



**In Support of the Full Access Full
Transfer Hypothesis: Evidence from
Error Patterns in the Second Language
Acquisition of English Articles**

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Abstract

The English article system is made up of simple article words: “a/an” and “the”, but these words convey a lot of information. In comparison with the first language (L1) acquisition, the final stage of the second language (L2) acquisition is variable. L2 learners may never achieve a native-like proficiency level. The English article system is complicated for L2 learners. Article errors usually happen in L2 article acquisition. With increasing exposure to the L2, however, learners can reduce the number of article errors in their production. Article errors are not random. The two main error patterns are article overuse and article omission.

These article overuse and article omission are consistent with Universal Grammar (UG). This thesis argues that L2 article acquisition is UG-constrained. These errors are treated as an indicative of interlanguages. However, the initial state of L2 article acquisition is controversial. This thesis suggests that the L1 grammar is available in the L2 Acquisition. So the Full Access Full Transfer hypothesis (FAFT) is expected to account for L2 article acquisition.

The Fluctuation Hypothesis is proposed to address article overuse in L2 article acquisition. Article choice will fluctuate between definite and indefinite in the context of [+definite, -specific] and [-definite, +specific]. This hypothesis is confirmed by L2 learners with no article systems in their native languages. However, this thesis also investigates the findings of Spanish-speaking, Arabic-speaking and French-speaking learners. Spanish has a similar article system to English. Arabic has an article system, but there is a null indefinite marker. French also has an article system, but it forbids bare NPs. These results show that the Fluctuation Hypothesis cannot account for the errors of article choice observed in L2 learners with article systems in their native languages. These results are consistent with the FAFT hypothesis.

The Missing Surface Inflection Hypothesis (MSIH) is used to address article omission. This hypothesis argues that article omission does not occur because the definiteness category is missing from the learners’ grammar, but rather because learners have problems retrieving the relevant forms. This thesis investigates the use of the English article system in light of the MSIH in learners with Turkish, Arabic and French as their native languages. The default value (null) is consistent with Turkish, which has no articles. For the Arabic learners, article omission is expected to be the main error type. Problems accessing surface morphology can

account for article omission. The performance of the French-speaking subjects is expected to be native-like. The experimental results confirm this. These results confirm the Missing Surface Inflection Hypothesis. They are also consistent with the FAFT hypothesis. Both of these hypotheses argue that the functional category expressing definiteness is available in the L2 acquisition. L1 transfer happens during the development of the L2.

This thesis finally provides a different explanation for article overuse and article omission from the framework of UG. This explanation maintains that articles are incorrectly analyzed as adjectives at the early stages by L2 learners with no article systems and as a result two candidates are available when L2 learners make their article choice, such as bare NPs and definite NPs. Because of the absence of articles in the L1, bare NPs become a candidate for L2 learners with no article systems to represent definiteness. This shows the effect of L1 transfer, which is consistent with the FAFT hypothesis.

According to these findings and hypotheses, the FAFT hypothesis is confirmed in this thesis.

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Chapter 1 Introduction

With the development of a more global economy, English has become a world-wide language. It plays an important role in business. Against this background, English has become the preferred option as a second language (L2) in many parts of the world. For example, children usually start learning English from the age of 5 in China, in some cases even earlier. However, Chinese L2 learners usually fail to achieve a native-like competence in English with respect to the article system. In order to figure out the reason for this result, it is important to investigate and research findings and linguistic theories of the L2 acquisition. Linguistic theory will help improve the performance of the L2 acquisition.

