A Linguistic Analysis of the Written Production of Second Language Learners

The Variation of Article Usage by Adult Chinese learners of English

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Abstract

This study aims to test Robertson’s lexical transfer principle, which posits that Chinese learners use demonstratives (particularly this) and the numeral one as markers of definiteness and indefiniteness. This is tested by analysing Chinese learners’ written production collected from the Spoken and Written English Corpus of Chinese Learners 2.0 (SWECCL 2.0). The purpose is to understand the variation of article usage by adult Chinese learners of English. More specifically, the study examines to what extent articles, possessive and demonstrative pronouns are used in Chinese learners’ English and how definite and indefinite articles are used by the Chinese learners. Findings suggest that Robertson’s lexical transfer principle was corroborated by the present study. In addition, Chinese learners prefer to use demonstrative determiners, the possessive determiner our, and the numeral one to perform the function of marking definiteness and indefiniteness. In particular, the learners try to use the demonstrative determiners that and this in the anaphoric function instead of the definite article, and the demonstrative determiner those is frequently used in the cataphoric function. What is more, the learners use the numeral one as a marker of indefiniteness, and it is also used as a marker
of definiteness in the anaphoric function. Further, the possessive determiner *our* is used as a marker of definiteness in larger situation uses referring to something unique. To this end, the study is able to show that the definite article is used to perform the function of marking indefiniteness, and in some particular contexts the definite article functions as a Chinese specifier in Chinese learners’ English. Also, the indefinite article is frequently used in quantifier phrases but is rarely used in other functions.

There are three main reasons that may explain why Chinese learners use determiners variously. Firstly, the choice of determiners by Chinese learners is influenced by linguistic contexts. Secondly, because of learning strategies, Chinese learners try to ignore the anaphoric function and cataphoric function that they are not yet ready to process in article usage. Thirdly, interlanguage grammar influences the optionality in the use of articles.

**Keywords:** second language acquisition, corpus linguistics, keyword analysis.
Table of Contents

1. Introduction......................................................................................................................7

1.1 Aim and Scope of the Study.........................................................................................8

2. Background.......................................................................................................................10

2.1 Describing and Explaining L2 acquisition.................................................................10

   2.1.1 The Goal of SLA..................................................................................................11

   2.1.2 Interlanguage........................................................................................................11

2.2 Previous Research on Article Usage..........................................................................12

2.3 Definiteness and Indefiniteness in Chinese.................................................................15

2.4 Definiteness and Indefiniteness in English.................................................................18

   2.4.1 The Definite Article............................................................................................18

   2.4.2 The Indefinite Article..........................................................................................20

   2.4.3 Demonstrative Determiners................................................................................22

   2.4.4 Possessive Determiners......................................................................................22

2.5 Description and Summary of Definite and Indefinite NP Environments.....................23
2.5.1 Definite NP Environments........................................................................................................23

2.5.2 Indefinite NP Environments........................................................................................................26

2.5.3 Summary of Definite and Indefinite NP Environments.................................................................26

3. Material..............................................................................................................................................28

4. Method................................................................................................................................................29

5. Results and Analysis..........................................................................................................................31

5.1 Distribution of Definite Determiners, the Quantifier one, and Indefinite Article.........................32

5.2 Categories of Definite and Indefinite Contexts and Their Frequencies in the Corpus..................33

5.3 Analysis of the Concordance Lists of Demonstrative Determiners, Possessive Determiners and the Numeral one..........................................................36

5.3.1 Demonstrative Determiners in Context......................................................................................36

5.3.2 The Numeral one in Context.....................................................................................................42

5.3.2 Possessive Determiner in Context..............................................................................................43

5.4 Variation of Article Usage in Chinese Learners’ English...............................................................45
5.4.1 Definite Article Usage in Chinese Learners’ English.............................................. 45

5.4.2 Indefinite Article Usage in Chinese Learners’ English............................................ 47

6. Discussion.................................................................................................................. 48

7. Conclusion.................................................................................................................. 52

References

Appendix 1 List of Essays Selected from the Corpus

Appendix 2 Data from Robertson (2000) for Comparison

Appendix 3 List of Definite and Indefinite NP Environments from the Selected Essays
1. Introduction

It is well known that the definite and indefinite articles central to English do not exist in the Chinese linguistic system. This means that Chinese learners of English may not have a frame of reference for articles when they write an English essay. According to a study by Rashid, Goh & Wan (2004), many Chinese learners are unaware of the various conditions existing in English that require the use of different articles, including the zero article. The study showed that many Chinese learners always insert a definite article before nouns like “God” and “time”, even though they are considered universal and therefore require no definite article (88). A research paper by Robertson (2000) showed that Chinese learners of English use some words, such as demonstratives (particularly this) and the numeral one, to perform the function of marking definiteness and indefiniteness which the equivalent words in Chinese (zhè ‘this’, nèi ‘that’ and yi ‘one’) perform (169). The fact that previous research has presented strong evidence for the variation of article usage by Chinese learners of English raises a series of questions: How are definite and indefinite articles used by Chinese learners of English? How are other markers of definiteness and indefiniteness, such as demonstratives and possessive pronouns, and even numerals, used by Chinese learners of English?

One approach to answer these questions is to look at specific examples in Chinese learners’ English written production. The present study uses Chinese college learners’ English
written production because Chinese college learners of English are relatively proficient in English. Thus, they would not make basic grammatical errors as beginning learners do. It is important to note that examples from beginning learners’ written production may not fully reflect the language of Chinese learners of English. Some research has indicated that beginning learners try to avoid using function words which do not exist in their first language because they know they will use the word incorrectly (Ellis 2000: 34). So, it might be speculated that beginning Chinese learners of English avoid the use of articles in their written and spoken production. Thus, it would be hard to find any variation in the use of articles in their written production. According to this way of thinking, college Chinese learners’ written production would be ideal as data for the present study. They are likely to use different articles more frequently in their written production than beginning learners do. Their written production would show precisely the native-like use and non-native-like use of the definite and indefinite articles in the language of Chinese learners of English.

1.1 Aim and Scope of study

Based on the previous research by Robertson (2000), the purpose of the present study is to test one of Robertson’s hypotheses, which posits a lexical transfer principle in the written data collected from a corpus of Chinese learners’ English, and then, to investigate the variation in the use of English articles by these learners. To achieve these goals, a combined approach of
qualitative and quantitative analysis will be applied. Firstly, corpus linguistic tools will be applied to measure the frequencies of occurrence of the definite and indefinite determiners in the written data from a corpus of Chinese learners’ English. Also, a lexical analysis will be carried out to investigate concordances of the definite and indefinite determiners in the written corpus data. Secondly, based on the results, a qualitative analysis will be applied to analyze the specific examples from the written data to see how Chinese learners of English use other markers to perform the function of marking definiteness and indefiniteness in English, and then, to attempt to understand the variation in article usage by Chinese learners of English.

The following research questions will be posed:

To what extent are articles, possessive and demonstrative pronouns used in Chinese learners’ English?

How are definite and indefinite articles used by the Chinese learners?

The paper begins with a background section that presents Robertson’s hypothesis and his previous research on variability in the use of the English article system by Chinese learners. Next, definiteness and indefiniteness in Chinese and in English will be presented. Then, the material and method of the current study are introduced, and after that the results are presented. Finally, an analysis and a discussion are given.

2. Theoretical background
This section presents a few significant ideas and studies that this analysis builds on. Firstly, a brief description of second language acquisition will be introduced. Secondly, Robertson’s previous research will be presented along with explanations of concepts and examples. Thirdly, as mentioned above, definiteness and indefiniteness in Chinese and in English will be introduced with examples. Fourthly, demonstratives and possessive determiners in English are described. Finally, Robertson’s description and summary of definite and indefinite NP environments are given.

2.1 Describing and Explaining L2 Acquisition

The meaning of the term ‘second language acquisition’ (often referred to as L2) needs to be carefully explained. Firstly, ‘second’ refer to “any language that is learned subsequent to the mother language” (Ellis 2000:3). Therefore, the term ‘second’ can refer to the learning of a third or fourth language (Ellis 2000:3). Also, ‘second’ does not contrast with ‘foreign’(Ellis 2000:3), which means that “whether you are learning a language naturally as a result of living a country where it is spoken, or learning it in a classroom through instruction, it is customary to speak generically of ‘second’ language acquisition”(Ellis 2000:3). Thus, ‘L2 acquisition’ can be interpreted as in which people learn a language that is not their mother tongue, inside or outside of a classroom (Ellis 2000:3).

2.1.1 The Goal of SLA
SLA researchers are interested in finding out how learners acquire an L2 by looking at collecting samples of learner language (Ellis 2000:4). Learner language is “the language that learners produce when they are called on to use an L2 in speech or writing” (Ellis 2000:4). These samples reflect the evidence of what the learners know about the language they are trying to learn (Ellis 2000:4).

