English Article Acquisition
— An Investigation among Chinese Students

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1. Introduction

English articles, including a/an, the, and the zero article (Ø), are frequently used function words in English. Despite their high frequency and early input, the acquisition of the highly complex article system remains one of the biggest challenges for an ESL (English as a second language) or EFL (English as a foreign language) learner. Sometimes, it is also difficult for teachers to teach English articles effectively. In China, English articles are taught to students in Grade One in junior middle schools. However, after the students have been taught the articles in the junior middle school, there is no further educational process about English articles. Students are then likely to reduce their attention to the use of articles no matter if it is in their oral or written English, unless they come across a task testing their ability to use articles in an English test.

In addition, teachers will gradually reduce their attention to noticing whether students are using English articles in a correct way. Most of the time, teachers will not correct the errors of using incorrect articles in the students’ utterance or written work, because this kind of errors is not believed to affect the meaning very much. All of these result in that the Chinese students can still not fully acquire the use of the English articles even if they are advanced university students.

The different ways of expressing definiteness in Chinese and English, and native language transfer also result in acquisition problems. There is a striking contrast in that there is no article system in Chinese while there is one in English. Therefore, the process of article acquisition becomes one of the focuses of SLA (Second Language Acquisition) studies. There has been a considerable amount of research conducted by scholars on the processes of acquisition of English articles by non-native learners of English in ESL contexts (Hawkins et al. 2009; Huebner 1983; Ionin et al. 2004; Master 1994; Miller 2005; Yamada & Matsuura 1982). However, there have been few studies carried out about the process of the English article acquisition among learners in China. This is a striking contrast to the fruitful studies conducted in other countries. Therefore, it would be of great theoretical and practical significance to get a relatively realistic picture of the actual acquisition process of learning the English article system for Chinese learners. Finally, this study could provide some beneficial pedagogical suggestions for teachers from a didactical perspective.
1.1 Aim

The study aims to investigate the following aspects: first, to see whether most Chinese students have difficulties using the English articles; second, to identify what kind of mistakes they make; third, to explore whether there are any possible underlying reasons that influence the students in their use of English articles; fourth, to speculate what can be done to solve the situation and to give some possible didactical suggestions that can improve the situation.

1.2 Material and method

In order to find out whether all different levels of English learners in China have difficulties using the English articles, this study is a cross-sectional one investigating the mastery of English articles at three different language proficiency levels. All the subjects are asked to take the same test so that the results can be compared between the different levels. The material and method adopted in this study are illustrated in detail in the following sub-sections.

1.2.1 Participants

In most areas of China today, the students will have English courses in the third year in primary schools, but the knowledge of the use of English articles is systematically taught in Grade One in junior middle schools. After those class periods for learning articles, students will not be taught any further knowledge about how to correctly use English articles and teachers will reduce their attention to correcting errors that students make in using of English articles. Students at these three levels are therefore expected to have more or less the same knowledge background about how to correctly use English articles: they are students from junior middle schools, senior middle schools and universities.

The subjects in this study are students in Ningbo city in Zhejiang Province in China. There are three groups according to their different academic levels in school. Group 1 participants are Grade 1 students in a junior middle school. Group 2 participants are Grade 1 students in a senior middle school. Group 3 participants are Grade 4 students in a university. The schools are key schools. There are two reasons for choosing the key schools in this study: first, in China, most of key junior middle school students will enter key senior middle schools, and most of key senior school students will go to universities, so that it can be ensured that they have more or less the
same training about how to use English articles; second, the language proficiencies of key school students are thought to be higher than those of students in average schools. If the key school students achieve low scores in the test, the average students are expected to get no higher scores than them. One class was selected randomly by computer from each level and then 20 students were also selected randomly from the class of that level so that their language abilities are more or less the same. This means that there were 60 participants in total. Before this test, all of the participants were not given any specific training about using English articles. All of them agreed to take this test but wished to remain anonymous.

1.2.2 Test

The test in this study is a gap-filling test (see Appendix I). It is adopted from Master (1994: 250). Master’s test is considered to be a legitimate instrument for this study for two reasons. First, the test seems to cover the entire range of article usage. Second, it is designed to test the English article usage for non-native speakers of English, so it is also appropriate for Chinese learners.

All of the subjects were asked to take the same test so that it is equal and obvious to see whether there was any disparity in the results between the different groups. In consideration of the relatively small amount of vocabulary of junior middle school student, several words in the test which are supposed to be unknown for them will include the meaning in Chinese in round brackets next to them. The instructions were given in Chinese so that all the participants knew clearly what they were going to do and what kind of language ability is tested. The time for the whole test was 45 minutes. As the test consists of two parts, there were 20 minutes for part one and 25 minutes for part two. Part one includes 32 gaps in discrete sentences, and part two includes 26 gaps in a short passage in which all the articles are left out. The subjects were asked to choose one article among a/an (the indefinite article), the (the definite article) and Ø (the zero article) to fill in the gaps.

1.2.3 Procedure

The English teachers in these three classes are asked for help to carry out the testing procedure. Each group of participants is asked to sit in their usual classroom to take the test. The test papers are distributed by their teachers. Before the test starts, the students are informed that they are
going to take a test about English articles. They are also informed that the purpose of the test is to
know whether or not they can correctly use English articles. The time of the test is limited to 45
minutes. After the test, all of the answer sheets are collected by the teachers, photographed, and
then returned via email.

All the results are calculated with the help of Microsoft Excel 2003 software. The results are
categorized according to different academic levels, so that the results can be compared and
analyzed in order to see whether there is any disparity between the different groups in terms of
the accuracy of using English articles. If most of them get high scores in the test, the result shows
that Chinese students at most levels acquire the English articles well. If the students in the three
groups get low scores, this may provide evidence that most Chinese students have difficulty in
using English articles. If one group of students do better in using the definite article while another
group of students do better in using the indefinite article, this shows that the acquisition of
English articles is unstable for Chinese students.

In this study, all errors in the results are categorized into three main kinds, namely omission of
articles, oversuppliance of articles and confusion of articles. Omission of articles refers to when
a/an or the is correct in a certain gap, but test takers choose Ø in that gap. Oversuppliance of
articles refers to test takers use the or a/an when the gap actually requires the zero article Ø.
Confusion of articles exists about the usage of a/an and the, which means the gap is filled with
a/an when the correct answer is the, or it is filled with the when the correct answer is a/an. The
analysis of the test results will be carried out based on these three kinds of errors.

2. Theoretical Background

In previous studies, many linguists and educators agree that most learners from Chinese-speaking
background find English articles too complicated to learn and have difficulties using articles
(Miller 2005; Robertson 2000; Zhu Yeqiu 2003). Their analysis of the acquiring and using of
English articles by non-native speakers is carried out from the perspectives of noun semantics,
definiteness and specificity in English, or from the perspective of language transfer. Thus, these
related theories will be illustrated and elaborated below. In addition, the English article system is
also explained here in detail.
2.1 English article system

As the acquisition of English articles is studied here, so at first, it is necessary to fully understand what English articles are and how they are used. Therefore, the definition, categorization and the usage of articles are explained in the following sub-parts.

2.1.1 Definition of English articles

Before introducing the definition of the English articles, two areas must be introduced at first. Firstly, noun phrases\(^1\) (NP) or noun groups are matters or people talked about in the discourse (Collins 2005:2). People use the noun phrases in their discourse in two main ways. One way is called specific reference: the speaker refers to someone or something, knowing that the hearer understands what is talked about. The other way is called general reference: the speaker refers to someone or something of a kind but without specifying a certain person or thing (Collins 2005:42-43).

Secondly, the English article is one kind of determiners. Leech (1994:268) suggests that “[d]eterminers are words which specify the range of reference of a noun, e.g. by making it definite (the book), or indefinite (a book), or by indicating quantity (many books)”. That is to say, determiners are used to identify what people are talked about in the discourse (Collins 2005:42). Determiners include articles, demonstrative determiners (this, that, these), possessive determiners (my, your, one’s, etc), quantifiers (a few, a little, etc), and so on (Leech 1994:268). One point should be noticed: people can not use more than one specific determiner in front of a noun in English (Collins 2005:43). For example, ‘the your mother’ is incorrect.

Knowing what are specific reference, general reference, and determiners, the definition of article is much easier to understand. Webster online dictionary (2010) gives the definition of the English articles: “[a]n article is a determiner that may indicate the specificity of reference of a noun phrase.” According to Leech (1994:268), the English article is one kind of determiners which is used to specify the types of reference of a noun. These two definitions are using two different ways to explain the same things: first, the English article should be used together with a noun; second, articles can indicate the type of reference for the noun. As

\(^1\) Briefly speaking, a noun phrase (e.g. the book) consists of an article (the) and a noun (book) (Yule 1996:104).
mentioned above, there are two types of references, specific reference and general reference. Therefore, the effect of nouns and what type of reference people want to make both determine what kind of articles they should use in a certain context. This will be illustrated in a more detailed way in the following.

2.1.2 Category of English article

It is widely agreed that there are at least two kinds of articles, the definite article the, and the indefinite articles a/an. However, sometimes there is no article before a noun (for example, Ø books), and then the term ‘zero article’ emerges. Is there a third kind of English article which is called ‘zero article’? Scholars’ views to this vary from each other. Leech claims that

[t]here are two articles in English, the definite article the (the book) and the indefinite article a (a book) or an (an eye). Sometimes nouns require no article at all. This is called the ‘zero article’ (books, eyes). (Leech 1994:237)

On the one hand, Leech thinks “[t]here are two articles in English”, indicating the zero article cannot be a kind of article. On the other hand, he acknowledges the existence of the zero article but only ‘sometimes’. Although some scholar may not agree that the zero article is a kind of article, the study here is operated on three kinds of articles, including the indefinite article the, the indefinite article a/an and the zero article Ø. The category of the English article is essential to know, because the whole discussion and analysis are based on it.

2.1.3 Basic usage of English article

In line with section 2.1.1, articles are related with nouns and types of reference of the noun phrase (NP). Quirk et al. (1972:149) summarize the range of the use for the three articles (a/an, the, Ø) and display the relationship between types of reference and articles in the following figure.

<table>
<thead>
<tr>
<th>SPECIFIC REFERENCE: Indefinite form</th>
<th>GENERIC REFERENCE: Indefinite, zero or definite article</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFIC REFERENCE: Definite form</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Categorization of article usage (Quirk et al. 1972:149)
However, such general explanations cannot tell when and which article should be used in detail. In fact, most of the time, the use of articles is determined by both the nature of the noun which the article is attached to and the type of reference of the noun phrase in contexts. Thus, the unclear explanations lead on to some difficulty for both learners and the researcher who intend to analyze data for errors.

Bickerton (1981:248-249) puts forward a new systematic approach to the analysis of the use of the English article system. He thinks that the use of English article is governed by the semantic function of the noun phrase (NP) in discourse. Based on Bickerton’s research, Huebner (1983:132) thinks that there are two features that are related to noun phrase reference — [+Specific Referent] ([±SR]) and [±Assumed Known to the Hearer] ([±HK]). The semantic wheel for English articles is represented in the following.