There is a lot of research related to the L2 acquisition. One area of research is the investigation of the L2 acquisition of the English article system. The article system in English only consists of the following simple article words: “a/an” and “the”, but these words convey a great deal of information. Why has the English article system been paid attention to? One reason may be the high frequency of articles. The frequent use of article makes them important in English. The COBUILD performs a frequency count in a corpus of 20 million English words (Sinclair 1991). These words are drawn from a corpus of contemporary text created by COBUILD. The definite article “the” is the most frequent word with a frequency rate of 25.1%. The indefinite article “a” follows closely as the fifth most frequent word, which has a frequency rate of 10.5%. In another study, Master (1994) investigates the frequencies of “the”, “a”, and the zero article (\emptyset) in five written genres in a corpus consisting of a total of 197,644 words. The results reveal that the frequency order is $\emptyset > \text{the} > \text{a}$ (48.0% > 36.3% > 15.7%). Based on this result, \emptyset is in fact the most frequent article in English.

Although English articles occur so frequently and L2 learners consequently are exposed them both very frequently and early in the L2 acquisition, article acquisition appears to be late. The article system is pretty complex in English. Article choice in English is complicated and context-dependent. Sometimes article rules cannot be summarized as simple rules. All of these result in the complication of L2 article acquisition.

When L2 learners learn the article system of English, they have to encode the information for articles in English. The fact that the article system is complicated in English makes it more difficult to encode them correctly. Superficially articles look like simple morphemes, but they

are difficult to master until at a very late stage of second language development. The earliest structure that L2 learners are exposed to turns out to be the last acquired.

In addition to the complication of the article system that needs to be acquired, another complicating factor is the first language (L1). L2 learners all have a native language. The second language is usually quite different from the L1. Some researchers argue that L1 transfer happens during the L2 acquisition. If this is the case, the L1 will have an impact on L2 article acquisition to some extent. However, the extent to which the native language influences the L2 acquisition is still controversial.

Another further complicating factor for the acquisition of the English article system is that different languages have different article systems. Some languages have no article systems, others have one. However, even languages with an article system may have systems that are different from the English article system. Chinese is an example of no article system. Arabic, on the other hand, has only a definite article, while English has both a definite and an indefinite article. It is interesting to investigate to what extent different L1 systems have a different effect on the L2 acquisition.

Because their initial input is usually insufficient, errors of article choice will frequently occur in the language of L2 learners. With increasing exposure to the L2, however, learners can reduce the number of article errors in their production. It has also been argued that errors of article choice still occur in more proficient learners as well (Master 1997). This shows that the L2 acquisition will be made up of a series of stages. L2 learners are able to master article choice more and more accurately. However, it is still uncertain whether they will ever achieve the native-like proficiency level. These errors are not random, because there are certain error patterns typically found in L2 article acquisition. Two main error patterns are article overuse and article omission. Article overuse is reported in Master (1987), Ionin et al. (2004) and Trenkic (2009). Article omission has been observed in obligatory contexts (Huebner 1983, Master 1987, Myers 1992, Trenkic 2002).

In the framework of Universal Grammar, these errors are considered as indicative of a series of interlanguages. Interlanguages are maybe not the first language or the second language. The syntax of the first language will influence the L2 acquisition development. However, the extent to which L1 transfer has impact has not been completely evidenced in previous research work. One of learning models is to consider the whole L1 and UG as the initial state

in the L2 acquisition. This model claims that L1 transfer will have an effect during the L2 acquisition. This is called “full transfer”.

It is challenging for L2 learners whose native language is article-less languages (such as Chinese and Korean) to learn to use articles appropriately (Master 1987). L2 learners with an article system of their native language tend to acquire native-like article supply more quickly than learners without an article system in Master (1997) and Zobl (1982). Learners with an L1 article system that is similar to that of the English one find it easier to understand the article system in English. This shows that L1 transfer has an impact on L2 article acquisition. These results show that the L2 acquisition is at least constrained by UG if it is based on L1 transfer.