One of the goals of SLA is “the description of L2 acquisition” (Ellis 2000:4). Another goal is “explanation identifying the external and internal factors that account for why learners acquire an L2 in the way they do” (Ellis 2000:4). The external factors are more about social conditions, such as the social milieu in which learning takes place and the input that learners receive (Ellis 2000:5). On the other hand, the internal factors are about learners’ individual variation in the rate they learn an L2 (Ellis 2000:6).

2.1.2 Interlanguage

There is the fact that “L2 learners construct a language system that draws, in part, on the learner’s L1 but is also different from it and also from the target language” (Ellis 2000:33). Therefore, the term ‘interlanguage’ is interpreted as a unique language system (Ellis 2000:33). The concept of interlanguage includes six premises about L2 acquisition: firstly, the “the learner constructs a system of abstract linguistic rules which underlies comprehension and production of the L2” (Ellis 2000:33). Secondly, “the learner’s grammar is permeable” (Ellis
2000:33), which means that the learner’s grammar is not just influenced from the outside but also influenced from the inside (Ellis 2000:33). Thirdly, “the learner’s grammar is transitional. Learners change their grammar from one time to another by adding rules, deleting rules, and restructuring the whole system” (Ellis 2000:33). Fourthly, “the systems learners construct involve variable rules” (Ellis 2000:33). It seems that “learners are likely to have competing rules at any one stage of development” (Ellis 2000:34). Fifthly, learners prefer to apply various learning strategies to develop their interlanguage (Ellis 2000:34). For instance, learners might ignore grammatical features that they are not yet ready to process (Ellis 2000:34). Lastly, “the learner’s grammar is likely to fossilize” (Ellis 2000:34), which means that most learners might not be able to develop the same mental grammar as native speakers (Ellis 2000:34).

2.2 Previous Research on Article Usage

In Robertson’s article, the results of an experimental investigation of the variable use of the definite and indefinite article by 18 Chinese learners of English are presented (Robertson 2000: 135). Robertson’s research is based on Hawkins’ (1978) description of the definite and indefinite article and demonstratives in English. Hawkins’s analysis indicates “an overall rate of 78% suppliance of articles in contexts where a native speaker would use the definite and indefinite article” (Robertson 2000: 135). Robertson finds that many of the instances of non-
suppliance of articles could be explained by three principles which are shown in the following table (Robertson 2000: 135):

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A ‘lexical transfer principle’</td>
<td>some of these learners are using demonstratives (particularly this) and the numeral one as markers of definiteness and indefiniteness respectively</td>
</tr>
<tr>
<td>A syntactic principle of ‘determiner drop’</td>
<td>an NP with definite or indefinite reference need not be overly marked for [± definiteness], if it is included in the scope of the determiner of a preceding NP</td>
</tr>
<tr>
<td>A ‘recoverability’ principle</td>
<td>an NP need not be marked for [± definiteness] if the information encoded in this feature is recoverable from the context</td>
</tr>
</tbody>
</table>

Since the aim of the present study is to examine Robertson’s lexical transfer principle, the first part of the background will provide Robertson’s experimental investigation of the lexical transfer principle only. Thus, the other two principles will not be examined here.

Robertson’s experiment tested the hypothesis of the lexical transfer principle in the spoken data collected from 18 dialogues produced by 9 pairs of speakers of Chinese origin and postgraduate students at Leicester University (Robertson 2000:152). Needless to say, Robertson’s data were experimental and not naturally occurring. By contrast, the present study looks at naturally occurring data.
As example (1) shows, Chinese learners were found to use the numeral ‘one’ as a determiner where an English native speaker would use the indefinite article (Roberson 2000: 167).

1) Speaker B: Top centre, centre, okay.

Speaker A: There is a circle.

Speaker B: Top right?

Speaker A: Yes, Top right corner, under three, this number, have a blue color square.

Speaker B: Finished.

Speaker A: Okay. Then, mm, then you have a point; have a point at, er, er, okay, then you have a point up the red square.

Speaker B: Under the s...

Speaker A: Under the square.

Speaker B: …has a, has a, one line.

Speaker A: Yeah, one line. (Dialogue 57-60)

Moreover, there is evidence that Chinese learners use the demonstratives (particularly this), in contexts where a native speaker of English would use a definite article. The following examples are presented in Roberson (2000:167).
2) Speaker B: What does square draw like?

   Speaker A: Like a book. How you, er, this square, this square line is, er, you look from, from the sky view, you know, just a square line. (Dialogue 12-13)

3) Speaker A: This square size is eight cm, er . . . (Dialogue 23)

4) Speaker A: Okay. Finish it? Then, er, under this blue square . . .

   Speaker B: Under blue square? (Dialogue 74-75)

As can be seen, based on examples such as these, Robertson identifies the lexical transfer principle, which led some of the learners to use “demonstratives (particularly this) and the numeral one as markers of definiteness and indefiniteness respectively” (Robertson 2000: 169), i.e., they were found to use these words “to perform the function of marking definiteness and indefiniteness which the equivalent words (zhèi ‘this’, nèi- ‘that’ and yi ‘one’) perform in Chinese” (Robertson 2000:169).

2.3 Definiteness and Indefiniteness in Chinese

In this section, the grammar of the noun phrase in Chinese will be presented, mainly by focusing on the marking of definiteness and indefiniteness. The account is based on Li and Thompson (1981) and Robertson (2000).
It is well known that Mandarin Chinese does not have a system of articles as English does. According to Li and Thompson, Mandarin is regarded as a topic-prominent language; the sentence is structured by the topic and comment rather than the subject and predicate as in English (Li and Thompson 1981: 20). In addition, the topic refers to the information that is already known to the speaker and the hearer (Li and Thompson 1981: 85). Moreover, as in English, Chinese definite NPs refer to an entity that is assumed to be known by the hearer; Chinese indefinite NPs refer to something that the hearer does not already know (Li and Thompson 1981: 130). Therefore, since indefinite NPs are necessarily not given information, it is possible to conclude that indefinite noun phrases cannot occupy the topic position (Robertson 2000:141). Thus, as can be seen, the word rén in example (5), which occupies the topic position, is interpreted as definite. By contrast, the example (6) is interpreted as indefinite since it occurs after the verb (Robertson 2000: 141). The following examples are presented in Li and Thompson (1981: 20).

5. rén lái le

   person come PFV/CRS4¹

   ‘The person(s) has/have come.’

¹ PFV: Perfective verbal marker le- in Chinese, which is an aspect maker presenting a viewpoint of an event in its entirety (Li and Thompson 1981). CRS: le- occurs at the end of a sentence without perfective meaning (Li and Thompson 1981:269).
6. lái-le rén le

come-PFV person CRS

‘Some person(s) has/have come.’

It is true that Mandarin Chinese does not have the article system as in English. However, the demonstrative determiners are widely used to perform the function of marking definiteness and indefiniteness (Li and Thompson 1981:131). More specifically, the demonstratives zhè ‘this’ and nèi- ‘that’ are used to signify definiteness and yi- ‘one’ is used to signify indefiniteness (Li and Thompson 1981:132). The following examples are given in Li and Thompson and chosen by Robertson (1981: 86 and 127).

7. gōˇu woˇ yīˇjing kàn-guo le

‘Dogs/The dog I have already seen

8. nèi-zhí gōˇu woˇ yīˇjing kàn-guo le

That dog I have already seen

9. mén-kōˇu zuò-zhe yi-ge nuˇ- háizi

Door-mouth sit-DUR one-CL female-child

In the doorway was sitting a girl.
In Mandarin Chinese, the demonstratives: zhè ‘this’ and nèi- ‘that’ have two functions. They are not only used as demonstratives that are used to point out an item, but also sometimes they are used as specifiers that occur as part of a noun phrase and that identity specific items (Ross and Ma Sheng 2006: 39). When used as specifiers, they “occur before the number if there is one and before the classifier and the noun in this order” (Ross and Ma Sheng 2006: 40), as shown in the following example:

10. Specifier + (number) + classifier + noun

zhè sān běn shū

This three classifier book

2.4 Definiteness and Indefiniteness in English

In order to understand the use and non-use of the definite and indefinite articles in Chinese learners’ English, it is important to look at the function of definite and indefinite articles in English. To this end, the essential difference between the definite article and the demonstratives will be shown. Also, possessive determiners will be briefly introduced. For each category, a definition and an example from the Longman Grammar of Spoken and Written English (Biber, Johansson, Leech & Conrad, 1999: 263-272) will be provided.

2.4.1 The Definite Article
The definite article can be used with both countable and uncountable nouns (Biber, Johansson, Leech & Conrad 1999:263). The first function of the definite article is called the anaphoric function. The definite article in the anaphoric function is used to refer to the NP which has earlier been introduced for the first time in the sentence with an indefinite article (Biber, Johansson, Leech & Conrad 1999:263). It is important to note that the referent of the noun phrase is considered to be known to the writer and the reader (Biber, Johansson, Leech & Conrad 1999:263). The following example is presented in Biber, Johansson, Leech & Conrad (1999:263).