![Semantic Wheel for Noun Phrase Reference](image)

Figure 2: Semantic Wheel for Noun Phrase Reference (Huebner 1983:133)

Huebner (1983:133) suggests that the noun phrase reference can be classified in terms of four semantic categories:

1. [−Specific Referent], [+Assumed Known to the Hearer]: Generics.
2. [+Specific Referent], [+Assumed Known to the Hearer]:
   a. Unique referent or conventionally assumed unique referent;
   b. Referent physically present;
   c. Referents previously mentioned in the discourse;
   d. Specific referents assumed known to the hearer.
3. [+Specific Referent], [−Assumed Known to the Hearer]:
a. First-mention of NP [+Specific Referent] in a discourse and assumed not known to the hearer
b. First mention of NP [+Specific Referent] following existential have and assumed not known to the hearer.

4. [−Specific Referent], [−Assumed Known to the Hearer]:
a. Equative noun phrases;
b. Noun phrases in the scope or negation;
c. Noun phrases in the scope of questions, irrealis mode.

The usage of article defined by the semantic wheel is much clearer than the figure 1 for learners to know about the semantic space for English articles. However, it categorizes the usage of articles according to semantics rather than as an illustration of each kind of article usage separately. It is still not clear enough for us to understand the usage of every kind of article. As this study is to investigate the acquisition of articles of Chinese students and to identify what kind of errors they make, thus, it is necessary for us to know in more detail the usage of every kind of article so that the analysis of the test results in chapter 3 can be easily understood.

2.1.3.1 The usage of definite article

The definite article, “the commonest determiner” (Collins 2005:43), indicates that the speaker refers to a specific thing or person in mind (The chair is broken) (article Webster 2010). Bickerton (1981:147) explains that ‘definite’ means the thing or people that is talked about is presumed known to the listener, no matter if it is the previous knowledge about it (‘the man you met yesterday’), unique character of the thing or people that is talked about (‘the sun is setting’), unique character in a given setting (‘the battery is dead’-car do not usually have more than one battery), or general knowledge that a named class exists (‘the dog is the friend of man’).

Combining this account with the semantic wheel, the explanations given by Bickerton (1981:147) and Collins (2005:43-48), the usage of the definite article the is illustrated in the following situations. First, the definite article the is used in the [+SR, +HK] situations. These situations include:

A. use the to refer to a specific person or thing, or to a specific group of people or things which are both know by speaker and hearer. Sometimes, people may put modifiers or add qualifiers to indicate who or what the speaker is referring to: the man you met yesterday.
B. use the to refer to the people or the thing which is unique in the world: The sun is setting.

C. to refer to the things or people which is unique in a given setting, both the speaker and hearer know it: The air in this city is not very clean.

D. use the to refer back to the information which has been mentioned above: A man knocked on my door. The man was bleeding.

E. use the with superlative adjectives: That was the worst storm of 1985.

Second, the definite article the is also used in the [-SR, +HK] situations. These situations are related to general knowledge, including:

F. use the together with a countable noun in singular form to refer to the thing more general or to refer to every member of a species: the dog is the friend of human.

G. use the together with an uncountable noun to refer to something in a general way: I once read a story about the courage and strength of these wild pigs.

2.1.3.2 The usage of indefinite article

According to Bickerton (1981:147), the indefinite article a/an refers to something which is expected unknown to the listener, whether by lack of knowledge (‘a man you should meet is Mr. Black’), an unspecified referent (‘Bill is looking for a wife’), or a referent which does not exist (‘George couldn’t see an aardvark anywhere’).

Generally speaking, the indefinite article a/an is used as general reference or reference to one member of a kind (Collins 2005:54-55). Their usage is illustrated in a more detailed way in the following:

H. use a/an together with countable noun to indicate the subject which the speaker is talking about is countable: I once read a story.

I. use a/an to mention things for the first time, and expected unknown to the hearer: There is an orange in that bowl.

J. use a/an together with noun to refer all the people or things of a particular kind: An elephant is stronger than a cow.
2.1.3.3 The usage of zero article

The zero article Ø appears when a noun is used without the, a/an. For example, Time is gold. Generally, there are mainly four kinds of situations which require the zero article Ø:

K. express the generic uncountable concepts: I hate Ø cheese

L. some idiomatic or conventional expressions: play Ø football, go by Ø bus or have Ø breakfast.

M. use Ø in front of some countries, streets, languages and single mountains: I am from Ø China; She climbed Ø Mount Tai.

N. use Ø in front of the plural form of countable nouns to refer to all the people or things of a particular kind: Ø Tigers are stronger than Ø cats.

2.2 English nouns

According to section 2.1.1, the English articles are closely related to two things, nouns and types of reference of the whole noun phrase. Therefore, it is essential to know the classification and the nature of English nouns. This paves the way for discussing whether the nature of nouns has an effect on using the English articles.

According to Collins (2005:5), English nouns can be classified into six main types. They are classified according to whether they have a plural form, whether they need a determiner in front of them, and whether they occur with a singular verb or a plural verb when they are the subject of the verb. They are listed in the following table:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Example</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count nouns</td>
<td>A bird, birds</td>
<td>Have plural, need determiner</td>
</tr>
<tr>
<td>Uncount nouns</td>
<td>Happiness, equipment</td>
<td>No plural, usually no determiner</td>
</tr>
<tr>
<td>Singular nouns</td>
<td>The moon, a day</td>
<td>No plural, need determiner</td>
</tr>
<tr>
<td>Plural nouns</td>
<td>Clothes, scissors</td>
<td>No singular</td>
</tr>
<tr>
<td>Collective nouns</td>
<td>The public, the staff</td>
<td>Either singular or plural verb</td>
</tr>
</tbody>
</table>

Table 1: Six main types of nouns in English (Collins 2005: 5)
This table simply displays the common use of these types of nouns. According to Collins, these types of nouns can be explained as follows. Countable nouns have two forms, the singular form and the plural form. The singular form is used to refer to one person or thing, while the plural form refers to more than one person or one thing. In another word, countable nouns are the nouns which can be counted and used together with the number or determiners in front of them, for example the car, a dog and two houses. Countable nouns “make up the largest group of nouns in English” (Collins 2005:6).

Uncountable nouns usually refer to general things, most of which are abstract concepts. They have only one form and cannot be used together with number. They are rarely used with the determiners a/an or the, for example, a girl with intelligence and drink water (Collins 2005:8). However, sometimes, the uncountable nouns seem to become countable. When the hearers are assumed to know the quantity of the things referred to, the speaker can leave out the quantity (Collins 2005:10). For example, people use ‘a coffee’ to refer to a cup of coffee.

Singular nouns refer to the things which are unique in the world or the things which are always talked about one at a time. The singular nouns are always used together with a determiner, for example the sun, the air, the future, have a try, make a move and so on.

Plural nouns refer to the noun which is supposed to refer to more than one thing. Plural nouns only have a plural form and should be used together with a plural form of the verb when they are the subjects in the sentences (Collins 2005:13). However, some plural nouns are most commonly used with the definite article (the rains, the fruits) and some with “my” or “his” (my feelings), others without a determiner (spirits, looks). In addition, some plural nouns can be used both with or without a determiner, for example, police, the police, papers, the papers, tracks, the tracks and so on (Collins 2005: 14-15). Police can only be used with a plural verb form – for instance, “the police are always hounding me”.

Collective nouns refer to a group of people or things, and they have only one form, but they can be used together with a singular verb or a plural verb (for example, ‘The enemy was moving’ compared with ‘The enemy were visibly cracking.’).
Proper nouns are used to refer to people or things by name and they can have determiners before them (Collins 2005:17). If the first letter of the names of people or things is spelled in capital, there are usually no determiners in front of them, for example, ‘...Michael Hall’ and ‘...Jerry’. If there is a title which shows the social states of the people, the title will be spelled with a capital letter and without a determiner (Doctor Lee). In addition, the names of organizations, institutions, books and other unique things are also proper nouns and their first letter should be in capital (Birmingham University) and sometimes they are used with the (the United Nations).

There are many other rules of using nouns, however, since the study is focused on article acquisition, the details of the use of nouns will not be all included here.

2.3 Definiteness and specificity

Based on the semantic wheel and the research of Bickerton and Huebner, Ionin et al. (2004) put forward a new article classification: definiteness setting and specificity setting. Hawkins et al. (2009:16) argue that

> [d]efiniteness and specificity are not the only properties that can be expressed by articles cross-linguistically; however, they are ‘the only discourse-related features that underlie article choice’ (Ionin et al. 2004: 12 footnote 6, italicized in original article). (Hawkins et al. 2009:16)

As definiteness and specificity are “the only discourse-related features” which affect the article choice in different contexts, thus, the illustration of them is essential in this study.

There are thus two important concepts here, definiteness and specificity. The definiteness is compared with the indefiniteness. Both of definiteness and indefiniteness are the features of noun phrases (NPs), distinguishing between definite noun phrases and indefinite noun phrases. According to Bickerton (1981:147), definite noun phrases are specific and identifiable in a given context while indefinite noun phrases are not specific and identifiable. This is similar to the two types of reference of noun phrase which have been introduced in the beginning of section 2.1.1. A definite noun phrase is a noun phrase referred to a particular individual in a specific reference way indicating both the speaker and the hearer know what is talked about. An indefinite noun is a noun phrase referred to an individual in a general reference way indicating that the speaker does not identify the things or people and the hearer does not know any detail about the thing or
people. In other words, definiteness is associated with the knowledge shared by the speaker and the hearer (Ionin et al. 2004:2 note1). English articles, which can determine the feature of noun phrases, are seen as the prototypes of definiteness and indefiniteness (Abbott 2004:1). In addition, specificity is associated with the speaker’s knowledge only (Ionin et al. 2004:2 note1). Ionin et al. (2004:2) put forward the definition of definiteness and specificity:

[i]f a Determiner Phrase (DP) of the form [D NP] is . . .

a. [+definite], then the speaker and hearer presuppose the existence of a unique individual in the set denoted by the NP.
b. [+specific], then the speaker intends to refer to a unique individual in the set denoted by the NP and considers this individual to possess some noteworthy property.

That is to say, the features [+definite] and [+specific] are associated with the knowledge state of the speaker and/or the hearer in the discourse (Ionin et al. 2004:2). The feature [±definite] refers to whether the knowledge is both shared with the speaker and the hearer, whereas the feature [±specific] refers to whether the knowledge is specified and identified by the speaker for the hearer (Ionin et al. 2004:2).

According to the explanations given by Ionin et al., a [+definite] or [+specific] context is a context that has satisfied the conditions on definiteness or the conditions on specificity, respectively. When we say that a context is [-definite] or [-specific], we mean that these conditions have not been satisfied.

In English, the definite article the encodes [+definite] feature, and the indefinite article a indicates [-definite] feature regardless of whether the contexts are specific or nonspecific (Wong 2007:215). In addition, the can be used both in singular and plural [+definite] contexts, while a is used only in singular [-definite] contexts (Wong 2007:215). The following examples are given to explain what is [+definite] or [+specific].

