the study showed that the advanced learners performed better than the intermediate learners in terms of article choices, and that both the L1 Korean learners and the L1 Russian learners tended to use the in the [+specific] contexts and use a in the [specific] contexts. Another study by Schönenberger (2014) revealed that, compared with German speakers, whose L1 has articles, the Russian group made many more errors in using English articles. German speakers rarely misused English articles. The performance of L1 Thai English learners whose L1 has no articles can be found in a study conducted by Pongpairoj (2020). Pongpairoj (2020) compared the use of English articles between an L1 Thai group, whose native language is articleless, and an L1 French group, whose L1 has an article system in both perception and production tasks, and found that the correct English article use rates for the L1 Thai group were significantly low. Besides, English article substitutions by the L1 Thai group were found in all three nominal contexts, i.e., [+def, +spec], [-def, -spec], and [-def, +spec] contexts, while the L1 French group rarely misused English articles in all the nominal contexts.

As far as L1 Chinese learners are concerned, some researchers also compared the use of English articles by L1 Chinese learners with the use of English articles by learners from other [+article] or [-article] L1 backgrounds such as Zdorenko and Paradis (2008), and Han et al. (2006). Zdorenko and Paradis (2008) conducted a longitudinal study on L2 English children's acquisition of English articles. The participants whose first languages (Spanish, Romanian and Arabic) have articles performed better than those from articleless

languages (Mandarin, Cantonese, Korean and Japanese). Besides, among the different types of article misuse, using *the* in indefinite context was the predominant error type for both the [+article] and [-article] groups. Han et al. (2006) analyzed 668 TOFEL essays from Chinese, Japanese, and Russian students and found that among all the NPs, about one in eight NPs had article errors. However, the proportion of the error type, *a-the* confusion, was relatively low compared to the other types of errors in the test.

Some researchers focused on English article errors made by L1 Chinese learners (Lei, 2016; Zhang, 2007; Zhou & Du, 2015). From the corpus compiled by Lei (2016), he found seven confusion errors made by the L1 Chinese learners out of 36 article errors. Using *the* instead of *a/an* was the dominant subgroup among all types of errors. A similar result can also be seen in Zhou and Du (2015). From the tasks which included filling blanks and error corrections, the authors found that the L1 Chinese learners made more errors when they had to select between *the* and *a*, because L1 Chinese learners had problems with the distinction of specific reference and generic reference. Zhang (2007), on the contrary, found that Chinese college students made many more errors when they had to select between *a* and *an*. The *a/an* confusion occupied 74.7%, which was much higher than *a/the* confusion (18.9%) and *an/the* confusion (6.4%). She believed that the effect of L1 transfer, L2 related factors, and article semantics caused Chinese speakers' errors in English articles.

As the above literature presented, compared with learners from [+article] backgrounds, L1 Chinese learners made many more errors with English articles, e.g. Zdorenko and Paradis (2008). L1 Chinese learners had great difficulties in selecting *the* in [+definite] contexts and selecting *a/an* in [-definite] contexts, e.g. Zhou and Du (2015). The errors investigated in the above studies, however, included not only English substitutions, but also other errors such as omissions and overuse. To the best of the researchers' knowledge, no previous study focused on English article substitutions by L1 Chinese learners. Thus, the present study aimed to bridge this gap by exploring English article substitutions by L1 Chinese learners.

Methodology

Participants

This study involved 60 Mandarin Chinese speakers who majored in English at Southwest Minzu University in China. They were all recruited online. Most of them learnt English for more than 10 years. Based on their TEM4⁶ scores, all the participants were divided into two groups according to their English proficiency. One was labeled as an intermediate group and the other was an advanced group. The reason why TEM4 was used was that TEM4 is a national test which all undergraduate English majors in China are required to take in their fourth semester. Results of TEM4 are reported in scale scores (0-100) at three levels. Test takers scoring 80 or above are classified as 'excellent'; test takers scoring between 70 and 79 are classified as 'good'; test takers scoring between 60 and 69 are classified as 'pass'. Those who score 0-59 fail the test and are given one more chance to retake the test in the following year.

As for the participants in the research, those who were 'good' (score between 70 and 79) were put into the intermediate group, while those who were 'excellent' (score 80 or above) were put into the advanced group. Besides, a total number of 8 participants from each group were selected through stratified sampling for an interview.