11. **A doctor** was allowed to carry on working after telling fellow general practitioners he had contracted Aids, health officials revealed yesterday. <…> **The doctor**, who died last summer, broke health service guidelines.

    The second function of the definite article is the indirect anaphoric function. The connection between the NP and the referent of the NP is inferred rather than signaled by repetition (Biber, Johansson, Leech & Conrad 1999:263). More specifically, it is possible to refer to things connected with the NP which have been introduced earlier in the text (Biber, Johansson, Leech & Conrad 1999:264). The following examples are given in Biber, Johansson, Leech & Conrad (1999:264).
12. **The Mercedes** took a hard bounce from a pothole. “Christ”, said Sherman, “I didn’t even see that.” He leaned forward over **the steering wheel**. **The headlights** shot across the concrete columns in a delirium.

13. He found **her blue Ford Escort** in the car park. **The vehicle** was locked and the lights were off.

The third function is named the cataphoric function. The definite article in the cataphoric function is used in the noun phrase that is established through something following later in the text, e.g. a restrictive relative clause or some other modifier of the noun (Biber, Johansson, Leech & Conrad 1999:263), as in the following example:

14. Another potential voter starts to tell him about **the car that went through his garden wall**.

Next, the last function of the definite article is the situational function where the definite article is used to reflect the situational context which is shared by the writer and the reader (Biber, Johansson, Leech & Conrad 1999: 264), as in:

15. I think there’s somebody at **the door** now.

2.4.2 The Indefinite Article
It should be noted that unlike the definite article, the indefinite article is only used with singular countable nouns (Biber, Johansson, Leech & Conrad 1999:260). Firstly, the indefinite article is often used to introduce a new specific entity in the discourse. Then, the referent of the noun phrase will be followed later in the text (Biber, Johansson, Leech and Conrad 1999:260). “Subsequent references generally take the form of definite noun phrases” (Biber, Johansson, Leech and Conrad 1999:260), as shown in the following example:

16. A cat was the victim of a cruel attack when she was shot in the neck by a pellet. The tortoiseshell cat was found wounded and frightened in Grange town.

Secondly, the indefinite article is also used in the noun phrase which does not refer to any specific individual (Biber, Johansson, Leech & Conrad 1999: 260). The following example is presented in Biber, Johansson, Leech & Conrad (1999:263).

17. I feel terrible. I need a friend.

Finally, the indefinite article can serve to classify an entity, and at the same time, it can also be used to express the typical member in a class (Biber, Johansson, Leech & Conrad 1999: 260), as in the following examples:

18. My husband is a doctor.

19. A doctor is not better than his patient.
2.4.3 Demonstrative Determiners

It is commonly believed that the demonstrative determiners *this/these* and *that/those* are somewhat similar to the definite article (Biber, Johansson, Leech & Conrad 1999: 272). However, it is true that the use of a demonstrative determiner specifies the number and the distance of referent in relation to the speaker (Biber, Johansson, Leech & Conrad 1999: 272). In addition, the essential difference between the definite article and the demonstrative determiners is that the use of definite article refers to the specific and unique entity which is something mentioned before or something which both the speaker and the hearer have knowledge of (Biber, Johansson, Leech & Conrad 1999: 272). By contrast, the use of the demonstrative determiners may maintain only a small part of their original meaning and refer to matters of more immediate concern (Biber, Johansson, Leech & Conrad 1999: 272).

2.4.4 Possessive Determiners

Possessive determiners specify a noun phrase which is related to the speaker and the addressee, and they can also be used to refer to other entities mentioned in the text or given in the speech situation (Biber, Johansson, Leech & Conrad 1999: 270). Moreover, possessive determiners are particularly associated with human beings. So, they correspond to personal pronouns (Biber, Johansson, Leech & Conrad 1999: 270).

2.5 Description and Summary of Definite and Indefinite NP Environments
In this section, in order to understand how definite and indefinite articles are used by Chinese learners, Robertson’s description of definite and indefinite NP environment will be presented with few examples. His description is closely based on the work of Hawkins (1978). In addition, it is also important to look at the definite and indefinite NP environment in the present corpus. Therefore, the examples from the present corpus will be given at the same time. To this end, Roberson’s summary of definite and indefinite NP environments is provided.

Notice that since the aim of the present study is to analyse written data rather than spoken data, some of the categories will not be introduced in this section, such as the immediate situation use and generic use which typically occur in spoken data. Moreover, since the NP with nominal modifier was not found in the present corpus, it will not be shown in this section.

2.5.1 Definite NP Environments

The first category of definite NP environment is the anaphoric use including the repetition of an NP which has been introduced earlier in a sentence with an indefinite NP (Robertson 2000: 145). The following example is from Robertson (2000: 145).

20. Speaker A: And then after that you draw a square with the red…
Speaker B: Square?

Speaker A: Yeah, a square.

Speaker B: What does the square draw like? (Dialogue 9-12)

The example chooses from the present corpus:

21. It can be reasonable as they may think a boy will act as a father in a family while a girl will be the mother. The father will only go out to earn the money to support the family and the mother of course will stay at home and care the child who is regard as the future of the nation.

As Robertson stated, it should be noticed that “a demonstrative (this) would be perfectly acceptable in this context, although perhaps the definite article would be preferred” (Robertson 2000: 145).

The second category is called “the larger situation use, is characterized by the fact that the NP referred to is uniquely specified on the basis of knowledge which is shared by the speaker and the hearer” (Robertson 2000: 146). In Robertson’s data, this category is presented by expressions such as the right-hand side, and the middle.

22. Speaker A: On, on the right hand side. It’s blue.

In the present corpus, this category is exemplified by examples such as:
23. He cannot make his life in the society. Even bad, he can break the order and the law, which may cause destruction to the society.

The third category is the associative clause use (Robertson 2000: 146). Robertson explains that “an associative clause consists of two NPs joined by the preposition of such as the bottom of the sear, the front of the house” (2000: 146). In the present corpus, this category is one of the most common types, such as the philosophy of life and the failure of education.

Next, the unexplanatory uses of the definite article can be found as in phrases such as the same N, the first N, and the best N (Robertson 2000: 147), as in the present data such as the first reason, the same thing and the good thing.

The last category is ‘establishing relative clause’ where the definiteness of the NP is established through the use of relative clause (Robertson 2000:147). The following example is given in Robertson (2000: 147).

24. Speaker A: The square box, the length of the square box is double the length of the, the underline, the line that you drew, the first line that you drew.

The example from the present data:

25. The person who gets nothing or even bad thing from it will suffer from it.
It is important to note that as shown in 2.4.1, the use of definite article in the NP with establishing relative clause is named the cataphoric function. So, it is possible to say that Robertson’s ‘establishing relative clause’ can be also called the cataphoric use.

2.5.2 Indefinite NP Environments

Robertson divides indefinite NP environments into three categories. Firstly, there is “the existential use of an NP where the existence of the NP is asserted in an existential predication” (Robertson 2000: 148). Examples are generally introduced by the phrases such as *there is* and *there are* (Robertson 2000: 148). The follow example in the present data is shown:

26. There is a man who graduates from Qinghua University.

The second indefinite environment can be divided further into two categories. The first one is “the object of a transitive verb, such as *draw* and *put*” (Robertson 2000: 148), as in:

27. We can get a job and earn our life.

The second one is “as the complement in a copulative construction” (Robertson 2000:148), which was not found in the written material.

2.5.3 Summary of Definite and Indefinite NP Environments

Robertson summarizes the definite and indefinite NP environments in his data as in table 1 (Robertson 2000: 149).
Table 1. Summary of definite and indefinite NP environments in the data (from Robertson 2000: 149)

<table>
<thead>
<tr>
<th>Code</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Definite NP environments</strong></td>
</tr>
<tr>
<td>D1</td>
<td>Anaphoric use of referring NP</td>
</tr>
<tr>
<td>D2</td>
<td>Immediate situation use of referring NP</td>
</tr>
<tr>
<td>D3</td>
<td>Larger situation use of referring NP</td>
</tr>
<tr>
<td>D4</td>
<td>Head noun of an associative clause NP</td>
</tr>
<tr>
<td>D5</td>
<td>Unexplanatory use of definite NP</td>
</tr>
<tr>
<td>D6</td>
<td>NP with nominal modifier</td>
</tr>
<tr>
<td>D7</td>
<td>NP with establishing relative clause</td>
</tr>
<tr>
<td></td>
<td><strong>Indefinite NP environments</strong></td>
</tr>
<tr>
<td>I 1</td>
<td>Use of NP in existential predication</td>
</tr>
<tr>
<td>I 2</td>
<td>Use of NP as object of transitive verb or complements of copulative construction</td>
</tr>
<tr>
<td>I 3</td>
<td>Generic use of singular NP</td>
</tr>
</tbody>
</table>

To this end, based on the differences between the Chinese and English systems, the present study expects to find that Chinese learners might be influenced by their first language
when they use the definite and indefinite articles in English. For instance, demonstrative determiners: zhè ‘this’ and nèi ‘that’ are used to signify definiteness in Chinese. Thus, it is speculated that when the learners need to use the English definite article, they might choose to use demonstrative determiners instead of the definite article. Also, Chinese indefinite nouns only occur after verbs, which might influence Chinese learners’ indefinite article usage in English. Moreover, it is predicted that in the contexts where a native English speaker would not use a definite article Chinese learners might choose to use an article.