Some researches focus on the problems of transfer from the first language's different properties to the acquired language (such as Odlin 1989). Some researches pay attention to the issues of error patterns during the L2 acquisition. The present thesis attempts to investigate these researches into the L2 acquisition of articles. It will give an overview of problems, methodology and results discussed in studies of L2 article acquisition. The purpose of this study is to investigate error patterns, including the overuse of the definite article “the” and article omission. Although there are already some existing hypotheses which are proposed to address the definite overuse and article omission respectively in the L2 acquisition development, this thesis discusses further the validation of them.

This thesis argues that the L2 acquisition of articles is UG-constrained. Existing findings and hypotheses are analyzed in the framework of UG. Although the initial state of the L2 acquisition is still controversial, this thesis argues that L1 grammar is the initial state of the L2 acquisition, and that there is full access to UG during the L2 acquisition. As a result, the Full Access Full Transfer (FAFT) hypothesis is argued for in this thesis.

The thesis is organized as follows:

Chapter 2 describes the English article system. It also illustrates the complexity of English articles and presents an overview of the theoretical background, including the semantic wheel and article choice parameters. Error patterns of article choice are also discussed.

Chapter 3 discusses UG and the L2 acquisition. Full access to UG is taken to be available during the L2 acquisition. The initial state is still controversial. This thesis argues that full transfer has an effect on L2 article acquisition.

Chapter 4 is concerned with the issues of the Fluctuation Hypothesis for article overuse. After the introduction of the Fluctuation Hypothesis, the validation of this hypothesis in different L1s is discussed in this thesis. The validation shows that this hypothesis cannot address all instances of article overuse when L2 learners have article systems. This hypothesis is only well-suited to the L2 acquisition of article systems by learners whose L1s have no articles. It is a particular case of the FAFT hypothesis. The FAFT hypothesis can account for article overuse with or without article systems.

Chapter 5 introduces the Missing Surface Inflection Hypothesis (MSIH) to account for errors of omission in L2 article acquisition. This chapter will discuss whether the MSIH is consistent with the FAFT hypothesis.

Chapter 6 introduces an explanation for article overuse and article omission. This explanation is not within the framework of UG. The hypothesis in this chapter argues that L2 learners incorrectly analyze articles as adjectives at the early stages of L2 article acquisition. This chapter will also discuss whether this account is consistent with the FAFT hypothesis.

Finally, the thesis ends with a brief summary and conclusion in chapter 7.

Chapter 2 Theoretical Background

2.1 Definiteness

In the world, some languages have article systems, but others do not have them. However, whether a language has articles or not, it has to have some way of expressing the information encoded by articles. How do the majority of the world's languages encode this information without the formal marking of articles? An answer can help address the problems experienced during the L2 acquisition of article.

This thesis will discuss the L2 acquisition of the English article system. The article system is made up of “a/an”, “the”, and zero article (\emptyset) in English. These articles express important information regarding the reference of noun phrases.

In the English article system, it is important for L2 learners to learn the referential properties of definite and indefinite articles. What exactly is definiteness? However, the definition of definiteness has a lot of versions, not one commonly-accepted one. Following the definition of Ionin et al. (2004) in this thesis, the formal and informal definitions are given in the following in order to answer this question.

(1) Formal definition of Definiteness (Ionin et al. 2004:6)

a. Definiteness:

[the ζ] ξ expresses that proposition that is

True at index i , if there is exactly one ζ at i , and it is ξ at i .

False at an index i , if there is exactly one ζ at i , and it is not ξ at i .

Truth-valueless at an index i , if there is not exactly one ζ at i . (Heim 1991:9)

b. Indefinites (quantificational analysis)

A sentence of the form [a ζ] ξ expresses a proposition that is true if there is at least one individual who is both ζ and ξ and false otherwise (Heim 1991:26).

(2) Informal definition of Definiteness (Ionin et al. 2004:5)

If a Determiner Phrase (DP) of the form [D NP] is

[+definite], then the speaker and hearer presuppose the existence of a unique individual in the set denoted by the NP.

From the above definitions of definiteness, it can be noted that nominal definiteness is related to a context of speaker and hearer. The scenario concerns the identification of referents in discourse. This scenario is in real time.