Research Instruments

Three instruments were employed in this study: a Fill-in-the-Blank Test, which focused on the learners' ability to produce English articles, a Grammaticality Judgment Task (GJT), which was designed to test the learners' perception of English articles, and an interview. The instruments were conducted based on the classification of the contexts in the English article system, i.e., definite and specific context, indefinite and specific context, and indefinite and nonspecific context (Ionin et al., 2004). Each task had four items for each context. All the nouns in the first two tasks were simple nouns which were taken from the Cambridge English Dictionary. Variables were controlled in this study. That is, only singular concrete nouns were used in the target items. Because tenses did not affect the participants' performance on English article choice, there was no restriction on tenses in each item. What is more, all the target nouns were bare nouns, i.e., no premodifiers (e.g. adjectives, nouns, present/past

⁶TEM4, which is the abbreviation for Test for English Majors-Band 4, is an English certificate test designed to measure the English proficiency of Chinese university undergraduates majoring in English (Jin & Fan, 2011).

participles), as well as postmodifiers (e.g. relative clauses, present/past participles, prepositional phrases). Also, 18 distractors which covered some other grammatical points were included in the test items so as to make the participants unaware of the purpose of this test. Each task contained 30 test items in total, i.e., 12 target items and 18 distractors.

The Fill-in-the-Blank Test of this study was composed of 30 test items. The participants were required to fill in the blanks within 20 minutes. This task was graded by assigning 1 point for each correct answer and zero point for each wrong answer. Following are three examples taken from the test, followed by the correct answers:

(10) a. Did you encounter anyone	in buildir	ng?
b. I am hungry now because I	only ate	banana this morning
c. All joiners will receive	pack.	

For the target items, in the [+def, +spec] context, *the* is the correct choice, while in the [-def, +spec] and the [-def, -spec] contexts, a is the correct choice. In (10a), the noun *building* is a thing that both the speaker and the hearer know, so this sentence belongs to the [+def, +spec] context. The definite article *the* must be used here. In (10b), only the speaker knows which banana s/he refers to. The context in this sentence is indefinite and specific, so a is the correct answer. The context in (10c) is indefinite and nonspecific. Neither the speaker nor the hearer knows which pack the joiners will get, so a must be used here.

GJT attempts to test the speakers' linguistic knowledge by asking them their acceptability of the given utterances (Myers, 2017). In the present study, there were 30 test items given to the participants to let them judge whether the sentences were correct or not. They had to submit their answers within 20 minutes. One point was given in two cases: the participants who considered the sentence correct put the mark $\sqrt{}$ in the blank where the sentence was correct and the participants who considered the sentence incorrect put the mark \times in the blank where the sentence was incorrect.

Examples of GJT in this research are shown below.

(11) a. Move up, John, and let <u>a</u> lady sit down	
b. I saw the movie yesterday and its name is Romeo and Juliet	
c. A triangle has three sides	

Because (11a) is definite and specific, using the indefinite article a here is incorrect, and the mark \times should be put in the blank. In (11b), the context is indefinite and specific, because only the speaker knows which movie s/he refers to. The definite article *the* must not be used here, and the mark \times should be put in the blank. *Triangle* is indefinite and nonspecific in (11c), so using a here is correct, and the mark $\sqrt{ }$ should be put in the blank.

While the participants were taking the test, they were not allowed to check and change their answers. Only their first responses were counted.

After finishing the first two tasks, eight participants from each group were selected through stratified sampling to participate in the interview. The interview in the study was mainly formed from three aspects: their thoughts about English articles, the types of errors they often made, and their learning methods. Also, in order to make sure they could express their thoughts without any language barriers, the participants were instructed to use their L1 to answer the questions. Seven questions that were asked in the interview were:

- (12) a. What do you think about learning English articles?
 - b. Do you think English articles are difficult to learn?
 - c. How did you learn English articles?
 - d. How did your teachers teach English articles?
 - e. Do you have any problems learning English articles?
 - f. What do you think about the two tasks?
 - g. Are you confident about your answers?

In order to examine whether the test items were consistent with the research objectives, three experts who were native speakers with English or linguistics background validated the test items of the study according to the Index of Item-Objective of Congruence (IOC). The result showed that all the items passed IOC. That is, the mean scores for the Fill-in-the-Blank Test, the GJT and the interview were 0.973, 0.945 and 0.906 respectively.

Results and Discussions

As presented in the methodology part, the Fill-in-the-Blank Test and the GJT aimed at investigating the participants' perception and production of English articles with respect to article substitutions.

Results from the Fill-in-the-Blank Test are shown in Table 1.

Table 1Scores of the two participant groups in the Fill-in-the-Blank Test

Groups	N	Maximum	Minimum	Mean	Sum (360)	SD
Advanced	30	12	10	11.17	335	.699
Intermediate	30	12	7	9.73	292	1.311

According to Table 1, the mean of the advanced group (m=11.17) was higher than that of the intermediate group (m=9.73). An independent t-test was conducted to compare the difference between the two learner groups and the results were significant at p<.05, as shown in Table 2.