3. Material

The material of the present study consisted of 30 short argumentative essays which vary in length from a minimum of 200 words to a maximum of about 300 words, with an average of about 220 words. The essays were written by college Chinese learners of English and collected from the Spoken and Written English Corpus of Chinese learners 2.0 (SWECCCL 2.0). The corpus was chosen because it is a major corpus project covering university English major students in China. It was created at Nanjing University and the foreign language teaching and research department in Beijing. The complete corpus contains 3,578 essays written for proficiency exams, excepting dissertations and other academic genres, totaling 1,186,215 words. More specifically, it includes 3,059 argumentative essays, 529 narrative
essays, and 90 expository essays written by Chinese learners of English who have majored in English from nine different universities in China.

When the corpus was created, the researchers also considered unpredicted factors that may influence the comparability of the data in the corpus. Therefore, they included detailed information, having to do with factors such as writing time, writing conditions, writing form, word limit, writing skill, the topic of the written essay, and students’ background (Wang and Wen 2007: 22). For instance, a list is presented at the beginning of each essay in the corpus, including mark-up such as <STU1> or <STU2>, <ARG>, <GRADE> and <YEAR>, <STU1> refers to students who are majors in English, while <STU2> refers to students who are not majors in English. <ARG> means that the chosen essay is an argumentative essay. <GRADE> represents the students’ grade in college. <YEAR> represents the year when the students wrote the essay, such as 2003 <YEAR03>. As mentioned above, 30 essays were selected from the corpus for the purpose of this study. Their codes are listed in the Appendix.

4. Method

The study applies the methodology of corpus linguistics, a particular methodology which is used to test authentic data (Lindquist 2009: 1-3). A corpus can be broadly defined as “a collection of texts which is stored on some kind of digital medium and used by linguists to retrieve linguistic items for research or by lexicographers for dictionary-making” (Lindquist
2009: 3), and it can be used to explore almost any area of linguistic research (McEenry, Xiao & Tono 2006: 1.6). It is true that studying actual and authentic instances of language use from a corpus gives researchers the most reliable evidence for the claims they make about language. The essays choose for this study function as a collection of texts, a corpus, which is used for linguistic analysis.

In addition, the AntConc tool, a freeware concordance program, is used. AntConc is able to list keywords, show word clusters, collocations and the context of keywords. In this study, AntConc is applied to measure the frequencies of occurrence of the target items, and also, to produce a set of concordance lists of the items for qualitative analysis. A concordance is “a list of all the contexts in which a word occurs in a particular text” (Lindquist 2009: 5).

In the first section of the study, AntConc is applied to measure the frequencies of occurrence of definite and indefinite articles the, a, and an, possessive determiner my, your, his/her, our, and their, the quantifier one and demonstrative determiner this, these, that and those. Based on the results, the categories of definite and indefinite contexts and their frequencies in the corpus will be presented based on Robertson’s categories listed in Table 1. In the second section, AntConc is used to produce concordance lines of the demonstrative determiners and the numeral one. Here, a qualitative analysis is used to analyze the lexical context of each target item, examining in which particular contexts those items function as
articles in Chinese learners’ English. In the third and last section, AntConc is applied to produce concordance lists of the definite article and collocations of the indefinite article. Again, a qualitative approach is taken to analyze concordance lists and collocations of each target item, looking at the specific example and showing the variation of article usage by Chinese learners of English.

5. Results and Analysis

In this section, an analysis of the results of the study will be presented. Firstly, the distribution of the definite and indefinite articles, demonstratives, possessives, and the quantifier *one* is provided. After that, categories of definite and indefinite contexts and their frequencies in the corpus will be shown. Next, an analysis of the concordance lists of demonstratives and possessive determiners, and the numeral *one* will be given, which is used to test Robertson’s lexical transfer principle. Here, it needs to be spelled out that, if the researcher finds that Chinese learners of English use demonstrative determiners and the numeral *one* as markers of definiteness and indefiniteness, then the lexical transfer principle will be verified; but if the researcher finds that the learners do not use demonstratives determiners and the numeral *one* as markers of definiteness and indefiniteness, then it will be falsified. Finally, by analysing the concordance lists of the definite and the collocations of the indefinite article, the variation of article usage by Chinese learners of English will be introduced.
5.1 Distribution of Definite Determiners, the Quantifier *one*, and Indefinite Article

In total, 987 noun phrases were coded and marked by using five different sets of forms: the definite article (*the*), possessive determiners (*my, your, his/her, our* and *their*), demonstrative determiners (*this, that, these and those*), the indefinite article (*a, an*) and the quantifier *one*.

The frequencies of occurrence are given in Table 1. As can be seen, the frequencies displayed in Table 1 show that the definite article is used with a higher frequency than the indefinite article. Also, the definite article is used with the highest frequency in all of the studied categories. At the same time, the indefinite article is used more frequently than possessive determiners and demonstratives determiners. Moreover, demonstratives determiners are less frequent than possessive determiners. Lastly, it is obvious that the quantifier *one* is used with the lowest frequency in all of the studied categories.

Table 1 Distribution of definite and indefinite articles, possessive determiners, demonstrative determiners, and the quantifier *one*

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite article (<em>the</em>)</td>
<td>423</td>
</tr>
<tr>
<td>Indefinite article (<em>a, an</em>)</td>
<td>241</td>
</tr>
<tr>
<td>Possessive determiners</td>
<td>163</td>
</tr>
</tbody>
</table>
Junyu, Wu

Demonstrative determiners

<table>
<thead>
<tr>
<th>Determiner</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>my, your, his/her, our and their</em></td>
<td>140</td>
</tr>
<tr>
<td><em>this, that, these and those</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The quantifier one</th>
<th>20</th>
</tr>
</thead>
</table>

| Total             | 987 |

The proportions in Table 1 are somewhat similar to Robertson’s results, which are given in the Appendix. However, it is significant to note that Robertson does not talk about possessive determiners in his research. The present study also aims to measure the frequencies of possessive determiners and to explore their use in Chinese learners’ English.

5.2 Categories of Definite and Indefinite Contexts and Their Frequencies in the Corpus

Definite and indefinite contexts are explained as the contexts that require the definite or the indefinite article in English (Robertson 2000: 153). In order to understand how definite and indefinite articles are used by Chinese learners, we need to understand definite and indefinite contexts and their frequencies in the corpus. A total of 423 noun phrases were identified in the definite context and 241 in the indefinite context. Table 2 shows the frequency of occurrence of each type of NP in the corpus. It should be noted that Table 2 is based on Robertson’s table that was given in 2.4. However, Roberson’s categories of definite and indefinite contexts were
based on spoken data, while the present study analyses article usage in written data. Therefore, the categories in Table 2 are the categories which were found in the written data.

Table 2 Categories of definite and indefinite contexts and their frequencies in the corpus

<table>
<thead>
<tr>
<th>Code</th>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Anaphoric use of referring NP</td>
<td>21</td>
</tr>
<tr>
<td>D2</td>
<td>Situational use of referring NP</td>
<td>108</td>
</tr>
<tr>
<td>D3</td>
<td>Un explanatory use of definite NP</td>
<td>89</td>
</tr>
<tr>
<td>D4</td>
<td>NP with establishing relative clause</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>(the cataphoric use)</td>
<td></td>
</tr>
<tr>
<td>D5</td>
<td>Head noun of an associative clause NP</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>423</strong></td>
</tr>
<tr>
<td>I1</td>
<td>Use of NP in existential predication</td>
<td>60</td>
</tr>
<tr>
<td>I2</td>
<td>Use of NP as object of transitive verb</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>241</strong></td>
</tr>
</tbody>
</table>

Overall, in the Chinese learners’ English, it seems that the definite article is used with a high frequency in the head noun of an associative clause NP. At the same time, the definite article is applied frequently in a situational use. However, as can be seen, the definite article is used with a low frequency in a noun phrase with establishing relative clause; also, the definite
article is used less frequently in the anaphoric function, which seems to indicate that the anaphoric function and cataphoric function might be ignored in Chinese learners’ article usage. Moreover, in the definite context, unexplanatory use of definite NP maintains a high frequency rate. To sum up, the results in the definite context implies that the use of definite article by Chinese learners seems to be explained; in particular, in many different contexts a Chinese learner would choose to use a definite article. So, there are high frequency rates of the associative clause use, the situational use and the unexplanatory use, but, more strikingly, there are low frequency rates of article use in the contexts where a definite article is actually required, such as the anaphoric and cataphoric uses.