When a speaker uses a definite noun phrase, she expects the referent to exist and to be uniquely identifiable to the hearer. In this case, the discourse referent is definite. The referent can be said to be uniquely identifiable when it exists and is unique in one of the pragmatically delimited domains mutually manifest to speaker and hearer in real time.

By contrast, the referent is indefinite when the conditions for unique identifiability do not hold. In this case, the referent does not exist in the context of speaker and hearer, or it is not unique within it.

Some languages encode definiteness explicitly through an article system, while others do not. However, even in languages that do not have article systems, nominal context can be classified as definite or indefinite. They just express it in a different way. Following this point of view, definiteness is a universal category, and can be encoded in all languages. The English Article system is one way of encoding this information.

In order to explain how definiteness works in further detail, an example is provided here. This example is not the only type of contexts where definite or indefinite is used. The context is that a speaker and a hearer are standing in front of three apples and the speaker wants to select one of these, as shown in Figure 2.1. There are two green apples on the left and a red apple on the right side of the figure. The speaker wishes the red apple passed to him.



Figure 2.1 A Scenario of Definiteness

The speaker can express this context in English as (3):

(3) Please pass me the red apple.

Definiteness is encoded by the definite article "the" followed by "red apple". This use of the definite form signals that the referent of the apple is uniquely identifiable. The red apple exists and is unique in this context during the conversation between speaker and hearer in real time, while none of the green apples are.

Speakers of languages without articles cannot express definiteness through articles. Chinese is an example of a language without an article system. If the speaker wants to express the same information as (3) in Chinese, he would say as follows:

(4) Qing ba hong pingguo gei wo.

Please BA red apple pass me

“Please pass me the red apple.”

Although the nominal phrase in (4) is not explicitly marked definite, the conversational context is the same as that in English. The reference to the red apple is clear. It is presupposed to exist because there is one red apple in front of the speaker and the hearer. It is also unique because there is only one red apple.

Comparing the two examples in (3) and (4) reveals that languages can encode definite contexts even though the noun phrase in languages without articles is not formally encoded as definite. The signaled information of the reference in (4) should be the same as that in (3). So the definite information of the speaker's utterance should be unambiguous and successful.

By contrast, an indefinite context is assumed if the speaker wants one of the green apples in figure 2.1, and wants the hearer to pass it to her. In English this request could be expressed as in (5), while in Chinese it would be expressed as in (6).

(5) Please pass me a green apple.

(6) qing gei wo lv pingguo.

Please pass me green apple.

The indefinite article "a" in English is used to mark in the nominal phrase in (5) as indefinite. The indefinite article signals that the criteria of definiteness are not met in this context. There is no referent in the context that can be uniquely identified among the green apples. As a

result, any of the green apples will satisfy a potential referent. The Chinese example in (6) is different from that in English. But the information is same, because of the same indefinite context. The hearer is aware of two available green apples. The hearer has to assume that each of them is an equally potential referent. If the speaker wants a specific green apple, then additional descriptive information would have been encoded in both of English and Chinese. In this case, the speaker and the hearer must interpret the nominal context as definite.

2.2 Difficulty of L2 Article Acquisition

The ability to choose the correct article is part of the competence of native speakers of English. Children seem to acquire the article system at a relatively early age in the L1 acquisition. Unlike L2 learners, they always manage to master the English article system. Native speakers are unaware of the importance of articles to English syntax sometimes. Native speakers of English make their article choices correctly but unconsciously. Due to the unconscious manner of this choice, Hewson (1972) refers to psychomechanism.

In contrast with the unconscious and effortless acquisition of article systems in L1, L2 learners have great difficulties acquiring article systems in their second language. Learning English articles represents a challenge, because of the complexity of the English article system. So errors of article choice will usually occur, when second languages are learned. Article choice depends on several factors. One of these factors is the fact that the English article system does not have a one-to-one form and meaning relationships.