 Table 2

 Independent samples t-test of the Fill-in-the-Blank Test

					95% Co	nfidence
4	10	Sig.	Mean	Std. Error	Interva	l of the
ι	df	(2-tailed)	Difference	Difference	Difference	
					Lower	Upper
5.283	44.247	.010	1.433	.271	.887	1.980

That is, the advanced group's production of article use was significantly better than the intermediate group.

The participants' scores in the GJT are shown in Table 3.

Table 3Scores of the two participant groups in the GJT

Groups	N	Maximum	Minimum	Mean	Sum (360)	SD
Advanced	30	12	10	11.40	342	.563
Intermediate	30	12	7	9.57	287	1.406

According to Table 3, the mean of the advanced group (m=11.40) was higher than that of the intermediate group (m=9.57). An independent t-test was conducted to compare the difference between the two learner groups and the results were significant at p<.001, as shown in Table 4.

 Table 4

 Independent samples t-test of the GJT

						95% Co	nfidence
	4	10	Sig.	Mean	Std. Error	Interva	l of the
	ι	df	(2-tailed)	Difference	Difference	Difference	
						Lower	Upper
Ī	6.628	38.068	.000	1.833	.277	1.273	2.393

That is, the advanced group's perception of article use was significantly better than the intermediate group.

According to the results from the two tasks, it could be noted that the intermediate learners did not produce and perceive English articles as well as the advanced learners. Based on Error Analysis (Corder, 1974; Dulay et al., 1982; Ellis, 1994), there were possible causes of both interlingual and intralingual errors. For interlingual errors, expressions of definiteness in English are different from those in Chinese. Definiteness is expressed in English through the article system, while definiteness in Chinese is expressed through word order and context. As articles are non-existent in Chinese, it could possibly be problematic for the Chinese learners to acquire the English article system. The results from the Fill-in-the-Blank Test and the GJT showed that the learners had difficulties with both production and perception of English articles, respectively. The first hypothesis was thus confirmed. L1 Chinese learners indeed had problems of English article substitutions.

Apart from the interlingual causes, an intralingual cause, i.e., complexity of the English article system, was another factor. In English, there are both definite and indefinite articles. With Chinese being an articleless language, it is probably difficult for the learners to decide on the definite article and the indefinite article. Some participants in the interview admitted that learning English articles was challenging for non-native speakers, because sometimes they did not know which articles should be chosen. Some learners said when they did not know which articles should be used, they would use the definite article *the* as the default article. In the two tasks, for example, the learners substituted English articles most frequently in the test item with the [-def, +spec] context, *I saw the movie yesterday and its name is Romeo and Juliet. 35% of the learners thought the definite article the was used here correctly. In the [-def, -spec] context, about 17% of the learners considered the sentence A triangle has three sides incorrect. In the [+def, +spec] context, about 12% of the learners

filled in the blank with the indefinite article *a* in the sentence **She finished the tea and laid* __ *cup aside*. The second hypothesis was also supported here, because both non-existence of articles and complexity of the English article system caused English article substitutions by L1 Chinese learners.

Since complexity of the English article system was found to be a possible cause of confusion among the Chinese learners, the following part probed into the learners' English article substitutions in the three nominal contexts: [+def, +spec], [-def, +spec], and [-def, -spec]. The results of English article substitutions in all the three nominal contexts from the two tasks are shown in Table 5⁷.

Table 5 *Inaccuracies of English articles in the three nominal contexts by the two L1 Chinese groups*

		Contexts					
Tasks	Groups	the	а	а			
		[+def, +spec]	[-def, +spec]	[-def, -spec]			
Fill-in-	Advanced	a: 4.17%	the: 0.83%	the: 1.67%			
the-Blank Test	Intermediate	a: 4.17%	the: 0.83%	the: 7.50%			
CIT	Advanced	a: 1.67%	the: 9.16%	the: 4.17%			
GJT	Intermediate	a: 12.50%	the: 27.50%	the: 20.83%			

As Table 7 presented, it could be seen that the learners made English article substitutions in all the three nominal contexts. For the Fill-in-the-Blank Test, the advanced learners made the highest errors in the [+def, +spec] context

⁷It was found that in the Fill-in-the-Blank Test, some participants filled demonstratives i.e., *this* and *that* and/or quantifiers such as *some* and *few* in some items. These answers were excluded from the data. In addition, some participants left some blanks empty. These answers were also excluded from the data analyses.

(4.17%), while the intermediate learners made the highest errors in the [-def, -spec] context (7.50%). For the GJT, both the advanced learners and the intermediate learners made the highest errors in the [-def, +spec] context, i.e., 9.16% and 27.50%, respectively. The intermediate learners made a lot of errors in the [-def, -spec] context as well (20.83%). It could therefore be observed that errors of English article substitutions were all scattered because they could be found in all the three nominal contexts in both production and perception tasks. The nominal context types where the learners made errors were not consistent, which reflected the learners' confusion about the use of English articles. As far as the English proficiency levels are concerned, the data showed that the intermediate learner group seemed to make more errors in both tasks, especially in the GJT. In the GJT, for example, the intermediate group did very badly in the [-def, +spec] (27.50%) and the [-def, -spec] contexts (20.83%).