Furthermore, in the indefinite context, it seems clear that the indefinite article is rarely used in existential predication. By contrast, the indefinite article is often used in the noun phrase functioning as object of a transitive verb. According to the results, it is not hard to find that the use of indefinite article can be predicted. It seems clear that Chinese learners often use an indefinite article in the object of a transitive verb because as mentioned in 2.2, Chinese indefiniteness only occurs after verbs. Therefore, it is possible to conclude that the use of the indefinite article of Chinese learners is highly influenced by the Chinese linguistic system.

In this section, it was found that the anaphoric and cataphoric functions seem to be largely ignored in Chinese learners’ article usage, which raises the question whether other
terms are used to perform the function of marking definiteness in the anaphoric and cataphoric function in Chinese learners’ English? To answer this, we need to look at other definite determiners and their lexical contexts.

5.3 Analysis of the Concordance Lists of Demonstrative Determiners, Possessive Determiners and the Numeral one

5.3.1 Demonstrative Determiners in Context

AntConc can create concordance lists which make it easy to look at the particular contexts in which demonstrative determiners this, these, that and those are used to perform the function of marking definiteness. The term this, for instance, can be used as a marker of definiteness in learners’ English depending on the context in which it appears. For example, in the string, “in this world”, the NP “this world” refers to be uniquely identified on the basis of knowledge which is shared by the writer and the reader, and also, the noun “world” has not been mentioned earlier in the text, which means that the NP does not derive from the immediate situation. Therefore, a definite article would be preferred to modify the noun referring to something unique rather than a demonstrative determiner. Thus, it can be concluded that the demonstrative determiner this is used as a marker of definiteness in the example. In order to study how demonstrative determiners are used to perform the function of marking
definiteness, it is necessary to study the immediate context of the terms. Here is an example of what the context tool for target items looks, using *this* as an example.

**Figure 1.** Concordances of Instances of ‘this’ in Chinese learners’ English

<table>
<thead>
<tr>
<th>Hit</th>
<th>KVAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>too expensive. especially in <em>this</em> increasingly develop societ</td>
</tr>
<tr>
<td>2</td>
<td>e play an significant role in <em>this</em> competitive society. in an</td>
</tr>
<tr>
<td>3</td>
<td>hen he or she be very young, <em>this</em> kind of education will acco</td>
</tr>
<tr>
<td>4</td>
<td>0 be a good person first. <em>in this</em> rapid develop world. educa</td>
</tr>
<tr>
<td>5</td>
<td>ith him and laugh at him. <em>in this case</em>, knowledge he not eno</td>
</tr>
<tr>
<td>6</td>
<td>irst. <em>What a big cost!</em> in <em>this</em> globalize world, a lot of</td>
</tr>
<tr>
<td>7</td>
<td>st he really important. face <em>this</em> problem, what can we do?</td>
</tr>
<tr>
<td>8</td>
<td>ary skill and gain no money; <em>this</em> he cannot make his life in</td>
</tr>
<tr>
<td>9</td>
<td>r he do not want to desert by <em>this</em> period of information, ha</td>
</tr>
<tr>
<td>10</td>
<td>oh, no. <em>I do n’t agree with this opinion.</em> do n’t you see th</td>
</tr>
<tr>
<td>11</td>
<td>ountry nowadays; you can see <em>this</em> example, there be a man wh</td>
</tr>
<tr>
<td>12</td>
<td>. so I think we should treat <em>this</em> problem seriously that we c</td>
</tr>
<tr>
<td>13</td>
<td>seriou that we can improve this case. besides, we ca n’t</td>
</tr>
<tr>
<td>14</td>
<td>up the flow of traffic. but <em>this</em> solution may occupy too muc</td>
</tr>
<tr>
<td>15</td>
<td>us problem of modern living. <em>This</em> be a problem that require a</td>
</tr>
<tr>
<td>16</td>
<td>, Shanghai, Guangzhou, etc. <em>this</em> phenomenon have cause a hot</td>
</tr>
<tr>
<td>17</td>
<td>nd live condition at abroad, <em>this</em> be the most important and u</td>
</tr>
<tr>
<td>18</td>
<td>pay and favorable condition. <em>this</em> serious problem will solve</td>
</tr>
<tr>
<td>19</td>
<td>ruth. some people think that <em>this</em> traditional practice must b</td>
</tr>
</tbody>
</table>

As can be seen from the sample in Figure 1, the term *this* seems to be used as a marker of definiteness in some particular contexts. As mentioned above, in standard, native-speaker grammar, the use of the demonstratives carries no such assumption of uniqueness while the use of the definite article refers to something unique. In example (28), the NPs “world” and “globalize world” refer to be uniquely identified on the basis of knowledge which is shared by the reader and the writer, but which do not derive from the immediate situation. Therefore, a definite article would be preferred to use here referring to something unique. However, in the example, the demonstrative determiner *this* is used to modify the NPs, which indicates that
the demonstrative determiner *this* is used to perform the function of marking definiteness in larger situation uses referring to something unique.

28. Question: Education is expensive, but the consequences of a failure to educate, especially in an increasingly globalized world, are even more expensive. State your own opinion.

   In *this* world, education is very important to our society. Almost every country spends a big deal of money on education. But the consequence of a failure to educate is even more expensive. The most important thing is not to teach them how to get a good knowledge, but to be a good person. As we all know, a college student kill his roommates, because they do not agree with him and laugh at him. In this case, knowledge is not enough to make his control himself. What a big cost! In *this* globalize world, a lot of science genius are on wrong road. They use high technology to steal, damage, even kill people. So teach them how to be a good people first are really important.

   Furthermore, the term *this* is not just used as a marker of definiteness in larger situation uses referring to something unique but also it is used for the anaphoric function. In example (29), the second and the third mention of the noun phrase “proverb” is assumed to be known to the writer and the addressee. Although the term *this* would be acceptable in this context, a definite article would be generally preferred to use with the referent of the noun phrase referring to something that is already on stage, or at least known to the reader. Thus, a
demonstrative determiner *this* is used instead of a definite article in the example, implying that the demonstrative determiner *this* used functions as a marker of definiteness for the anaphoric function.

29. Question: An African proverb says “If you educate a boy, you educate an individual; if you educate a girl; you educate a family and a nation”. Do you agree or disagree?

When ask about the unceasing uproar involve the distinction between boy’s and girl’s education, traditional African give their answer by use a simple but obscure comparison in an ancient proverb. They maintain that if you educate a boy, you educate an individual; however, if you educate a girl, you educate a family and a nation. General speaking, this proverb reflect the wisdom and special perspective of African in some degree; whilst from where I stand, this proverb sound not very comprehensive and dialectical.

Moreover, it is important to note that the term *that* is actually not used frequently as a demonstrative determiner in Chinese learners’ English. After analysing the concordance lists of the demonstrative determiner *that*, it is likely that it is used as a marker of a definite article and is used in the anaphoric function in some particular contexts. In example (30), the second mention of the noun phrase “proverb” is considered to be known to the writer and the reader. Therefore, a definite article is needed here to refer to a specific item. However, in the example, a demonstrative determiner is used with the referent of the noun phrase, which reflects the
fact that the demonstrative determiner that is used to perform the function of marking definiteness for the anaphoric function.

30. Question: An African proverb says: “If you educate a boy, you educate an individual; if you educate a girl, you educate a family and a nation”. Do you agree or disagree?

A proverb indeed push woman to an indispensable position. It declare that though habitually be consider as housewife, woman could play an important role in accelerate the whole world’s development as well. Children are a nation’s future and a nation’s prosperity depends on the qualification of the youth. To be a child’s mum, woman shoulder their child’s education. It may be help if they are well educate, in this way, they have a more clear idea of lead their kid and handle their million ’ why. However, is that enough to foster the nation’s future? I doubt.

We could find many opposite case in our modern society. Just as some “problem kid”, their descend are not on account of lack learn mother, but care and proper lead way. So, go back to that proverb, it smells a little unfair to that responsible gentleman.

Lastly, there is evidence that the demonstrative determiner those seems to be used to perform the function of marking definiteness and is used in the cataphoric function in Chinese learners’ English. As mentioned before, the definite article can also be used to modify an NP which is established through something following later in the text, e.g. a restrictive relative clause or some other modifier of the noun. As can be seen, in example (31), the noun “people”
is followed and modified by a relative clause. Although perhaps *those* would also be perfectly acceptable in this context, a definite article would generally be the determiner of the NP. Therefore, in the example, a demonstrative determiner *those* is used to be the determiner of the NP, which illustrates that the demonstrative determiner *those* used here functions as a marker of definiteness for the cataphoric function.

31. Question: Many people think that work nowadays is more stressful and less leisurely than in the past. What is your opinion?

   It is become a hot issue that work nowadays is more stressful and less leisurely than in the past.