Master (2002) outlines three main difficulties for students when they study English articles. Firstly, the high frequency of articles both in speech and print makes it difficult to identify a rule from too many examples and usages. Secondly, function words are not usually stressed. This makes them harder to notice them. Finally, the article system has only one morpheme for numerous uses in English. This one-to-many mapping introduces the complexity of L2 article acquisition.

In addition to these difficulties, the following subsections will present four other problems that L2 learners of the English article system will encounter.

2.2.1 Complexity of Noun Classification

Noun classification also has an impact on article choice in English. Celce-Murica and Larsen-freeman (1999:172) confirm that article choice is tightly related to the classification of nouns. However, noun classification is complicated. All English nouns can be classified as either

common nouns (e.g. a boy, a country, a planet) or proper nouns (e.g. Bob Robertson, Denmark, Saturn) in Celce-Murcia and Larsen-Freeman (1999:172). Celce-Murcia and Larsen-Freeman also argue that all common nouns must be further classified as mass (e.g. water, clothing, and luggage) or count (a beverage, a shirt, and a suitcase); only count nouns can have singular and/or plural forms. These distinctions may overlap in some cases. But these classifications are useful and necessary to master the English article system. Thus, the choice between “the”, “a/an”, and zero article in English depends on whether the noun in question is countable or uncountable, and if it is countable on whether it is singular or plural.

2.2.2 Information Redundancy of Articles

As already mentioned some languages have articles while others do not. Languages without articles can express the same contexts as languages with articles. This means that languages without article systems have to be able to express these distinctions in other ways. The semantics of definiteness is necessary for all language systems, but articles do not seem to be the only way to express a definite context.

This might cause us to question whether it is necessary to have an article system. Why do some languages develop an article system to mark definiteness, while others do not have to mark nominal referents as definite or indefinite? Brown (1973) discusses a similar question. Why are English articles necessary when the speaker and the hearer can identify the referent from the context? This information redundancy is also one of the reasons for the difficulties learners with articles in their L1 have when it comes to learning the English article system.

In order to address this redundancy problem, an example is given here.



Figure 2.2 Definiteness Context

Figure 2.2 describes a context where only one red apple is in front of the speaker and the hearer. This apple is red. If a speaker wants the hearer to pass this apple to him, he can encode this information as follows.

(7) Please pass me the red apple.

The definite form is used because in this context there exists only this unique apple. The speaker can also give more description regarding this apple, for example by saying: “please pass me the red Norwegian apple”. As a result, it seems like the hearer has more information to help him interpret the words of the speaker, but this information is, in fact, redundant, because the context has only one apple. If the speaker prefers to refer to the apple using a minimum amount of information, he may say as follows:

(8) Please pass me the apple.

The question is whether we can remove more words? Can we drop the definite article (“the”)? The answer to this is that this is not possible. Yet this is something that frequently occurs in the language of speakers, whose second language is English; a hypothetical example is provided in (9):

(9) Please pass me apple.

A hearer should be able to understand this information, because the context is clear and only one apple is available there. But the grammar does not allow (9). It is ungrammatical to omit the article. English grammar requires articles in well-formed, countable, singular noun phrases. However, this violates information pragmatics (Mey 1993), which is a subfield of linguistic. Pragmatics is the study how context contributes to meaning. Pragmatics means that the information is encoded as little as possible. Language should not reduplicate the information contained in the context. So the context of the speaker and the hearer has a unique apple. The speaker will drop the definite article if he follows the pragmatic rule. Pragmatics requires for the information to be implicit in the context. This goes against English grammar. English grammar requires explicit marking of definiteness. This seems that English grammar has violated the principles of rational communication. This violation will make L2 learners of English confused.