(I) I left a notebook ([−definite, +specific]) behind this morning, so I returned home to get the notebook ([+definite, +specific]).

(II) I have bought a book ([−definite, +specific]) online, but I haven’t received it yet, so I asked the seller ([+definite, −specific]) for my money back.
In the first part of example (I), when notebook is first mentioned, there is no presupposition of the unique notebook between the speaker and the hearer, and only the speaker knows which is the notebook, thus it is [-definite, +specific] condition, and the indefinite article a is used in front of the singular form of the countable noun notebook. However, in the second part of example (I), the notebook is mentioned again, so the hearer is assumed to known the existence of a unique notebook. In addition, the speaker identifies the specific notebook that he got from home, thus this is a [+definite, +specific] condition, and the definite article the is used.

In the first part of example (II), a book seems similar to a notebook in example (I), that the hearer does not presuppose the existence of a unique book, and only the speaker knows which the book is, so the condition is [-definite, +specific] which requires the indefinite article a. However, the definite article the in ‘the seller’ is different from the in example (I). Both the speaker and the hearer know the seller is the online book seller who sells the book to the speaker, but the speaker does not identify a specific person for the seller. Due to this, the condition is [+definite, -specific], and the definite article the is applied here.

From the illustration above, it is clear to see that when both the speaker and the hearer share the mutual knowledge and the condition of the unique individual has been established — the feature of context is [+definite], and the definite article the is used. Otherwise, in the [-definite] context, the indefinite article a is used. In addition, in these two examples, we could find both a and the can be used in [+specific] and [-specific] contexts, but the definite article the can only be used in [+definite] contexts and the indefinite article a can only be used in [-definite] contexts. Ionin et al. (2004:4) also claim that the indefinite article a can be used both in [-specific] contexts and in [+specific] contexts as long as the contexts are [-definite].

However, definiteness as well as indefiniteness in Chinese is marked by using other determiners, such as zhè (this), nà (that), and yī (one) (Robertson 2000:142), because Chinese language does not have functional equivalents of the definite article and indefinite article in English (Robertson 2000:135). Thus, the effect of language transfer can not be avoided when acquiring and using English articles. The language transfer will be illustrated below, because it is possible that the learners from Chinese-speaking background use the determiners within parenthesis instead of using the English articles.
2.4 Language transfer

Since the present study is about the second language acquisition which refers to cross-linguistic knowledge, the understanding of language transfer is an essential basis of understanding the study. Selinker (1972) suggests that five principal processes may affect the second language acquisition: language transfer, overgeneralization, transfer of training, strategies of learning, and strategies of the second language (L2) communication. Language transfer will be illustrated in this section, and overgeneralization and transfer of training are discussed in section 2.5.

Odlin (1989:27) gives a ‘working definition’ of transfer: “[t]ransfer is the influence resulting from the similarities and differences between target language and any other language that has been previously (and perhaps imperfectly) acquired.” That is to say, for the second language learners, transfer is due to the effect of similarities and differences between their L1 and L2. Yule (1996:194) suggests that if the L1 and the L2 have similarities, the learner may benefit from the positive transfer from the L1 knowledge. If the knowledge of L1 in a certain aspect is really different from that of L2, the negative transfer will occur.

In addition, Yule (1996:194) also claims that some errors in L2 acquisition may be because of the transfer of expressions or structures from the L1 of learners. Therefore, language transfer is often applied to analyze and to study the case of L2 acquisition. For example, some learners commit errors of omission: they leave out the English articles a and the and leave out the -s of plural nouns. If these learners are Chinese, this kind of phenomenon can be interpreted as L1 transfer, because there is no article system or plural form for nouns in Chinese and these errors reflect that they attempt to make use of L1 knowledge (Ellis 1997:19).

There are two kinds of transfer (Odlin 1989:26) — negative transfer and positive transfer. As for the L2 learners, when the knowledge of L2 is different from that of the L1, they are more likely to find it difficult to learn or even make errors of it. This is called negative transfer. For example, Spanish students may find it is difficult to acquire the pronunciation of the English plural marker -s, because English sound [z] has no real equivalent in Spanish (Huebner 1983:9). However, Yule (1996:195) also considers that negative transfer is commonly seen in the early stage of
second language learning, and it will gradually be reduced due to the learner's increasing knowledge about L2.

On the other hand, positive transfer means that when the knowledge in L1 is similar to L2, the acquisition of L2 may benefit from the knowledge of L1. For example, French learners of English are supposed to make much less errors than Arabic learners while using pronouns (like 'him' in 'The man whom I spoke to him is a millionaire'), because there are no pronouns in relative clauses in French whereas the Arabic is (Ellis 1997:51).

For Chinese students, English and Chinese are different in terms of the alphabet, phonology and grammar. Learning English as a foreign language inevitably involves Chinese transfer. Language transfer may be reflected in the productive language forms, such as expressive forms, grammatical structures and cultural conventions. If there are similarities between Chinese and English, positive transfer will occur (Yule 1996:194). Otherwise, negative transfer will take place when the knowledge of Chinese is different from that of English. As articles are present in L2 English but absent in L1 Chinese, the first language transfer is expected to occur. For example, when they find it is difficult to use articles, they may fall back to Chinese and tend to leave out the articles, just like what has been mentioned in Ellis (1997:51), that the L1 transfer can lead to avoidance — to avoid using the articles, for there is no equivalent knowledge in Chinese.

2.5 The overgeneralization and transfer of training

Some errors in second language acquisition seem to occur not from language transfer, but from other aspects, such as overgeneralization and transfer of training.

Overgeneralization is also an underlying reason to explain why the L2 learners make errors. To some extent, overgeneralization seems similar to the L1 transfer. If L1 transfer can be seen as falling back to use the knowledge of L1 when the learners lack the knowledge of L2, overgeneralization can be seen as a kind of using the existing L2 knowledge to expend it to new knowledge (Ellis 1985:171).
Lee (2001:76) suggests that overgeneralization refers to how the learners overgeneralize the knowledge of the second language (e.g. structures) they know, however, sometimes these generalizations are incorrect. For example, early stage learners overgeneralize the apparent rule of adding -s to form plurals and will talk about foote and manes (Yule 1996:182). For Chinese students, as the English articles is new knowledge that only exists in L2, they may overgeneralize to use them, for example, to overuse the definite article the in contexts while the contexts require other kinds of articles.

In addition, transfer of training is “[t]he influences that arise from the way a student is taught” (Odlin 1989:18). On the one hand, due to the fact that there is no article system in Chinese, the teachers in schools of China will put more emphasis on how to use the indefinite article a/an and the definite article the. On the other hand, the indefinite article a/an can sometimes be equated to the number “one” in Chinese. Therefore, compared with the indefinite article, the teacher may take more time emphasizing on the use of the, and finally the students may correspondingly pay more attention to learning the definite article the and tend to use it more often than a/an and Ø.

2.6 Teaching and learning the English articles

Researchers have done much research about the second language acquisition of the English articles. Miller (2005: 80) claims that “[m]ost of ESL students have trouble with the articles”. She argues that the English articles system causes many problems for learners who learn English as a second language or as a foreign language, particularly when there is no equivalent article system in their first language. She conducted an empirical study on 41 non-native English learners, among which 31 were from a Chinese speaking background (2005:83). She designed two exercise tasks for the participants in order to help the students to work out the rules of how to use correctly use articles by themselves via doing the exercises. Finally, she discovered that even for the advanced learner, the mastery of the use of English articles is still not enough and improvement in this area is still possible and necessary (2005:84).

Zobl (1982) conducted a study comparing the acquisition of the English definite article by a Chinese-speaking child and a Spanish-speaking child. In the study, Zobl identifies that in the early stage, the definite article the is seen as a form which serves the function of the use of this,
because in Chinese there is no article system. It is noteworthy that when a native English speaker talked to the Chinese-speaking child, including the determiner this in his or her utterance, it tended to remain in the child’s speech. If the utterance of the native speaker included the definite article the, the child would like to leave out the article or change it to this when repeating what the native speaker said.

Robertson (2000:135) considers that Chinese learners have difficulties in the English article system, due to the fact that the Chinese language does not have functional equivalent structures of the English articles. The learners tend to omit the article where native speakers of English would use one. Robertson conducted an experimental investigation of 18 Chinese learners of English, using a referential communication task to elicit their instances of variable use of the definite and indefinite articles. He discovered that they achieved an accuracy rate of 78% in contexts which require a or the. He argues that the Chinese learners tend to use ‘this’ and number ‘one’ to instead of using the definite article the and the indefinite article a/an respectively, which is because of the first language transfer.

Yamada and Matsuura (1982) conducted an investigation of two groups of Japanese adult learners who were different in language proficiency, intermediate and advanced. Japanese language has no article system. They discovered that overall accuracy rates were about 70%, with little variance between the two proficiency levels (1982:50). The results indicate that both the two groups of learners thought that specific reference is easier to comprehend than non-specific (1982:61). It was very common to see that the subjects used the zero article Ø in place of the definite the. They suggest that learners should be taught and required to pay more attention to the article system so that they can improve their mastery of the English articles (1982:61). In addition, Yamada and Matsuura claim that one of the reasons for incorrectly using the English articles is that the learners “use articles almost randomly”.

Zhu Yeqiu (2003:206) conducted an investigation of the acquisition of the English articles of Chinese university students. His participants were 48 students in Grade 1 and 48 students in Grade 3. All of them took a designed test and some of them also attended an interview after the test. He discovered that both of the two groups of students could only achieve low average
accuracy rates in using English articles. He thinks the students’ abilities to correctly use the articles do not correspond to their grades, because Grade 3 students did not have any advantage over Grade 1 students in terms of the average accuracy rate. In addition, most of them seem to do best in using the indefinite article a/an, followed by using the definite article the, and last comes the zero article Ø. He also argues that students in general use articles randomly, especially when they do not know clearly which one should be chosen. This also reflects how they lack knowledge of the use of English articles and their acquisition of the English articles is unsteady.

Some teachers even believe in that English articles are difficult to acquire because no formal rules can be taught (Miller 2005:81). However, Master (1997:216) suggests that “formal instruction does have a positive effect”, and many linguists and educators still try to give as clear rules as possible for how to use the English articles.

### 2.7 The present situation of teaching and English articles in China

Ten years ago, Chinese students were taught English in junior middle school, and English articles were taught in the first year at that time. Nowadays, the children first come into contact with English articles in primary schools, but their systematical learning about English articles still takes place in Grade One in junior middle high school. Unfortunately, knowing how to use English articles will not be taught again to reinforce the mastery of English articles after they have been taught in Grade One in junior middle schools.

In addition, as articles are function words that are assumed not to have much effect on the meaning of a sentence, the teacher will not correct them in the students’ utterance. One way to reinforce the knowledge about English article is that the students sometimes come across multiple-choice tasks about using English articles in a certain test.