   I quite agree with it. In the past, there are no so much stress on population and employment, when you are offer a job, you can enjoy it and no use to worry about one day you will be lay off if you do not make any serious mistake. But now, in contrast, there are often more population and less job. On the other hand, the company lean to adopt and remain those high quality worker, so the worker no choice but improve themselves by all kind of way. What is more, *those people* who possess excellent knowledge and experience also in danger of unemployment, if they cannot submit a remarkable achievement, so their weekend is always fill with their job. There is no doubt that nowadays ’ social competition force worker work in a high speed than ever before. Whoever he does not want to desert by this period of information, he must work more and restless.
There is the fact that the term *these* is used with a very low frequency in the data. Therefore, there is no example showing that the term *these* is able to be used as a marker of definiteness in the data. Thus, to this end, it is possible to conclude that not all the demonstrative determiners appear to be used to perform the function of marking definiteness in Chinese learners’ English.

As mentioned above, the results in Table 2 show that the anaphoric function and the cataphoric function in the article usage seems to be largely ignored by Chinese learners of English. Following the examples, it is likely that Chinese learners of English try to use the demonstratives determiners *that* and *this* in the anaphoric function instead of the definite article, and the demonstrative determiner *those* is also frequently used in the cataphoric function.

5.3.2 The Numeral *one* in Context

As Robertson has observed, some Chinese learners use the numeral *one* as a marker of indefiniteness in the contexts where an English native speaker would use the indefinite article. After looking at the concordance lists of the numeral *one*, there is evidence that the numeral *one* sometimes functions as an indefinite article in the present corpus data. In example (32), the noun “person” is a singular countable noun and a new entity in the essay, so the indefinite article is required here to introduce a new unspecific entity. However, the numeral *one* is used
instead of the indefinite article, implying that the numeral *one* is used to perform the function of marking indefiniteness and is used to introduce a new unspecific entity in discourse.

32. **One** famous person have said that never too old to learn.

Note that in the present study it was also found that the numeral *one* can be used to perform the function of marking definiteness in some particular contexts. In example (33), it seems that the numeral *one* is used as a marker of definiteness for the anaphoric function. As can be seen, the second mention of the noun phrase “country’s traffic condition” is assumed to be known by the writer and the addressee. Therefore, a definite article could be used with the referent of the noun phrase to refer to something which is already mentioned before. However, the numeral *one* is used with the referent of the noun phrase instead of the definite article, which reflects the fact that the numeral *one* used here seems to perform the function of marking definiteness.

33. The train is very important for a **country’s traffic condition** even beside countries. It does not only can make **one country’s traffic condition** good, but also can bring one country’s economy rise up.

5.3.3 Possessive determiners in Context
As mentioned above, the present study also aims to examine the use of possessive determiners in Chinese learners’ English. After analysing the data, it was found that the possessive determiner *our* is used to perform the function of marking definiteness in Chinese learners’ English.

It is likely that the term *our* is used as a marker of definiteness in larger situation uses referring to something which is uniquely specified. As can be seen in example (34), the noun phrase “world” refers to be uniquely identified on the basis of knowledge which is shared by the writer and the addressee. Although the term *our* might also be acceptable in this context, a definite article would be preferred to use with the noun phrase here, for instance “in the world”. Therefore, it is possible to say that the possessive determiner *our* used here functions as a marker of definiteness in larger situation uses referring to something unique.

34. Question: Some people think that education is a life-long process, while others do not agree.

In my opinion, I agree that education be a life-long process. As society is developing, I think that education become more and more important. <…> Now, there are many sort school in *our world*. These education apartment think about people is needed; they also want to help most people increase knowledge. Only have learn life-long, people could change the old view. As a result, *our world* can become more and stronger. So I suggest people should learn new knowledge constantly.
5.4 Variation of Article Usage in Chinese Learners’ English

It seems clear that the Chinese learners use the article system in a rather predictable way. In this section, by analysing the concordance lists of the definite article and the collocations of the indefinite article, it is hoped that we will see in greater depth how the definite article and indefinite article are used by Chinese learners of English.

5.4.1 Definite Article Usage in Chinese Learners’ English

Following from the examples, it seems that Chinese learners prefer to use a definite article to perform the function of marking indefiniteness. In example (35), two nouns: “small city” and “big city” are neither something unique nor something which refers to any specific items. The nouns are actually presented as new entities in the essay. Therefore, an indefinite article is required to introduce them. However, in the examples, the Chinese learners have used the definite article rather than the indefinite article. Thus, it is possible to conclude that the definite article used in Chinese learners’ English actually performs the function of marking indefiniteness.

35. Question: Traffic and housing problem in major cities would be solved by moving big companies, factories and their employee to the countryside. Do you agree or disagree?
I do not agree. Traffic jam is a common sight, with all the road pack with vehicle, bicycle and pedestrian. About traffic problem, there are two way to solve. One is to lay down more roads to make the public highway less crowded and to speed up the flow of traffic. But this solution may occupy too much land. The second solution is to open up more bus route to reduce the number of other vehicle and bicycle in the street. But the problem is that some people may have to walk long distance to bus stop or wait for long time in bus line. I think the answer to the problem of heavy traffic should be a combination of both solutions. We can build more and wide road in place where the land be not arable, and also increase the number of public bus route. Many solutions are suggested to solve the housing problem, such as to build more high-rise apartment, to expand underground space, to construct the small city around the big city, and to evacuate the city resident.

Furthermore, by the influence of the first language Chinese, it is likely that the definite article in Chinese learners’ English is used to perform the function of Chinese specifiers that occur as part of a noun phrase and that identify specific items. In example (36), as can be seen, the highlighted definite articles may not be required in the contexts in which they appear. For instance, the nouns “uneducated people” and “poor students” are neither something which refer to any specific individual nor something which is uniquely specified. Also, there are no other modifiers coming after which are used to modify the nouns. In this way of thinking, it is possible to say that the definite article is not needed before the nouns in the contexts. By
contrast, in Chinese, the noun “uneducated people” actually requires specifiers to show that the people being talking about are from a specific group: that of uneducated people. Therefore, specifiers are needed to identify the specific group of people. What is more, the noun “students” in Chinese also needs specifiers showing that the students are from a specific group: a lower social group. Thus, it is possible to conclude that the highlighted definite articles here function as Chinese specifiers that identify specific items.

36. They can break the order and the law, which may cause destruction to the society. To avoid the awful prospect of the uneducated people, we must emphasise the importance of education, improve the education quality, and take care of the poor students.

5.4.2 Indefinite Article Usage in Chinese Learners’ English

Although the indefinite article is rarely used in Chinese learners’ English, there are still some interesting elements that can be found by looking at collocations of the indefinite article. It has been found that the indefinite article collocates with quantifiers quite frequently in Chinese learners’ English. There is evidence that the indefinite article does not function as an indefinite article which is used to introduce or to classify a new entity but it is a part of quantifier phrase. More specifically, in examples (37-39), the indefinite article collocates with quantity quantifiers, such as ‘large’, ‘lot’ and ‘small’. It seems clear that the indefinite article used in the examples does not introduce or classify a new item, implying that the indefinite
article in the examples does not function as an indefinite article. There are some factors that potentially explain why the indefinite article is rarely used and does not function as an indefinite article in Chinese’s learners’ English. As we have seen, in Chinese learners’ English, the definite article is actually used frequently to perform the function of marking indefiniteness. At the same time, as mentioned above, the numeral *one* is also used as a marker of indefiniteness in some particular contexts. Thus, it is possible to conclude that the indefinite article’s functions are largely ignored in Chinese learners’ English because the definite article and the numeral *one* are widely used to perform the function of marking indefiniteness.

37. Nowadays a large number of student and their parent always complain that education is too expensive.

38. Consequently, it is worth of spend a lot of money on education.

39. In this way, thing like do drug will definitely be forbid with force, which undoubtedly result in a small rate of crime by the young.

6. Discussion

The results indicate that in the studied distribution of definite determiners, the quantifier *one*, and indefinite article, the definite article is used with the highest frequency in all of the
studied categories; while the quantifier *one* is used with the lowest frequency in all of the studied categories. The results are somewhat similar to the results of Robertson (2000), who measured the frequencies of definite determiners, the quantifier *one*, and indefinite article in spoken data (Robertson 2000:153). However, Roberson also compared the individual accuracy rates in use of articles between native English speakers and Chinese learners, which shows clearly the differences in the use of articles between native English speakers and Chinese learners, but this type of comparison has been beyond the scope of the present research, which only focuses on Chinese learners’ article usage. This is considered to be a limitation of the paper.