2.2.3 Ambiguity of English Indefinite

Indefinites are usually considered to function as quantifiers in the traditional analysis. Consider, for example, the definition of indefinite shown in (1b). Based on this standard quantificational analysis of indefinites, indefinites will be expected to behave similar to other quantifiers (such as "every").

However, indefinites do not in fact work the same as other quantifiers. Indefinites are able to scope out of some scope islands. In order to illustrate this, consider the example (Fodor and Sag 1982:370) (10).

- (10) a. If a friend of mine from Texas had died in the fire, I would have inherited a fortune.
b. If each friend of mine from Texas had died in the fire, I would have inherited a fortune.

The indefinite “a friend of mine from Texas” can take scope over if-clause in (10a). In this case, the sentence means that there is a particular friend of mine from Texas. If that friend had died in the fire, I would have inherited a fortune. By contrast, if this indefinite take the narrow-scope where it does not cross if-clause, the meaning of the sentence would be different. Only if any friend of mine from Texas had died in the fire would I have inherited a fortune.

But the quantifier “each” of (10b) behaves differently from the indefinite “a”. It takes narrow scope. (10b) only expresses the information: I would have inherited a fortune if all of my friends from Texas had died. If the quantifier “each” can take wide scope over if-clause, the sentence means that I would inherit a fortune if anyone of them died. As a result, it would not be necessary for all of my Texan friends to die. However, this meaning of (10b) is unavailable.

2.2.4 Ambiguity of English Definite

The definition of the English definite given in (1a) is referential definite. Donnellan (1966) argues that the referential reading does not cover all the uses of the English definite article. In addition to the referential reading, English definites can sometimes have an attributive. Some definites are ambiguous between a referential and an attributive reading.

An example illustrating the two readings is given in (11). This example comes from Donnellan (1966:364).

(11) Smith's murderer is insane.

The nominal phrase "Smith's murderer" can be rephrased as the 'murderer of Smith'. So the context of this sentence is definite. One possible interpretation of the sentence involves an attributive reading of the noun phrase. The speaker does not know who murdered Smith. But the speaker believes that Smith was such a sweet and kind person that his murderer has to be insane. It is impossible for a sane person to do so. As a result, whoever murdered Smith must be insane.

In comparison with the attributive reading, the noun phrase can get a referential reading. In this case, the speaker knows that a particular person is the murderer, such as John. So the speaker has reasons to believe that John is insane. However, it is only the opinion of the speaker. It may not be true that John is Smith's murderer. In this analysis, (11) would still be true on the referential reading of the definite.

From the example in (11), the difference between a referential and an attributive reading is whether the speaker knows of an existing referent. However, whether this ambiguity of English definite exists is still controversial. But it shows the complexity of acquiring English definite to some extent.

2.3 Article Classification System

The English article system is fairly complex. In fact, it is so complex that some researchers have suggested that L2 learners use articles randomly in the course of the L2 acquisition. A study reported in Yamada & Matsuura (1982) suggests that L2 students' use of articles has little or no resemblance to established English practice. The students seem to use articles almost randomly. English teachers found it difficult to understand how or on what basis the article choice of their students was made. However, Master (1997) suggests that formal instruction does have a positive effect. It is helpful that many teachers do indeed attempt to provide rules for the use of articles.

The question is whether L2 learners really use articles randomly? In order to address this question, it is very important to review the existing classification theories regarding the English article system in light of the L2 acquisition. This will help to get a better understanding of how such theories relate to L2 learners' uses of articles.

2.3.1 Semantic Wheel

Most early studies of L2 article acquisition follow the idea of the binary semantic system including specific referent and hearer knowledge proposed in Bickerton (1981). Huebner (1983) extends Bickerton's idea. Huebner (1983) argues that early morpheme studies have only inspected obligatory contexts. Early morpheme studies are inspired by work on L1 development. L1 researchers in the early 1970s discover a common order of appearance for a set of grammatical morphemes 90 percent accurately supplied, in the speech of children learning English as L1, in obligatory contexts (linguistic environments where omission of the morphemes would result in ungrammaticality) (Frawley 2003:25). The article is repeatedly found to reach 80 or 90 percent accurate suppliance in English as Second Language (Frawley 2003:25). However, these studies are unable to represent variation in the use of a morpheme in an evolving interlanguage. Huebner does not only consider obligatory contexts of article usage, but also the L2 learner's article usage in the course of the L2 acquisition.