Although the usage of articles will be tested, the students still cannot fully acquire the usage of English articles. There are three reasons. First, the usage of English articles is too complicated (Miller 2005:80). Second, the tasks about the usage of English articles only cover five points of the whole score or even only one or two points if the whole test is 100 points. Due to the low occupancy rate of the score, the accurate use of English articles does not attract the students’ and
the teachers’ attention. Third, the syllabuses for English courses in Chinese schools, no matter junior middle schools or senior middle schools, have no specific emphasis on the use of English articles (The syllabuses are listed in the reference list in Chinese). For example, when the article is under the frame of grammar that should be acquired, the syllabus only states that the students should acquire the general usage of English articles. When the articles are listed in the vocabulary, the articles will be listed separately according to their first letter, and the simple meaning is given in Chinese. For example, the meanings under the word *a/an* are “1. to name one of countable nouns; 2. to name one member in a group; 3. to name any one of a particular group” (translation of the syllabus for senior middle school students). All of the above constructs the present situation of teaching and learning English articles in China, and they may affect the acquisition of the English articles for students in schools and universities.

3. Analysis and Discussion

In this part, all of the results of the test are calculated and presented. The discussion and analysis are carried out according to the theories elaborated on in chapter 2. At first, the results are analyzed in general, and then all the errors will be categorized into three types. Finally, possible underlying reasons that may influence the article choice will be discussed. Based on the results and analysis, related didactical suggestions will be put forward. In this chapter, all the examples are given the correct answers in round brackets behind the gaps.

3.1 Major findings

After all the test answer sheets were collected, Excel 2003 was used to calculate all the results. The average accuracy rates of using the articles for the three groups are presented in table 2.

<table>
<thead>
<tr>
<th>Group number</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average accuracy rate of the test (%)</strong></td>
<td>60.78 %</td>
<td>52.41 %</td>
<td>70.95 %</td>
</tr>
</tbody>
</table>

The results in this table seem to clarify the first aspect of the aim of this study. It demonstrates that most Chinese students make errors and have difficulties using English articles no matter
university students or junior middle school students. This finding is similar to the findings of Zhu Yeqiu (2003) (cf. section 2.6). He discovered that both Grade 3 and Grade 1 university students achieved low scores in the test testing the use of English articles. In this table, it is clear to see that the university students (group 3) do the best out of all three groups. The junior middle school students (group 1) achieve second middle place. The performance of the senior middle school students (group 2) comes last, with an accuracy rate of only 52.42%, and this is the lowest among the three groups in the test.

Overall, the performance of all three groups is not satisfying, and the highest accuracy rate is only 70.95%, which shows that even the university students are still far from fully acquiring the use of English articles. There is one point worth noticing, namely that the accuracy rates of the three groups of students do not increase according to the grades they are in. Both group 1 and group 3 students do better than students in group 2 in terms of the average rate. Therefore, the result possibly indicates that the acquisition of English articles of Chinese students is a fluctuating process. The result further proves the findings of Zhu Yeqiu (2003). He argues the students’ abilities to correctly use the articles do not correspond to the grades they are in, and the acquisition seems to be an unstable process.

In addition, the performances of all three groups of students vary when using different kinds of articles. The accuracy rates of using articles for each group are presented in following three tables:

Table 3: The accuracy rates of using articles for Group 1 students

<table>
<thead>
<tr>
<th>Type of article in the tasks</th>
<th>a/an</th>
<th>Ø</th>
<th>The</th>
</tr>
</thead>
<tbody>
<tr>
<td>The accuracy rates of using the articles of Group 1</td>
<td>72.50 %</td>
<td>34.06 %</td>
<td>70.33 %</td>
</tr>
</tbody>
</table>

The results in table 3 indicate that the group 1 students do best when the gaps in this test need to be filled in with the indefinite article a/an. The accuracy rate of using the indefinite article is about 72.50%, which is above the average accuracy rate (60.78%) for the whole test (cf. table 2). In addition, the accuracy of the use of the definite article the is 70.33%, which is very close to the rate of using a/an, and also higher than the average accuracy rate of the whole test for group 1.
However, they achieve the lowest accuracy rate of using the zero article Ø, with only 34.06%. This can also be analyzed from another angle in that most students in group 1 fill in the gaps with the or a/an, when the gaps actually require the zero article Ø.

The following table displays the accuracy rates of using three kinds of articles for group 2 students who are studying in the senior middle school:

<table>
<thead>
<tr>
<th>Type of article in the tasks</th>
<th>a/an</th>
<th>Ø</th>
<th>The</th>
</tr>
</thead>
<tbody>
<tr>
<td>The accuracy of using the articles of Group 2</td>
<td>73.33 %</td>
<td>26.88 %</td>
<td>57.67 %</td>
</tr>
</tbody>
</table>

Table 4 reveals that group 2 students also do best in the gaps that require the indefinite article a/an. The percentage of that is 73.33%, which is obviously higher than the accuracy rates of using the other two kinds of articles. The accuracy rate of using the definite article the takes second place and finally comes the accuracy rate of using the zero article Ø. Table 2 shows the average accuracy rate of the whole test for group 2 students is 52.41%. Although the accuracy rates of using the and a/an are higher than the average rate of the whole test, the low score they achieve in the zero article tasks results in their low average accuracy rate of the whole test.

As for group 3 students who study at university, table 5 displays their accuracy rates of using three kinds of articles.

<table>
<thead>
<tr>
<th>Type of article in the tasks</th>
<th>a/an</th>
<th>Ø</th>
<th>The</th>
</tr>
</thead>
<tbody>
<tr>
<td>The accuracy of using the articles of Group 3</td>
<td>74.58 %</td>
<td>68.13 %</td>
<td>71.00 %</td>
</tr>
</tbody>
</table>

The accuracy rates of using the three kinds of articles for group 3 students seem very close to each other. They achieve an accuracy rate of 74.58% in the gaps which require the indefinite article a/an, a 71.00% accuracy rate in using the definite article the, and a 68.13% accuracy rate in using the zero article Ø. Comparing the three accuracy rates with the average accuracy rate of the whole test for group 3 students, which is 70.95% (see table 2), we can clearly see that group 3
students perform almost equal in using the three kinds of articles, but the accuracy rate of using the zero article Ø still comes last.

Having analyzed the three groups of participants separately, all the accuracy percentages are put together in table 6 so that a comparison between the different groups can be made.

Table 6: The accuracy rates of using articles for the three groups of students

<table>
<thead>
<tr>
<th>Type of article</th>
<th>a/an</th>
<th>Ø</th>
<th>the</th>
<th>Average accuracy rate of the test (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The accuracy rates of using</td>
<td>72.50%</td>
<td>34.06%</td>
<td>70.33%</td>
<td>60.78 %</td>
</tr>
<tr>
<td>articles of Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The accuracy rates of using</td>
<td>73.33%</td>
<td>26.88%</td>
<td>57.67%</td>
<td>52.41 %</td>
</tr>
<tr>
<td>articles of Group 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The accuracy rates of using</td>
<td>74.58%</td>
<td>68.13%</td>
<td>71.00%</td>
<td>70.95 %</td>
</tr>
<tr>
<td>articles of Group 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in table 6 indicate group 3 students perform best in the whole test and achieve a relatively high score among the three groups, because they are advanced English learners in China. However, it seems unexpected and thought provoking that the senior middle school students (group 2) get the lowest average accuracy rate in the test. The average accuracy rate for group 2 is 52.41%, which is 8.37% lower than that for group 1 and 18.54% lower than that for group 3 students. The results for group 2 students provide good evidence for further confirming that the acquisition of the English articles of students in China seems to be an unstable process. In addition, the accuracy rates of using the and Ø seem also to indicate the acquisition of English articles is unsteady, because both group 1 and group 3 students do better than group 2 students in terms of using these two kinds of articles. In other words, it seems that Chinese students may acquire and use English articles better when they study in the junior middle school, but then their ability of correctly using articles seems to decline in the senior middle school. However, their ability of using articles seems to recover again when they move up to higher grades, for example, in universities.

As for the accuracy rates of using the indefinite article a/an, the results show that the three groups of students perform more or less the same when applying the indefinite article. Overall accuracy rates of using the indefinite article is above 70%. The group 3 students achieve the highest
accuracy rate of 74.58%, but only 1.25% higher than that of group 2 students and 2.05% higher than that of group 1 students. It seems that the students’ ability of precisely using the indefinite article keeps stable and improves little when they move up to higher grades.

As for the accuracy rates of using the zero article Ø, the table displays that all of the three groups of students achieve the lowest scores among all three kinds of article use. The highest accuracy percentage is 68.13% and the lowest is only 26.88%, which is unbelievable and far from expectation, achieved by group 2 students. Group 1 students also get a low accuracy rate, only 34.06%.

As for the accuracy rates of using the definite article the, the results reveal that group 1 and group 3 students perform more or less the same. However, it is a striking contrast that group 2 students achieve the lowest rate among the three groups, which is 13.33% lower than that of group 3 and 12.66% lower than that of group 1 students.

In addition, there are three other things worth noticing. First, the overall accuracy rates of using the indefinite article a/an are all above 70%, with little variance between the three proficiency levels. Second, the order of accurately using articles for all of the three groups of students from a high accuracy to a low accuracy is a/an > the > Ø. To some extent, the results prove the findings of Zhu Yeqiu (cf. section 2.6). He discovered in his study that the university students did best in using the indefinite article, followed by the use of the definite article, and last comes the zero article. Third, group 1 and group 2 students achieve low scores in the blanks that require the zero article Ø, while the university students in group 3 seem to master the zero article quite well. The possible reasons for these phenomena are discussed in connection with the following analysis.

3.2 Types of errors of using articles

In this section, all the errors in the results are categorized into three kinds: omission of articles, oversuppliance of articles, and confusion of articles. The analysis below is carried out based on the categories.
3.2.1 Omission of articles

Omission of articles refers to when a certain blank is filled with Ø by the test takers, but actually the indefinite article a/an or the definite article the is required. For example, in the task c (see appendix): What is Ø (the) sex of your baby? --It’s Ø (a) boy! (The articles in the round bracket are the correct answers). The total number of errors of omitting articles is summed up according to their group number.

Table 7: The total number of error instances of omission of articles

<table>
<thead>
<tr>
<th>Groups</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The total number of omission of articles</td>
<td>89</td>
<td>120</td>
<td>154</td>
</tr>
</tbody>
</table>

The results in this table are interesting: the higher grades the students are in, the more errors they make in omitting the articles. We can discover that the university students in group 3 make the greatest number of errors of omission. They make 154 errors (7.7 errors on average) in omitting articles when the blanks actually require a/an or the. The performance of group 2 students is in the middle place and they make 120 errors (6 errors on average). Compared with these two groups, group 1 students make the fewest errors — 89 errors (4.45 on average), which are 31 less than group 2 and 65 less than group 3.

However, there is one point worth noticing. It is impossible to tell whether the students think Ø is the correct answer for a certain blank according to their knowledge or they just randomly fill in Ø without knowing why, since in both situations, they fill Ø in that blank. Thus, we need to connect the numbers of omission of articles with their accuracy rates of using the zero article (cf. table 6 in section 3.1). Results in table 6 show that both group 1 and group 2 students get low scores in using the zero articles, for they only achieve accuracy rates of 34.06% and 26.88% respectively. Meanwhile, group 3 students reach the highest accuracy rate among the three groups, which is 68.13%.