In the distribution of categories of definite and indefinite contexts and their frequencies, it has been found that the anaphoric function and cataphoric function seem to be largely ignored in Chinese learners’ article usage. Moreover, the indefinite article is used less frequently in NPs in existential predication. In addition, the results are somewhat contradictory with the results of Robertson (2000) because in his research the definite article is used in the anaphoric function with the highest frequency in all of the studied categories (Robertson 2000: 153), but as mentioned above, the present study focuses on written data rather than spoken data, which could potentially explain this difference. Also, Robertson uses experimental data and the present study uses naturally occurring corpus data. Therefore, it is possible to reach different conclusions.
It was found that Chinese learners of English try to use demonstrative and possessive determiners (*this, that, those* and *our*) to perform the function of marking definiteness. Also, Chinese learners prefer to use the numeral *one* as a marker of indefiniteness in the contexts where an indefinite article is actually required. Therefore, it has to be concluded that the results in section 5.3 clearly support Robertson’s lexical transfer principle the notion that Chinese learners use demonstratives (particularly *this*) and the numeral *one* as markers of definiteness and indefiniteness respectively. The reason why the lexical transfer principle occurs in Chinese learners’ English is because the choice of determiners of Chinese learners is influenced by linguistic contexts, as Ellis (2000) has mentioned, “learners vary in their use of the L2 according to linguistic context. In one context they use one form while in other contexts they use alternate forms” (Ellis 2000: 26). The results in section 5.2 show that the definite article is rarely used in the anaphoric function and cataphoric function, which implies that in those two linguistic contexts these learners might prefer to use alternative forms such as demonstrative determiners instead of the definite article. Moreover, learning strategies could also provide an explanation. The learners could be trying to ignore the anaphoric function and cataphoric function that they are not yet ready to process in article usage (Ellis 2000: 34). Furthermore, interlanguage grammar could also influence the optionality in the use of articles. Robertson (2000) mentions that “interlanguage development and grammaticalization are both constrained by Universal Grammar” (170). In Ellis’s book, he
points out Chomsky’s perspective that “language is governed by a set of highly abstract principles that provide parameters which are given particular setting in different languages” (Ellis 2000: 65). Thus, given this explanation, it could be that when Chinese learners study the article system which does not exist in their first language, it may be very difficult for them to reset the parameter in the L2.

In section 5.4, it was found that Chinese learners use the definite article to perform the function of indefiniteness in some particular contexts, and at the same time, these learners use the definite article functioning as Chinese specifiers that identify specific items. The reason might be that the definite article usage in Chinese learners’ English is highly influenced by the nature of their first language, but still, the variation of article usage by Chinese learners is mainly influenced by their interlanguage grammar.

Furthermore, the paper has only focused on analysing Chinese learners’ article usage rather than comparing the articles usage between native English speakers and Chinese learners of English. Therefore, it should also be remembered that the comparison of article usage between native English speakers and Chinese learners is really necessary in further research. Moreover, in the sampling of this study, it can be seen that the analysis of the indefinite article is actually not detailed enough due to the reason that Chinese learners do not use the indefinite article frequently, but still, it is true that the present study focuses more on
the analysis of the definite article rather than the indefinite article, which is considered to be a limitation of the paper. Furthermore, previous research does not talk about zero article usage because zero article usage does not often occur in Chinese learners’ English. However, more research on this is required in order to find out in which particular contexts Chinese learners may not use articles at all whether in accordance with native-speaker norms or not.

7. Conclusion

As Robertson’s previous research mentioned in this study, Chinese learners of English prefer to use demonstrative determiners and numeral one as markers of definiteness and indefiniteness (Robertson, 2000; 135). This evidence for article usage by Chinese learners worked as a starting-point for this study, and the aim of this paper was to test Robertson’s lexical transfer principle in Chinese learners’ written production and to look at the variation of article usage by Chinese learners. More specifically, as specified in the aims section, this paper has tested the lexical transfer principle in the written data collected through SWECCCL 2.0, and answering the research questions that the definite article is actually used with the highest frequency compared with the indefinite article and other definite determiners, then, Chinese learners prefer to use the definite article as a marker of indefiniteness and Chinese specifiers, and at the same time, the indefinite article is used frequently being a part of quantifier phrase. Further, Robertson’s summary table of categories of definite and indefinite
contexts was added to examine the variation of article usage of Chinese learners in different linguistic contexts.

The results indicate that compared with demonstrative determiner, the quantifier one, and indefinite article, the definite article is used with the highest frequency in all of the studied categories. By contrast, the quantifier one is used with the lowest frequency in all of the studied categories. Then, the indefinite article is used most frequently than possessive determiners and demonstrative determiners. Moreover, demonstrative determiners are less frequent than possessive determiners. If we look at the categories of definite and indefinite contexts, it seems that the definite article is used with a high frequency in the associative clause use and in the situational use. However, the definite article is used with a low frequency in the cataphoric function and in the anaphoric function. This implies that the anaphoric function and cataphoric function seem to be ignored in Chinese learners’ article usage.

Next, Robertson’s lexical transfer principle was tested in the written data, and it was found that Chinese learners use demonstrative determiners and the numeral one as markers of definiteness and indefiniteness. Also, the present study found that the possessive determiner our and the numeral one can be used to perform the function of marking definiteness. More specifically, Chinese learners of English use demonstrative determiners this and that in the
anaphoric function as markers of definiteness, and at the same time, the demonstrative
determiner *those* is frequently used in the cataphoric function as a marker of definiteness.
What is more, Chinese learners use the numeral *one* as a marker of indefiniteness, and it is
also used as a marker of definiteness in the anaphoric function. Further, the possessive
determiner *our* is used as a marker of definiteness in larger situation uses referring to
something unique. Finally, it was found that the definite article functions as the indefinite
article and Chinese specifiers in some particular contexts in Chinese learners’ English. Also,
the indefinite article is frequently used in quantifier phrases but rarely used in other functions.
To this end, there is evidence that the indefinite article’s functions are largely ignored in
Chinese learners’ English because the definite article and the numeral *one* are widely used to
perform the function of marking indefiniteness.

It has been speculated that there are three main reasons that may explain why Chinese
learners use determiners variously. Firstly, the choice of determiners by Chinese learners is
influenced by linguistic contexts. Secondly, because of learning strategies, Chinese learners
try to ignore the anaphoric function and cataphoric function that they are not yet to process
article usage. Thirdly, interlanguage grammar influences the optionality in the use of articles.

The results in the present study are somewhat similar to Robertson’s results. Of course,
there are some parts of the results that are contradictory to Robertson’s results. However,
since Robertson’s results are based on spoken data and the present study on written data and he uses experimental data and the present study uses naturally occurring corpus data, different conclusions might be expected. There are some limitations of the paper that need to be pointed out: the present study only focuses on analysing the article usage by Chinese learners and not by native speakers of English, and the analyses of the indefinite and zero articles have been limited. The limitations leave plenty of room for further research. What is different between Chinese learners’ article usage and native English speakers’ article usage? Does the zero article occur in Chinese learners’ English? These are just a few questions of possible development that can only be answered by further research.

References


**Appendix 1. List of essays selected from the corpus**

The chosen essay from the corpus 中国学生英语口语语料库 Spoken and Written English Corpus of Chinese Learners 2.0 (SWECCCL 2.0).

```
WARG0040  WARG0070  WARG0041  WARG0072
WARG0042  WARG0073  WARG0046  WARG0074
WARG0047  WARG0076  WARG0048  WARG0077
WARG0052  WARG0078  WARG0053  WARG0080
WARG0056  WARG0083  WARG0057  WARG0084
```
Appendix 2. Data from Robertson (2000) for comparison

Table 1 Distribution of Coded NPs in the Corpus (Robertson 2000: 153)

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definite contexts</td>
<td>1411</td>
</tr>
<tr>
<td>Demonstratives</td>
<td>92</td>
</tr>
<tr>
<td>Indefinite contexts</td>
<td>373</td>
</tr>
<tr>
<td>The quantifier one</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1884</strong></td>
</tr>
</tbody>
</table>

Table 2 Categories of Definite and Indefinite Contexts and Their Frequencies in the Corpus (Robertson 2000:153)

<table>
<thead>
<tr>
<th>Code</th>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Anaphoric use of referring NP</td>
<td>598</td>
</tr>
<tr>
<td>D2</td>
<td>Immediate situation use of referring NP</td>
<td>74</td>
</tr>
</tbody>
</table>
Appendix 3. List of Definite and Indefinite NP Environments from the Selected Essays (Examples from the Selected Essays)

Examples of the Definite NP Environments:

It was found that the follow examples are regarded as the associative use, as Robertson mentioned, an associative clause consists of two NPs joined by the preposition of.

In my opinion, the consequence of a successful education deserves our money.

You will get the philosophy of life and you will not make avoidable mistake.

In a word, we cannot neglect the importance of education.
In my opinion, the fee of education is a little bit high than someone can afford.

With the development of society, great change has happen in China.

But the consequence of a failure to educate is even more expensive.

To reduce the cost of a failure in education, we must do that.

What about the failure of education?

To avoid the awful prospect of the uneducated people, we must emphasise the importance of education, improve the quality of education quality, and take care of a student. On the other hand, the student must learn how to be and how to do.

The failure of education would be an expensive destruction.

We should vigorously enlarge to the cost of technical development.

The life of people becomes more and more convenient.

In the middle of the 19th century, the technology develops very fast.

I thank the answer to the problem of heavy traffic should be a combination of both solutions.

It changes the condition of the people’s life well.

The shortage of housing in big city is one of the most serious issues.

As for me, I am inclining to the former point of view.

Firstly, the money use by the government is from taxpayer, who makes up a large proportion of the total population.