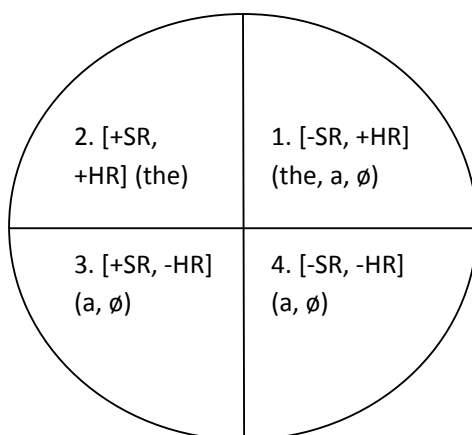


Figure 2.3 Semantic Wheel for Noun Phrase Reference (Huebner 1983)

Huebner's subject is Ge who is a 23-year old Hmong speaker with a basic-level English proficiency. The study was a longitudinal naturalistic study. This study lasted a year. Huebner identified six stages in Ge's development. Based on the result, Huebner made a semantic classification of the English article system. This classification is named the Semantic Wheel. This semantic wheel suggests that noun contexts be classified in terms of four semantic categories, [\pm Specific Referent (\pm SR)] and [\pm Assumed Known to the Hearer (\pm HK)]. This classification is illustrated in Figure 2.3 together with the article(s) used in these contexts. The identified six stages provide support for the existence of interlanguages in L2 article acquisition. The four categories show the random choice of articles in the course of acquisition.

Example sentences are given in Table 2.1. Those are drawn from Venuti (2011).

Category	Article	Environment	Example
[-SR,+HK]	the, a, Ø	Generics	A paper clip comes in handy. The Grenomian is an excitable person. Ø Fruit flourishes in the valley.
[+SR,+HK]	The	Unique, previously mentioned, or physically present referents	Pass me the pen. The idea of coming to the U.S. was... I found a book. The book... The first person to walk on the moon...
[+SR,-HK]	a, Ø	First-mention NPs, or NPs following existential 'has/have' or 'there is/are'	Chris approached me carrying a dog. I keep sending Ø messages to him.
[-SR,-HK]	a, Ø	Equative NPs, or NPs in negation, question, or irrealis mode	Alice is an accountant. I guess I should buy a new car. Ø Foreigners would come up with a better solution.

Table 2.1 Environments and Examples for the Semantic Categories [\pm SR, \pm HK] (Venuti 2011)

However, there are some limitations when the semantic categories are used to address L2 article acquisition. The four categories cannot cover all uses of English articles. Idiomatic expressions and other conventional uses have to be considered as a separate category. The semantic wheel provides a classification based on SR and HK. However, this system is not helpful when it comes to the issue of transfer from the first language in the L2 acquisition. Although the semantic wheel can account for interlanguages, it does not address problems related to cross-languages influence.

The referent is maybe not related to the speaker's or the hearer's knowledge. For example, the following sentence ("*we are looking for the vandals who broke into the office last night*") is drawn from Lyons (1999). The referent is existence and uniqueness. However, it is unknown to the speaker and the hearer. As a result, semantic wheel cannot cover all of contexts of article usage.