This phenomenon seems closely related to their errors of omitting articles. To group 1 and group 2 students, low accuracy rates of using the zero articles means that they possibly do not clearly know which kind of context requires the zero article Ø, since they fill the other two kinds of
articles when the gap requires Ø. Their less errors than those of group 3 in omitting articles may possibly indicate they tend to use the other articles more often in order to avoid to often use the zero article Ø. The transfer of training may influence this (cf. section 2.6), because when they receive the teaching or training from their teachers, they are asked to pay more attention to the use of the definite article the and the indefinite article a/an which are absent in their L1.

As for group 3 students, they reach a relatively high accuracy rate of using the zero article, however, they, too, have a considerable number of omitted articles, about 7.7 on average. This result reveals that also group 3 students do not master the use of the zero article well, because they seem more often to use the zero article than a/an and the, and it is possible that they correctly fill some blanks with the zero article Ø without knowing the reasons for doing so. In a word, most students in these three groups cannot correctly use the zero article and may not clearly know the rules of how to use the zero article.

3.2.2 Oversuppliance of articles

Oversuppliance of articles refers to cases where a certain blank is filled with the indefinite article a/an or the definite article the by the test takers, however in fact, the blank requires the zero article Ø. For example, in task d (see appendix): “[I] always drink the (Ø) water with my meals”, the gap requires the zero article Ø but the test taker fills in the. The total numbers of errors of this type for three groups are displayed in table 8.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The total number of oversuppliance of articles</td>
<td>211</td>
<td>242</td>
<td>102</td>
</tr>
</tbody>
</table>

The results in table 8 display that group 2 students make the largest number of errors of oversuppliance, and group 1 students make 211 errors, so they form the middle level. Group 3 students make relatively fewer errors than the other two groups, 102, which is a half of the errors made by each of the other two groups. On the one hand, the results indicate that most students in the three groups do not exactly know which kind of context needs the zero article Ø, because of
their great number of errors of this type. On the other hand, they also do not clearly know about
the use of the other two kinds of articles, because they overuse them. Thus, this also provides
evidence that the students have difficulties using all three kinds of articles.

However, oversuppliance of articles can be divided into two types in order to see which kind of
article is incorrectly used more often in the context which actually requires the zero article Ø:
first, overusing the indefinite article a/an to replace Ø; second, overusing the definite article the
to replace Ø. The numbers for these two types of errors are listed in the following table 9:

Table 9: The number of error instances of different types of oversuppliance

<table>
<thead>
<tr>
<th>Types of overuse</th>
<th>Groups</th>
<th>overuse a/an instead of Ø</th>
<th>overuse the instead of Ø</th>
<th>Total number of oversuppliance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group 1</td>
<td>75</td>
<td>136</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td>Group 2</td>
<td>81</td>
<td>161</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>Group 3</td>
<td>20</td>
<td>82</td>
<td>102</td>
</tr>
</tbody>
</table>

Based on the results in table 9, we can discover that most students in the three groups are more
often to overuse the rather than the indefinite article when the gap actually needs the zero article Ø. The numbers of error instances of overusing the for both group 1 and group 2 are almost twice as many as the number of errors of overusing a/an. Moreover, the number of error instances of overusing the of group 3 students is four times more than the other type. This forms a striking contrast between the two types of oversuppliance errors. This is possibly because of the effect from transfer of training. As the indefinite article a/an sometimes can be equated to the number “one” in Chinese while the definite article has absolutely no equivalent in Chinese, teachers tend to put more emphasis on the definite articles the than the indefinite article when teaching the articles. Therefore, students correspondingly pay more attention to learning the definite article and more often use the definite article the.

In addition, comparing table 6 with table 9, there are some other findings. In table 6, the results show that the accuracy rates of using the indefinite article of the three groups is 72.50%, 73.33% and 74.58% respectively. In table 9, the numbers of errors of overusing a/an errors for three
groups are 75, 81 and 20 respectively, which means 3.75, 4.05 and 1 errors on average. Such relatively high accuracy rates and few errors on average demonstrate that the students acquire the use of the indefinite article well and know comparatively well the kind of context in which a/an should be used.

On the other hand, the accuracy rates of using the of the three groups are 70.33%, 57.67% and 71% respectively. However, the numbers of instance of overusing the are 136, 161 and 82, which means 6.8, 8.05 and 4.1 on average. To some extent, such relatively high accuracy rates of using the, but more errors of overusing it, may demonstrate two points. First, these students know some rules about the use of the in different kinds of contexts, but they may still not know all the rules. This goes against the suggestions of Yamada and Matsuura (1982) that the learners “use articles almost randomly” (cf. section 2.6). Second, they may first choose the definite article when they are not sure which article is the correct one. This is possibly because of overgeneralization of the use of the definite article and transfer of training. One the one hand, they may overgeneralize the use of the in some contexts, which actually need the other two kinds of articles. On the other hand, affected by the transfer of training, they may prefer to choose the when they have no idea about which article is the correct one. This will be discussed later in section 3.5.

3.2.3 Confusion of articles

Confusion of articles refers to the confusion between the definite article the and the indefinite article a/an. For example, the students choose the to fill in the gap when the correct answer is a or an [e.g. task r: She owns the (an) enormous house in Pasadena], or they choose the indefinite article a or an when the correct answer is the [e.g. task k: A man knocked on my door. A (The) man was bleeding]. The total numbers of errors of confusing the articles for three groups are listed in table 10.

Table 10: The total number of error instances of confusion of articles

<table>
<thead>
<tr>
<th>Groups</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The total numbers of confusion of articles</td>
<td>155</td>
<td>190</td>
<td>81</td>
</tr>
</tbody>
</table>
We can discover that all three groups make errors of confusion of articles, no matter junior middle school students or university students. Group 2 students make the most errors of the three groups, which are 190 errors (9.5 on average). Group 3 students make the fewest errors, only 81 and less than half of these of group 2. The results possibly indicate that the confusion between the and a/an more commonly happens in the relatively low proficiency levels of students rather than among advanced learners. To some extent, that also reveals that the students do not clearly know the boundary for when a/an or the should be used.

However, table 10 is not enough to describe the situation. Confusion of articles is divided into two types in order to see which type of confusion happens more often. The numbers of error instances of different types of confusion are listed in the following table:

<table>
<thead>
<tr>
<th>Groups</th>
<th>Use a/an instead of the</th>
<th>Use the instead of a/an</th>
<th>Total number of confusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>114</td>
<td>41</td>
<td>155</td>
</tr>
<tr>
<td>Group 2</td>
<td>159</td>
<td>31</td>
<td>190</td>
</tr>
<tr>
<td>Group 3</td>
<td>54</td>
<td>27</td>
<td>81</td>
</tr>
</tbody>
</table>

We can clearly see that the instances of misusing a/an to replace the are far more than that of misusing the when the gap actually requires a/an. Group 2 students make errors of misusing a/an instead of the five times more than errors of using the instead of a/an. All of the three groups make more errors in misusing a/an instead of the, which may indicate that students are more often to use a/an in contexts, which require the. In addition, the number of instances of misusing the instead of a/an are reduced, when the students move into higher grades. These two findings show that the students know better what kind of contexts need a/an because fewer errors of confusion are made when the gaps require a/an. The results in table 6 (see 3.1) also indicate that all of the three groups achieve a relatively high accuracy rate in using a/an.

However, if the omission of articles is seen as overusing the zero article, incorrect use of a seen as overusing the indefinite article and use of the to replace other two kinds of articles as overusing the, another table can be constructed. By connecting table 11 with table 7 and 9, table 12 is displayed as follows:
Table 12: The number of errors of overusing the three articles

<table>
<thead>
<tr>
<th>Types of errors</th>
<th>Overuse Ø</th>
<th>Overuse a/an</th>
<th>Overuse the</th>
<th>The total number of errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>89</td>
<td>189</td>
<td>177</td>
<td>455</td>
</tr>
<tr>
<td>Group 2</td>
<td>120</td>
<td>240</td>
<td>192</td>
<td>552</td>
</tr>
<tr>
<td>Group 3</td>
<td>154</td>
<td>74</td>
<td>109</td>
<td>337</td>
</tr>
</tbody>
</table>

The results in this table show that all of the three groups of students make a great number of errors while choosing articles. This provides evidence for the suggestion of Miller (2005:80) that “most of second language acquisition students have trouble with the articles” (cf. section 2.6). The performance of group 3 is just as expected, making fewer errors in total than the other two groups, since they are advanced English learners. However, it seems that they are more likely to overuse Ø than the other two kinds of articles. Moreover, they more often overuse the than a/an. The results also demonstrate the argument of Miller (2005:84) that even advanced learners do not clearly know the use of English articles and they still need to improve (cf. section 2.6).

In addition, overusing the three kinds of articles of group 3 can be arranged in an order from a high frequency to a low frequency: Ø > the > a/an. In other words, this means they are more often to use the zero article Ø. This result can be interpreted as that they are possibly more affected by their first language transfer than affected by the transfer of training. Firstly, the Chinese students have no further education about the use of articles after they have been taught the articles in the junior middle school (cf. section 2.7), thus, the longer time since they first learned the articles, the more was forgotten by them. Therefore, they may make use of the knowledge in L1 to overuse the zero article Ø. Secondly, the teachers in university are unlike the teachers in middle school, who pay attention to reinforcing the knowledge of using articles for students. The university teachers will not correct the students’ errors in their utterance as long as the errors do not influence the understanding of communication. Correspondingly, the students pay little attention to using articles, and tend to omit the articles in their utterance.

In addition, group 2 students seem more frequently to overuse the indefinite article. According to the table 12, their frequency of overusing the three kinds of articles can be arranged in an order from a high to a low: a/an > the > Ø. This is because they are more affected by transfer of training rather than affected by L1 transfer. As the middle school teachers will sometimes correct their
use of articles and the tasks in English test sometimes are testing the use of English articles, thus, the students will pay more attention to the use of the and a/an.

Third, group 1 seems similar to group 2 in terms of the order of frequency of overusing the three kinds of articles from high to low: a/an > the > Ø. Moreover, they make fewer errors in overusing Ø than group 2 students, which may possibly indicate that they may know how to use the zero article better than group 2 students.

Finally, the discussion in this section further demonstrates that all of the three groups of students have difficulties using the English articles, and they make errors in every type. On the one hand, the university students (group 3) seem to acquire the indefinite article a/an best, but tend to overuse the zero article. On the other hand, both group 1 and group 2 students seem to more often use a/an and the. The acquisition of English articles of group 3 students is possibly affected by L1 transfer, while group 1 and group 2 students are influenced by the transfer of training and teaching in school. This will be further discussed in section 3.5. Based on the discussion above, students appear to know quite a few rules about using articles in some kinds of contexts, but they do not clearly know all the rules. The following three sections are discussing possible underlying reasons for incorrectly using articles.