Due to the prohibitive price of ticket, they are leave unused at most of the time.

We still have to pay for the high maintenance of them.

In conclusion, the focus of our government’s attention should be shift to how to benefit the public, rather than those millionaires.

It is the healthy development of people both mentally and physically.

The problem of the brain drain cannot be solving.
At the same time, we are throw away them in the form of plastic bag and rubbish which can be recycled.

It needs everyone to take action, to be have the awareness of protect our environment just like the way we treat our eye.

We are high-ranking animal to be endued with the obligation to keep the balance of the nature.

We also need advanced technology to fully dispose of the rubbish, and to produce new material like new energy, biology to replace the wasting one.

We cannot imagine the result of lose energy.

Some people think that this traditional practice must be change along with the development of modernization.

But in my opinion, the development of modernization does not mean there is only one culture in the world.

One county should take in the advantage of the other county.

These thought have been in the deep of the heart of every Chinese.

It is not easy for all the Chinese to change their mind of the culture.

Next, let us see the culture of the western world. It will make the patient is in bad condition and spirit.

We should keep our own culture and take in the advantage of the other county.

I think we should think more about the purpose of education deeply.

I think we should remedy the present system of examination.

A nation’s prosperity depends on the qualification of the youth.

We are the hope of our country’s future.

The image of father affects kid profoundly and lastingly.

Our country also put up several ways to reduce the cost of education.
A boy will act as a father in a family while a girl will be the mother. The father will only go out to earn the money to support the family and the mother of course will stay at home and care the child who is regard as the future of the nation.

If a man be well educated, it will come into effect in the process of policy-making.

It seems that in these countries it is female who are the leader of family and the country.

From ancient time people have be emphasize the importance of male, think of them as the backbone of family.

What be more, education make the gender distinction less and benefit the harmony of the whole society.

This proverb tells us that we should pay more attention to the strength of the woman.

But that does not mean that they should also pay the full cost of their study.

It was found that the following examples are unexplanatory uses of the definite article because as Robertson stated, the unexplanatory uses of the definite article can be found as in phrases such as the same N, the first N, and the best N.

The first reason why I think so be that if we do not receive a good education.

We should spend money, time and effort on it and try our good to get the most from education.

We invest the same amount of money on education.

A person who gets the good thing from it will make use of it to earn money back.

Education is the right way to obtain knowledge gradually turn to a hot area.

Education in the last century is a luxurious activity.

You should face the bad condition and try hard to get knowledge in any area.

But giving up to obtain knowledge is bad than the poor condition.

The most important thing is not to teach them how to get a good education.

Education is one of the most important issues in a human being’s life.
Even *the good habit* and moral, it can be threaten to the whole society.

Once they not in the office perhaps the family, we then very difficult promptly contact with on them and do not have the mean to tell *the new condition* them.

In *the past*, there are no so much stress on population and employment.

Another simple example is the computer and the Network gives us *the big help*.

Some people cheat *the other people* use the network.

But I could increase knowledge more and more in *the follow days*.

People could change *the old view*.

*The second solution* is to open up more bus route to reduce the number of other vehicle and bicycle in the street.

I prefer *the first idea*, high-rise apartment, because it is relatively cheap, faster, and easy to carry out than other option. *The second idea* is not practical, because it is dangerous.

Many people view government ' poor policy is the reason that loses *the most precious resource*.

This is *the most important and useful research work*.

It is really necessary for *the entire nation* to help and support them.

It was found that the follow examples are considered ‘establishing relative clause’ where the definiteness of the NP is established through the use of relative clause.

It is *the fact* that education can tell you how to be a good person.

Education includes not only school year, but also *the other time* when we are learning from other.

With *the knowledge* we learn, we can get a job and earn our life.

*The person* who get nothing or even bad thing from it will suffer from it.

Let people say goodbye to *the lamb* which is worked by wood or oil.
It is the train which is very important for a country’s traffic.

Many people view government's poor policy is the reason that loses the most precious resource.

The one who is more-educated earns high salary.

There are surely some graduate without the ability to earn their living.

We are high-ranking animal to be endued with the obligation to keep the balance of the nature.

The patient, who has got a cancer or some other disease, will not tell their children.

A boy will act as a father in a family while a girl will be the mother. The father will only go out to earn the money to support the family and the mother of course will stay at home and care the child who is regard as the future of the nation.

The following examples can be considered the larger situation use, is characterized by the fact that the NP referred to is uniquely specified on the basis of knowledge which is shared by the speaker and the hearer.

He would not earn money back that easy, he just loses the money to pay.

In another word, it means knowledge be just the power to open the happiness door.

But in today’s world, everyone have the right to study and try hard to get a chance to be educated.

Knowledge sometimes is the power to improve your living standard.

It is likely for them to be successful in the future.

However, they do not know whether the education be suitable for them or not.

Our government should close the door, which our child could communicate with those bad people.

Even the good habit and moral, it can be threaten to the whole society.

He cannot make his life in the society. Even bad, they can break the order and the law, which may cause destruction to the society.
They can adapt to the society.

The modern science and technology play the role is huge.

In my opinion, the modern science and technology cause our life to be more comfortable.

Another simple example is the computer and the Network gives us the very big help.

Certainly, the modern science and technology also can bring to us inconvenient.

In the network also have very many false thing.

Some people cheat the other people use the network.

I think that everyone may know Lijiacheng, who is the rich man in Hong Kong.

As a result, the world can become more and more strong.

But in my opinion, the development of modernization does not mean there be only one culture in the world.

A boy will act as a father in a family while a girl will be the mother. The father will only go out to earn the money to support the family and the mother of course will stay at home and care the child who is regard as the future of the nation.

Especially, the generator has been inventing, and then the electricity is used for lighting.

Now we can see many bus and car move in the street.

One is to lay down more roads to make the public highway less crowded and to speed up the flow of traffic.

The second solution is to open up more bus route to reduce the number of other vehicle and bicycle in the street.

Many solutions are suggested to solve the housing problem, such as to build more high-rise apartment.

Firstly, the money use by the government is from taxpayer, who makes up a large proportion of the total population.
In conclusion, the focus of our government’s attention should be shift to how to benefit the public, rather than those millionaires.

Due to the prohibitive price of ticket, they are leave unused at most of the time.

The government should arouse the public’s interest in culture, art, sport and offer more chance for people to participate.

They will become well-known in the whole world and have a great of prestige in the international.

But oil can pollute the air.

In the western world, if a family member have get a cancer<…>

In the Chinese culture, a common practice is not to tell the patient the truth.

Woman could play an important role in accelerate the whole world’s development as well.

However, this kind of opinion tends to be out of date in the society of nowadays.

Most couple go out for work in the morning and get back in the evening together.

What be more, education make the gender distinction less and benefit the harmony of the whole society.

If you are a less well-educated graduate in the community, many things will change.

You have got a high mark in the quality examination. The high mark means you are good at study and you do a good job in the examination.

Chairman Mao once says teenagers are the rise sun at 8 and 9 in the morning.

Nowadays a large number of young people are indulged in the Internet.

There are still many problems, which are always ignored by the government.

Those examples are considered the anaphoric function, including the repetition of an NP which has been introduced earlier in a sentence with an indefinite NP.
To avoid the awful prospect of the uneducated people, we must emphasise the importance of education, improve the quality of education quality, and take care of a student. On the other hand, the student must learn how to be and how to do.

A telephone may enable we quite prompt relation to have the telephone in the office perhaps a family, but, once they not in the office perhaps the family, we then very difficult promptly.

Besides, the sophisticated equipment makes it easy for a scientist to gain academic achievement. The scientist abroad is offer high reward and gives great opportunity.

A boy will act as a father in a family while a girl will be the mother. The father will only go out to earn the money to support the family and the mother of course will stay at home and care the child who is regard as the future of the nation.

You have got a high mark in the quality examination. The high mark means you are good at study and you do a good job in the examination.

Examples of Indefinite NP Environment:

As Robertson mentioned, there is the existential use of an NP where the existence of the NP is asserted in an existential predication. Examples are generally introduced by the phrases such as there is and there are. The following example is considered the existential use of an NP.

This is a problem that requires an urgent solution, because it leads to social instability and economic inefficiency.

So we innovates mechanical equipment to use the wind power and solar energy to substitute it. Where there is a will, there is a way.

There is a tendency in the present society.

There is a man who graduates from Qinghai University.

There is an old saying that give time is money.

It is a terrible waste of resource and fund.

It is a fact that college graduate earn high salary than the less-educated in the community.
The second indefinite environment is the object of a transitive verb. The following examples can be seen as the use of NP as object of transitive verb.

If we do not receive *a good education*, we won not get enough knowledge and ability to get *a good job*.

Education can tell you how to be *a good person*.

With the knowledge we learn, we can get *a job* and earn our life, we can have *a good understanding of life*.

Nowadays, education becomes *a hot topic* in our daily life.

Everyone has the right to study and try hard to get *a chance* to be educated.