Discussion

Based on Error Analysis, the data on English article substitutions showed that both the interlingual factor of non-existence of English articles in Chinese and the intralingual factor of complexity of the English article system were possible causes of L1 Chinese learners' problems of English article substitutions. As for intralingual factors, besides complexity of the English article system, false concepts hypothesized seemed to play a role. As mentioned earlier, false concepts hypothesized refers to the learner's misapprehension of grammatical rules as a result of teaching and learning materials and/or faulty teaching (Richards, 1975). The case of English article teaching and learning in Sichuan province was taken as an example⁸. In Sichuan province, most students started to learn English articles when they were in the first semester of their seventh grade. In the textbook *Go for it!*, the English structures they had to learn were distributed among twelve units. However, there was not any unit or part specifically designed for English articles.

The usage of English articles was found in some exercises through introductions of some English structures, rather than the focus on English articles. For example, consider Figure 1.

⁸One of the researchers is from Sichuan province in China.

Figure 1
An activity in the students' textbook (Liu et al., 2013, p. 7)



Figure 1 shows an activity from Unit 2 on the *wh*-question "What's this/that in English?" and the answer "It's...". It can be seen that there was no explanation of why the indefinite article *a/an* was used in the answer.

Consider another example in Figure 2.

Figure 2
An exercise in the students' textbook (Liu et al., 2013, p. 11)

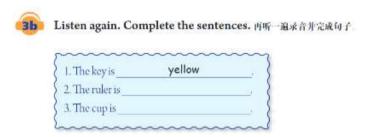


Figure 2 shows an exercise from Unit 3 on the *wh*-questions "-What's this/that in English?" and "What color is it?" and the answer "It's...". Similarly, it can be seen that there was no explanation of why the definite article *the* was employed.

The two examples show that there was no specific unit in the students' English textbooks which mainly provided detailed rules and exercises of English articles. Data from the interview also supported this. Some students in the interview said that their teachers did not explain much about English articles. Most of them learned English articles by themselves by reading some external textbooks.

As the above results presented, the L1 Chinese learners in the study made English articles substitutions as the results of both non-existence of articles in Chinese and the complexity of the English article system. This finding confirmed the two hypotheses. In addition to the complexity of English articles, the intralingual factor, i.e., false concepts hypothesized, was also discovered to contribute to L1 Chinese learners' problems of English articles. The results of the study were in line with some of the previous studies on English article acquisition such as Zhang (2007) and Zhou and Du (2015). The effect of L1 transfer and L2 related factors, i.e., complexity of English articles as causes of Chinese speakers' errors in English articles can also be found in their studies.

Conclusions and Suggestions

The present study was designed to investigate L1 Chinese learners' problems of English article substitutions and find out causes of L1 Chinese learners' English article substitutions. Two research hypotheses were formulated: L1 Chinese learners have problems of English article substitutions, and based on Error Analysis, both non-existence of articles and complexity of the English article system cause English article substitutions by L1 Chinese learners.

Firstly, the results from the Fill-in-the-Blank Test and the GJT showed that both groups had difficulties with English articles. Although the advanced learners performed significantly better than the intermediate learners in both the Fill-in-the-Blank Test (p<.05) and the GJT (p<.001), both groups made English article substitutions in all the three nominal contexts. Hypothesis 1 was thus confirmed.

Secondly, based on Error Analysis (Corder, 1974; Dulay et al., 1982; Ellis, 1994), both interlingual and intralingual factors were found in the study. For the interlingual factor, the non-existence of articles in Chinese might cause problems for Chinese learners to acquire the English articles. For the intralingual factor, the complexity of the English article system and false concepts hypothesized possibly caused the L1 Chinese learners' English article substitutions. Hypothesis 2 was therefore confirmed.

The study yielded theoretical and pedagogical implications as follows. In terms of theoretical implications, the study contributed to SLA on diagnosing L1 Chinese learners' problems of English articles and also explaining possible causes based on Error Analysis.

With respect to pedagogical implications, English teachers should understand the roles which both L1 and L2 play in students' English article acquisition. It is inappropriate for English teachers to let students discover how to use English articles by themselves. Besides, it is also suggested that authentic

texts should be provided so as to demonstrate English article use in different nominal contexts.

As far as limitations and recommendations of the study are concerned, the present study focused on the substitutions of English articles by L1 Chinese learners. Future studies might add analysis of the individual results and expand to article omissions or both error types in the three nominal contexts.

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