3.3 The effect of English nouns

According to Collins (2005), there are mainly six types of English nouns. From table 1, we can see that different types of nouns require different ways of using them. For example, countable nouns have plural forms and need determiners, and uncountable nouns have no plural forms and usually do not need determiners in front of them. As the English article is one kind of determiners, choosing which kind of article to use is sometimes greatly affected by the noun that the article is attached to. In the following, the analysis continues by discussing the tasks in the test.

In the test, many tasks test the article use in front of countable nouns. To avoid discussing all tasks about this type, some typical examples are selected and analyzed here. Countable nouns have two forms, the singular form and the plural form (cf. section 2.2). Both a/an and the can be used together with the singular form, while only the and Ø can be used before the plural form.
Therefore, it is obvious to see when the students use a/an before the plural form. There are seven tasks testing the use of articles in front of the plural form. The numbers of error instances made by the three groups of students are listed in the following table:

<table>
<thead>
<tr>
<th>Gap number</th>
<th>Groups</th>
<th>Gap 10</th>
<th>Gap 15</th>
<th>Gap 25</th>
<th>Gap 28</th>
<th>Gap 37</th>
<th>Gap 51</th>
<th>Gap 58</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap 10</td>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>14</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Gap 15</td>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>2</td>
<td>13</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Gap 25</td>
<td>Group 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

In order to discuss the result conveniently, the gaps with the gap numbers and the nouns after them are listed here: _10_ (the) trees, _15_ (Ø) cigarettes, _25_ (Ø) bottles of vodka, _28_ (Ø) copies of rare books, _37_ (Ø) large, catlike tracks, _51_ (Ø) bands of, and _58_ (Ø) human hunters. It is interesting that no student filled in the indefinite article in gap 10 and 15, which may show that they know a/an should not be used in front of the plural form. However, several students still use a/an in front of plural nouns in the rest five gaps. Gap 37 seems to be the most difficult for the students, because 14 students in group 1 and 13 students in group 2 made errors in this gap, and even five university students chose a/an in that gap. Native speakers may think it is very easy to avoid using a/an in front of a plural noun as long as they notice the plural form marker ‘-s’. This may indicate they do not care about article use in daily life. In addition, as nouns have no plural forms in Chinese, the students are not sensible to the plural form of nouns. Due to the L1 transfer, they make errors using a/an in front of a plural noun.

Second, the test also tests the use of English articles in front of uncountable nouns. It is illustrated in the section 2.2 that uncountable nouns are usually used without a determiner. However, according to situation D in section 2.1.3.1, the definite article the can be used to refer back to information mentioned above. In that way, the uncountable nouns can be used with the definite articles, if the noun is mentioned for a second time or more than twice in a text. There are six gaps related to uncountable nouns. The number of instances of using the articles before uncountable nouns is displayed in table 14:
Table 14: The number of errors of using articles in front of uncountable nouns

<table>
<thead>
<tr>
<th>Gap number</th>
<th>Gap 5</th>
<th>Gap 23</th>
<th>Gap 46</th>
<th>Gap 52</th>
<th>Gap 53</th>
<th>Gap 56</th>
<th>In total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>2</td>
<td>6</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>Group 2</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>3</td>
<td>13</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>34</td>
</tr>
</tbody>
</table>

These gaps are displayed here with the gap numbers and the contexts around them:
‘drink 5__ (Ø) water’, ‘23__ (Ø) money’, ‘46__ (a) favorite food’, ‘52__ (Ø) great courage’, ‘53 (Ø) strength, and 56__ (the) courage and strength’. The results indicate that the students in the three groups have difficulties choosing articles before uncountable nouns. Group 2 students make more errors than the other two groups. The zero articles are used to express generic uncountable concepts (see section 2.1.3.3), thus, gaps 5, 23, 52 and 53 all require the zero article, since all of them are generic concepts.

However, gap 46 and 56 are different from these four gaps. Although the word food is an uncountable noun, it can be countable sometimes, if people talk about one particular kind of food. In addition, from the context around gap 46, we can discover that kind of food is first mentioned. According to situation I in section 2.1.3.2, a/an is used to mention things for the first time, thus, the correct answer in gap 46 is a, which means a kind of food and the kind of food is mentioned for the first time. By contrast, gap 56 is quite opposite to gap 46. Both of the words strength and courage are uncountable nouns just like in gaps 52 and 53, however, the courage and strength after gap 56 are mentioned for the second time. Therefore, gap 56 needs the definite article, which means that the information has been mentioned before, in the context around gaps 52 and 53. The result in table 14 shows that quite a few students cannot correctly use articles in front of uncountable nouns.

Third, there are six tasks testing the article use before singular nouns. They are gaps 3, 8, 9, 13, 16, 38 (3__ (the) sex, 8__ (the) diameter of 9__ (the) moon, 13__ (the) evening sky, 16__ (the) air in the city, 38__ (the) ground). The singular nouns refer to the unique person or thing in the world or the thing which people can only mention one at a time (see section 2.2). Situation B in section 2.1.3.1 also explains that the is used to refer to people or thing which is unique in the
world. Therefore, the should be included before the singular nouns. The number of instances of these gaps is displayed in the following table:

<table>
<thead>
<tr>
<th>Groups</th>
<th>Gap 3</th>
<th>Gap 8</th>
<th>Gap 9</th>
<th>Gap 13</th>
<th>Gap 16</th>
<th>Gap 38</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Group 2</td>
<td>6</td>
<td>9</td>
<td>0</td>
<td>9</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>15</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

As moon, sky, air and ground are all unique things in the world, they require the definite article the in front of them. On the other hand, sex and diameter are concepts which people can only mention one at a time. Since everybody only has one kind of sex, and there is only one kind of diameter of the moon, gaps 3 and 8 also require the. However, most of the three groups of students do not do well in gap 13. Some students fill in the indefinite article an, for they think ‘an evening sky’ is one kind of sky just like the food in gap 46. Some students fill in Ø, for they think sky is an uncountable noun. These show that they know a few rules about using articles in front of an uncountable noun, but perhaps they do not clearly know about the characteristics for uncountable nouns, since they cannot tell whether sky is uncountable. However, it is still good to see some students fill in the gap 13 with an, which means they have noticed the word evening begins with a vowel and should be used with an rather than a. To some extent, this phenomenon shows that these students have acquired the rule that an should be used in front of a vowel.

Fourth, there is only one gap of articles choice which may be affected by the plural nouns: gap 37 (Ø) large, catlike tracks). Collins(2005) explains plural nouns as the nouns which are thought to be plural rather than singular, so these nouns only have plural forms, for example goods, fruits, tracks and so on. Gap 37 is just a good example to illustrate this. Although the word track is a countable noun, it is thought to be more plural rather than singular when it refers to the trace made by animals. In addition, the tracks are not specifically referred to particular tracks and the reader is assumed not to know any details about these tracks (cf. [-definite, -specific] in section 3.4), thus, the zero article Ø is the appropriate answer for this gap.
Fifth, the article choices in gaps 7 and 43 are affected by collective nouns (7 (the) army, 43 (the) cat family). According to Collins (2005), collective nouns refer to a group of people or things. Army and family are in the list of common collective nouns (Collins 2005: 17). The definite article the is appropriate for both gaps 7 and 43, because the army can refer to the whole army which include the people and organizations in the army and the cat family refers to the whole big cat family which include all kinds of cats, tigers and so on. The errors made in these two gaps are divided in to two types, which are displayed in the following table:

<table>
<thead>
<tr>
<th>Groups</th>
<th>Gap 7 omit the</th>
<th>Gap 7 use a/an instead of the</th>
<th>Gap 43 omit the</th>
<th>Gap 43 use a/an instead of the</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Group 2</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Group 3</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Comparing the results between gaps 7 and 43, we can see that students make more errors in gap 43 than in gap 7. It seems that the chance of omitting the or using an instead of the in gap 7 is almost the same. In group 1, three students omit the in front of the word army and another three students use a/an instead. In group 2, five students make errors in these two types respectively, which means only 50% students in group 2 give the right answer. They possibly either choose the wrong answer for they do not know which article should be used in front of collective nouns, or they actually do not know the definition of collective nouns and whether a collective noun requires an article before it or not. The case seems the same for gap 43, for many students overuse a/an in that gap.

Gaps 36 and 44 are affected by proper nouns (36 (the) United States, 44 (the) American continent). Proper nouns are names of people or unique things which begin with a capital letter, and sometimes they have a definite article the in front of them. Moreover, according to situation B in 2.1.3.1, the should be used in front of ‘United States’ and ‘American continent’, since there is only one ‘United States’ and only one ‘American Continent’ in the world. The errors made in these two gaps are also divided into two types and displayed in table 17:
Table 17: The numbers of two types of errors in gap 36 and gap 44

<table>
<thead>
<tr>
<th>Groups</th>
<th>Gap 36 omit the</th>
<th>Gap 36 use a/an instead of the</th>
<th>Gap 44 omit the</th>
<th>Gap 44 use a/an instead of the</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>6</td>
<td>0</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Obviously, the students make fewer errors in gaps 36, 44 than in gaps 7 and 43. In table 17, we can discover that only one student among the three groups incorrectly used a/an in front of the proper noun in gap 44. In addition, more students omit the in gap 44 than in gap 36. This is possibly because United States is easier than American continent for students to understand as a unique thing in the world, or the students are possibly just more familiar with the United States, for its high frequency occurrence in their text book.

Finally, the gap 6 in task e seems tricky for the students. As we all know, man is a countable noun, and a countable noun should have either determiners in front of it or plural form ‘-s’ after it. However, the word man in that sentence seems to act as a function of adjectives, just similar to the word tall in the sentence ‘Is your brother tall enough to reach the top of the tree?’ However, in all the dictionaries, man is never used as an adjective. The article choice in this gap should be based on understanding the meaning of man, thus, nineteen students in group 1 make errors in this gap and fourteen students in group 2 and five students of group 3 also make this kind of error.

The discussion in this section shows that the article choice is affected by the noun which the article is directly attached to. If the students cannot figure out the nature of the noun and do not clearly know whether the noun requires a determiner or not, or which kind of articles it requires, they will possibly make errors in choosing the articles. In addition, if the students are unfamiliar with uncommon meanings of some common nouns, it will directly result in their errors when choosing articles in front of those nouns.
3.4 The effect of definiteness and specificity

Both definiteness and indefiniteness are the features of noun phrases in contexts, and they are “the only discourse-related features that underlie article choice” (Hawkins et al. 2009:16). Therefore, the effect of definiteness and specificity will be analyzed in this section.

Definite noun phrases are specific and identifiable in a given context while indefinite noun phrases are not specified and identified in context. In other words, the article choice is affected by whether a noun phrase in a context is specific and identifiable or not. However, one important issue should be identified: noun phrases are different from noun in this study. The effect of the English noun has been discussed in section 3.3. Definiteness and specificity of a noun phrase (which consists of a noun and an article, cf. section 2.3), are usually related to its semantic function in a context, thus, they are actually used to explain the semantic effect of a context for the article choice. The feature of [+definite] refers to whether both of the speaker and the hearer share the knowledge about what is talked about in their discourse, for example, a unique individual. The feature of [+specific] refers to whether the speaker specifies the individual or not. Therefore, there are four kinds of contexts for the noun phrases, which require different kinds of articles.

The definite article the can be used both in singular and plural [+definite] contexts no matter with [+specific] or [-specific] features, and a is only used in singular [-definite] contexts no matter with [+specific] or [-specific] features (Wong 2007:215). Therefore, the first type [+definite, +specific] context only requires the definite article the. Many tasks in the test belong to this type, so the gaps in which at least two groups of the students achieve accuracy rate lower than 50% are used as examples and analyzed here.

(1). These tracks are made by 39 (the) spotted jaguar, 40 (the) greatest hunter of all 41 (Ø) North American animals and 42 (the) largest member of 43 (the) cat family on 44 (the) American continent.

There are two typical gaps — gaps 39 and 43, in which the students achieve accuracy rates lower than 50% in terms of using article in [+definite, +specific] context. All of the three groups of students achieve an accuracy rate lower than 50% in gap 39 and more than half of group 1 and
group 2 students make errors in gap 43. Gap 39 should be filled in the, because ‘these’ seems to specify and identify the tracks. In addition, the ‘tracks’ has been mentioned before and the speaker assumes the hearer knows the existence of the unique tracks. Thus, the definite article the is appropriate in this context.

As for gap 43, due to the ‘largest number’ and ‘cat family’ all refer to the jaguars on the American continent, both the speaker and the hearer already know some information about the referent, therefore, the is correct for that gap. As for gap 39, 39 students fill a in it and 12 students fill Ø in. This is possibly because they cannot get the clue from the context around to know whether both the speaker and the hearer share details about what is talked about. There are also 23 students who fill a in gaps 43 and 10 students fill Ø in that gap, and the reasons for why they do so may be the same as for gap 39.

In addition, there are many other tasks which also belong to the [+definite, +specific] contexts, which are worth noticing:

(2). What is 8 (the) diameter of 9 (the) moon?
(3). Once there were many trees here. Now, 10 (the) trees are gone.
(4). 13 (The) evening sky was really beautiful.

The article choice in gaps 8 and 9 are similar, because the speaker asks this question, assuming the hearer have some knowledge of what is being talked about, because ‘moon’ is unique in the world and the diameter of the moon should also be unique. Moreover, the moon is specified and identifiable in the context, thus, both of gaps 8 and 9 require the. Gaps 3, 7, 18 and 36 are similar to gaps 8 and 9, because the noun phrases in these contexts are all something unique in the world and both the speaker and the hearer have knowledge about it.

In addition, the ‘trees’ after gap 10 seems different from them. ‘Trees’ has been previously mentioned, and both the speaker and the hearer already have presumptions about the existence of these trees, thus, the definite article the is used. The article choice in gap 10 is similar to that in gap 14 (A man... 14 (the) man was bleeding), gap 31 (I ordered a bottle of wine, but 31 (the) bottle of wine...) and gap 47 (...a favorite food. 47 (the) favorite food of the jaguar is ...), because all of the noun phrases have been previously mentioned.
The article choice in gap 13 seems a little different from these two, that the speaker identifies and specifies the noun phrase by adding modifiers and qualifiers around the noun so that the hearer can know clearly about the referent. The article choice in gap 16(16 (the) air in this city) and gap 26 (26 (the) restaurant in which we ate) both belong to this type. Many gaps in the test require using articles in the [+definite, +specific] context, but the students seem to do pretty well in this kind of context, because it only requires the definite article the.

The noun phrases in second kind of context are with features of [+definite, -specific]. There are four typical gaps in this kind of context which the students achieve the accuracy rates lower than 50%. They are gaps 33, 34, 48 and 49.

(5). 33 (the) Jaguar and 34 (the) Wild Pig
(6). 47 (the) favorite food of 48 (the) jaguar is 49 (the) wild pig.

The number of instances of incorrect use of articles in these four gaps is displayed in table 18.

<table>
<thead>
<tr>
<th>Gap number</th>
<th>Gap 33</th>
<th>Gap 34</th>
<th>Gap 48</th>
<th>Gap 49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>omit the</td>
<td>use a/an instead of the</td>
<td>use a/an instead of the</td>
<td>use a/an instead of the</td>
</tr>
<tr>
<td>Group 1</td>
<td>1</td>
<td>15</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>15</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Group 3</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>In total</td>
<td>13</td>
<td>37</td>
<td>14</td>
<td>35</td>
</tr>
</tbody>
</table>

If the students make errors in gap 33, it seems more probable that they will make errors in gap 34, as they did in gaps 48 and 49. Maybe this is because gaps 33 and 34, gaps 48 and 49 are very close to each other. These four gaps should be filled with the, because they are in the [+definite, -specific] contexts. The jaguar and wild pig in gaps 33 and 34 refer to jaguars and wild pigs in general without being specified, and the hearer is assumed to know jaguars and wild pigs are talked in the discourse, and thus the is suitable for these two blanks. As for the blanks 48 and 49, the ‘jaguar’ and the ‘wild pig’ are mentioned for the second time and the hearer is also assumed to know what is being talked of, and thus the definite article the is required.
The noun phrases in [+definite] context only require the definite article the. If the students use other two kinds of articles in this kind of contexts, it indicates that they are unable to figure out whether the speaker specifies and identifies the things talked about and whether the hearer is assumed to know what is talked about from the context. From the results in table 6, we can conclude that their accuracy rates in using the definite article are 70.33%, 56.67% and 71% respectively, which shows that it is still quite difficult for them to tell whether the contexts need a noun phrase with [+definite] feature.

The third type of context is [-definite, +specific] context. Three typical gaps (gaps 22, 30 and 46) are discussed here to illustrate why the students’ performance is not good in this kind of context.

(7). 22 (A) fool though he was, he was clever with money.
(8). John was hired as 30 (a) special assistant to Judge Lee.
(9). Most animals have 46 (a) favorite food. The favorite food…

Gaps 22, 30 and 46 seem tricky for students, since many students make errors here. As for gap 22, there are 14 students in group 1 and 11 students in group 3 filling the definite article the in this gap. They may think that the hearer is assumed to know which person is talked about here, because ‘he’ is used. Therefore, this is a context with [+definite] feature, and the should be filled in. However, the indefinite article a is the correct answer for gap 22. Although the pronoun ‘he’ indicates that both of the speaker and the hearer know clearly who the person talked about is, but the hearer does not know that the person is a fool. Moreover, the speaker specifies that ‘he’ is a fool, thus the noun phrase in this context is with the feature of [-definite, +specific]. Gap 30 is similar to gap 22. As the hearer may not know any detail about John and Judge Lee, the speaker specifies John as one special assistant of Judge Lee, thus, ‘special assistant’ is with the feature of [-definite, +specific].

Many students choose the zero article Ø in gap 46. One reason for them doing so is possibly because they think ‘food’ is an uncountable noun. However, food can sometimes be used as a countable noun to refer to one kind of food (cf. section 2.2). The reason for a as the correct answer is that ‘food’ here is firstly mentioned, and the hearer is assumed to not know the detail about what kind of food, thus the ‘food’ is with feature of [-definite] and a should be used. There
are other gaps which are similar to gap 46, which the noun phrases are firstly mentioned in the context and assumed to be unknown for the hearer, for example, gaps 1, 2, 11, 17, 21 and 55.

The fourth type of context requires a noun phrase with the feature of [ -definite, -specific]. There are many gaps in which the students achieve an accuracy rate of less than 50%. They are gaps 25, 28 and 37, 41, 45, 50, 51 and 58. Some of them are used as typical examples to illustrate why they are weak in choosing articles in this kind of context.

(10). We found 25 (Ø) bottles of vodka in every cupboard.
(11). …jaguar, the greatest hunter of all 41 (Ø) North American animals

All these gaps are similar to each other. Taking gap 25 as an example, since the bottles of vodka are mentioned for the first time, the hearer is assumed to not know the existence of unique bottles of vodka. The speaker also does not specify the bottles of vodka, just mentions them in general, so the noun phrase is with feature of [ -definite, -specific]. In addition, the indefinite article a/an can only be used in the singular [ -definite, -specific] contexts (cf. section 2.4), thus, the zero article is the appropriate answer. As for gap 41, there are 16 students in group 1, 17 students in group 2 and 8 in group 3 all overuse the in this blank. They may possibly think ‘North American animals’ is identified and specified by the speaker, thus, they choose the. However, in fact, the ‘North American animals’ is mentioned for the first time and it is not specified or identified to the hearer, thus, the context requires a noun phrase with the feature of [ -definite, -specific].

The discussion in this section indicates that the students are greatly affected by the context when using articles. They do pretty well in the [+definite, +specific] context, because in this kind of context, both the speaker and the hearer share the same knowledge about the referent, and only the definite article the is required. The students may get low scores when choosing articles in the [-definite] context. It seems difficult for them to figure out when the hearer is assumed not to know detailed information about what is being talked. Therefore, many of them do not perform well in using articles in [-definite] context. This result is similar to the findings of Yamada and Matsuura (1982). They find that their participants think specific reference is easier to comprehend than non-specific (1982:61).
3.5 The effect of language transfer

Language transfer also plays an important role in affecting the use of English articles. According to Odlin (1989:27), when the learners lack the knowledge of the target language, they will fall back on using the language they have acquired. Therefore, if their first language is similar to the second language, positive transfer will occur. Otherwise, negative transfer will happen.

According to Robertson (2000), Chinese students may possibly leave out the English articles a/an or the, because there is no article systems in Chinese. That is to say, the Chinese students may possibly overuse the zero article Ø, because the zero article actually has nothing in form, and it is impossible to distinguish using the zero article from omitting articles. Take group 3 students for example. Table 12 in section 3.2.3 displays that the total number of errors made by them is 337 while 154 instances are about overusing the zero article Ø. Moreover, the result in table 6 reveals that group 3 students achieve a relatively high accuracy rate in using the zero article. All of these provide the evidence that their native language Chinese has an impact on their acquisition of English articles, because the result shows they are more often to use the zero article, which means they more often omit the articles.

Sometimes, the indefinite article a/an is similar to the number ‘one’ in Chinese. In that case, positive transfer seems to occur. The results displayed in table 6 show that all of these three groups do pretty well when the indefinite article is required in the blank. Their accuracy rate of these gaps is 72.50%, 73.33% and 74.58% respectively.

However, group 1 and group 2 students are different from group 3 students, a conclusion based on the results displayed in table 12. They are more likely to overuse the definite article the and the indefinite article a/an. Group 1 students make 366 errors for overusing both the and a/an among the total number of 455, and group 2 students make 432 errors for overusing both the and a/an among the total number of 552. This phenomenon of overusing the indefinite article and the definite article shows that they are possibly under the impact of overgeneralization and transfer of training. There are some typical examples to demonstrate this.

(12) I always drink 5_______ water with my meals.
(13) We found 25_______ bottles of vodka in every cupboard.
(14) ____ copies of rare books should always be preserved.
(15) ____ large, catlike tracks
(16) in ____ bands of
(17) these pigs sometimes even attack ____ human hunters.

According to Lee (2001:76), overgeneralization refers to learners who overgeneralize the knowledge of the second language and use it incorrectly. For Chinese students, they may overgeneralize the use of English articles, especially the definite article and the definite article, incorrectly using them in the contexts which actually require the zero article Ø.

Take gap 5 for an example. Several students fill a or the in it, however, water is an uncountable noun, and usually no articles are required in front of it. In addition, many students fill the indefinite article a in gaps 25, 28, 37, 51 and 58, although it is a kind of basic grammatical knowledge in English that a noun should have either singular indefinite article in front of it or have the plural form -s after it. However, in table 13 in section 3.3, we could discover that many students use the indefinite article a in gaps 25, 37 and 51.

In addition, transfer of training also has an impact on their use of English articles. According to Odlin (1989:18), the students are affected by the way they are taught. Since there is no equivalent of English articles in Chinese, teachers in China will put more emphasis on teaching how to use the indefinite article a/an and the definite article the. On the other hand, as the indefinite article a/an sometimes can be equated to the number “one” in Chinese, the teacher may take more time and put more emphasis on the use of the definite article the, and finally the students correspondingly pay more attention to learning the definite article the and tend to use it more often. However, as the students move into higher grades, teachers will reduce their emphasis on articles. The university teachers rarely correct the errors in the utterance of students, thus the university students may receive less effect from the transfer of training than the other two groups.

The discussion in this section indicates that the students are really affected by their first language transfer and transfer of training when using English articles. Firstly, the acquisition of English articles of Chinese students is affected by negative transfer. Since there is no article system in Chinese, the students are possibly more often use the zero article Ø. This is similar to the finding of Yamada and Matsuura (1982), whose subjects are Japanese students who also have no article
systems in their native language Japanese. They also find the subjects are more often use the zero article Ø in place of the definite the. Secondly, the students also benefit from L1 positive transfer, if the students can find an equivalent to the knowledge in L2. For example, Chinese students benefit from the equivalent between a/an in English and number ‘one’ in Chinese. This is demonstrated by their high accuracy rates in using the indefinite article. However, because of the disparity between the two languages in terms of article system, the students may overgeneralize the use of indefinite article and the definite article. In addition, the transfer of the ways they are taught and trained about English articles also have an effect on the use and acquisition of the English articles.

3.6 Didactical suggestions

Having established a picture of the practical use of the English articles by Chinese students and considered the problems that remain to be tackled, some didactical suggestions are put forward to help the learners improve their use of articles to achieve a higher accuracy, and in the end, to get closer to native-like proficiency in using the articles.

First of all, English articles should be taught to the students in a systematical and continuous way. Based on the analysis in section 2.7, we know that the English articles are only taught in the first year in junior middle schools. After those classes, students will receive no further education about the use of English articles. Therefore, it is hard for the students to improve their ability to correctly use English articles. In addition, we have discovered that most Chinese students have difficulties using the English articles. According to Master (1997:216) “formal instruction does have a positive effect”, thus, a systematical and continuous way of teaching English articles can help them gradually improve their ability to use English articles.

Secondly, the use of English articles should be clearly instructed on according to the features of the English articles. For example, the teacher can carefully explain to students that the indefinite article a/an can only be used in front of the singular form of a countable noun. From the results in table 12 of section 3.2.3, we discover that the university students in group 3 are more likely to overuse the zero article than other two kinds of articles, while the other two groups of students overuse the definite article and the indefinite article. Therefore, as for the university students, the
teacher should emphasize more on the use of the and a/an. As for middle school students, the teacher should balance the emphasis on all three kinds of articles.

Thirdly, the rules of article use should be instructed based on understanding of the categories of English nouns. In section 3.3, the results show that most students do not clearly know what kind of determiner, especially what kind of article, should be attached to a particular noun. Some fixed noun phrases call for the students’ repetition and memory, for example, the United States.

Fourthly, the rules of article use should be instructed together with examples and contexts. Four types of contexts which require different features of noun phrases should be carefully taught so that the students can correctly use the articles according to definiteness and specificity in the discourse. In section 3.4, we discover that most students do better in the [+definite] context but have difficulties choosing articles in the [-definite] context. Thus, the teacher should explain more clearly for the students how to know whether a context is definite or not. Extensive reading should also be required in order to develop the learners’ language sense.

Last but not least, the teacher should help the students to realize the importance of acquiring the English articles and using the English articles. Yamada and Matsuura (1982) also suggest that learners should be required to pay more attention to the article system so that they can improve their mastery of the English articles (1982:61). Most of time, the students make errors in using English articles just because they do not care about the use of English articles, for they think a wrong article will not change much meanings of their utterance. Therefore, students should be required to pay attention to the use of the articles in their discourse. Proper exercises are also needed to check up on as well as to reinforce the learning process. However, measures should also be taken to counteract the effects of training transfer.

4. Conclusion

The present study focuses on the acquisition of English articles among Chinese students. There are three groups of subjects. Group 1 are junior middle school students, group 2 senior middle school students and group 3 university students. Via evaluating the test results, we explore that most Chinese students have difficulties using English articles, and their acquisition of the English
articles seems to be an unsteady process. In addition, the order of correctly using articles of all these three groups is the same, from a high accuracy to a low accuracy: a/an > the > Ø. In other words, most students seem to do better in terms of using the indefinite article a/an. The findings are similar to the findings of Zhu Yeqiu (2003) (cf. section 2.6).

All the errors in this study are categorized into three types: omission of articles, oversuppliance of articles and confusion of articles. The university students in group 3 tend to omit articles and make the largest number of overusing the zero article among the three groups. The senior middle school students (group 2) and junior middle school students (group 1) seem to use the definite article the and the indefinite article a/an more often than the zero article Ø.

Their errors in using English articles are mainly affected by the following five aspects: (1) the different types of nouns that the article is attached to; (2) the effect from definiteness and specificity in discourse; (3) language transfer; (4) overgeneralizations; (5) transfer of training.

Firstly, it is discovered in this study that students will choose the incorrect articles when they do not clearly know the type or character of the noun, which the article is attached to.

Secondly, we also discover that the students make errors when they cannot identify the feature of the noun phrase in context. They seem to do better in the [+definite, +specific] context. This is simply because when both the speaker and the hearer share the same detailed knowledge about what is talked and the speaker clearly specifies and identifies the referent, the context only requires the definite article the. It seems easy for them to figure out this kind of context. In addition, [-definite] context seems more difficult than [+definite] context for students to choose the correct article in, because sometimes the [-definite] feature seems harder than [+definite] feature for students to figure out.

Thirdly, as there is no article system in Chinese, the students are affected by negative transfer from their first language and tend to leave out the articles when the gap requires the definite article the or the indefinite article a/an. The performance of group 3 students provides good evidence for this. They make a great number of errors of overusing the zero article. However,
positive transfer also exists. Group 3 students achieve a relatively high accuracy about 68% in using the zero article when the gap really requires Ø.

Fourthly, overgeneralizations and transfer of training also have impact on the use of English articles for Chinese students. Both group 1 and group 2 students, who can be called learners of early stages, tend to overuse a/an and the rather than overusing the zero article. Firstly, this is possibly because they overgeneralize the use of the definite article and the indefinite article to apply to all kinds of contexts, some of which may only require the zero article. Secondly, transfer of training may also affect them. The teachers usually put more emphasis on teaching the knowledge of English which is different from Chinese, thus, the students will tend to pay more attention to learning the use the definite article and the indefinite article, and to choose them first when they are not sure which kind of article is appropriate for a certain gap.

Based on the analysis and findings, some didactical suggestions are put forward to improve the present learning and teaching situation in China. Students are required to pay more attention to the use of the English articles in their oral English and written work. Teachers should teach the English articles combining them with the knowledge of English nouns, definiteness and specificity in English discourse. All of the didactical suggestions are expected to help the Chinese students improve their correct use of English articles.

Finally, one interesting phenomenon was discovered when analyzing the results (cf. section 3.1), namely that the senior middle school students achieve lower accuracy rates than the other two groups of students in terms of the accuracy rate for the whole test, the accuracy rates of using the definite article the and the zero article Ø. This phenomenon does not directly relate to the aim of the study but it serves as a good source for further study.
References


Appendix

I. Choose the correct article (a, an, the, Ø ) in the following sentences. Mark your answers on the answers on the answer sheet only.

Part I. 请选择合适的冠词 (a, an, the, Ø )，并在横线上填写答案。

a. There is 1_______ orange in that bowl.
b. Carlos is 2_______ student at our university.
c. What is 3_______ sex of your baby? --It’s 4_______ boy!
d. I always drink 5_______ water with my meals.
e. Is your brother 6_______ man enough to join 7_______ army?
f. What is 8_______ diameter of 9_______ moon?
g. Once there were many trees here. Now, 10_______ trees are gone.
h. I would like 11_______ cup of coffee, please.
i. My father earns $25,000 12_______ year.
j. 13_______ Evening(evening) sky was really beautiful.
k. A man knocked on my door. 14_______ Man(man) was bleeding.
l. People who smoke 15_______ cigarettes often get lung cancer.
m. 16_______ Air(air) in this city is not very clean.

n. Einstein was 17_______ man of great intelligence.
o. In this family, 18_______ first child inherits everything.
p. Check 19_______ rearview mirror before you change lanes.
q. Smith was appointed 20_______ chairman of that committee.
r. She owns 21_______ enormous house in Pasadena.
s. 22_______ fool though he was, he was clever with 23_______ money.
t. That was 24 worst storm of 1985.

u. We found 25 bottles of vodka in every cupboard.

v. 26 restaurant in which we ate was quite expensive.

w. This room has 27 length of 12 meters.

x. 28 copies of rare books should always be preserved.

y. If you want to read, why don’t you turn on 29 light?

z. John was hired as 30 special assistant to Judge Lee.

aa. I ordered a bottle of wine, but 31 bottle of wine was too cold.

bb. Dr. Engelberg, 32 physician to Marilyn Monroe, would not comment on her death.

II. Choose the correct article (a, an, the, Ø) in the following paragraph.

Part I. 请选择合适的冠词填空 (a, an, the, Ø), 将答案填写在横线上。（25 分钟）

33 Jaguar and 34 Wild Pig

When hunters visit 35 southwestern part of 36 United States, they often find 37 large, catlike tracks along 38 ground. These tracks are made by 39 spotted jaguar, 40 greatest hunter of all 41 North American animals and 42 largest member of 43 cat family on 44 American continent. 45 most animals have 46 favorite food. 47 favorite food of 48 jaguar is 49 wild pig. 50 wild pigs move in 51 bands of fifteen to twenty. They have 52 great courage and 53 strength in 54 group. I once read 55 story about 56 courage and strength of these wild pigs. 57 story pointed out that these pigs sometimes even attack 58 human hunters.