2.3.2 Article Choice Parameter

L2 learners are able to acquire parameter values which are not part of their first languages. This has been suggested for various phenomena, such as the verb-raising parameter (White 1990/1991) and the V2-parameter (Robertson and Sorace 1999). This makes possible to introduce a parameter for addressing the issues of L2 article acquisition. These values of this parameter maybe come from different languages. Following this idea and the theory of article semantics, Ionin et al. (2003) propose a hypothesis in which the underlying mechanism for

article choice is captured by the article choice parameter. This parameter can have one of two settings, the definiteness setting or the specificity setting. A language with an article system will have one of these two settings. In other words, articles are distinguished on the basis of definiteness or on the basis of specificity.

The definitions of definiteness and specificity involve three parts, knowledge, hearer and speaker. A conversation includes two participants, hearer and speaker. Ionin et al. (2004) provide informal definitions of definiteness and specificity. These definitions are based on what knowledge the speaker and the hearer have about a given referent. A Determiner Phrase (DP) is made up of a determiner and a noun phrase, and the form can be presented as [D NP]. If the DP is definite, the existence of a unique individual in the set denoted by the NP is presupposed between the speaker and hearer. If a DP is specific, the speaker intends to refer to a unique individual in the set denoted by the NP and considers this individual to possess some noteworthy property.

The article choice parameter is proposed based on the following fact. Some languages distinguish between definites and indefinites, while others distinguish between specific and non-specific. One of piece of evidence for this is the article system of Samoan, which makes use of the feature [+specific].

This evidence comes from the work of Mosel and Hovdhaugen (1992). Samoan supplies one article (le) for [+specific] DPs and uses another article (se) for [-specific] DPs. The specific article singular le/l=ART indicates that the noun phrase refers to one particular entity regardless of whether it is definite or indefinite (Mosel and Hovdhaugen 1992:259).

Examples (12, 13 and 14) are taken from Ionin et al.(2004:9). Example (12) illustrates “le” used in [-definite, +specific] (12a) and [+definite, +specific] (12b) contexts. Example (13) presents “se” used in a nonspecific singular context. Example (14) shows the use of “se” with possessive DPs. In these examples, PRES, ART, Poss, du, DIR, Q, and LD stand for present tense, article, possessive marker, dual number, directional, question words and locative case respectively. The digital “3” means the third person.

(12) a. [-definite, +specific]

‘O le ulugāli’i, fānau l=a lā tama ‘o le teine ‘o Sina.

PRES ART couple give birth ART=Poss3.du. child PRES ART girl PRES
Sina

“There was a couple who had a child, a girl called Sina.”

b. [+definite, +specific]

Māsani ‘o le tamāloa e usua’i=ina lava ia. . . .

used PRES ART man GENR get up early=ES EMPH 3sg

’ae nonofo ‘o le fafine ma l=a=na tama I le fale.

but.stay(pl.) PRES ART woman and ART=POSS=3.sg child LD ART house

“It was the man’s practice to get up early and . . . while the woman stayed at home with her child.”

(13) a. [-definite, -specific]

‘Au=mai se niu!

take=DIR ART(nsp.sg.) coconut

“Bring me a coconut [no matter which one]!”

b. [-definite, -specific]

Sa fesili mai se tamaitai po=o ai l=o ma tama.

PAST ask DIR ART(nsp.sg.) lady Q-PRES who ART=Poss 1.exc.du father

“A lady asked us who our father was.”

(14) a. [+definite, -specific]

Alu i se tou aiga e moe. Pe se tama a ai!

go LD ART(nsp.sg.) 2.pl. family GENR sleep. Q ART(nsp.sg.) boy POSS who

“Go to your family—whoever that may be—and sleep! [I wonder] whose boy you might be!” [said to a boy who is selling necklaces at night in front of a hotel]

b. [+definite, -specific]

Tapagai lava ulavale l=o=u pua'a po='o ai s=o=u
tama.

[term of abuse] EMPH troublesome ART=Poss=2.sg. pig Q=PRES who ART(nsp.sg.)
father

“Oh you filthy little bastard, you pig, whoever is your father.”

The examples above show that Samoan uses one article (“le”) in [+specific] contexts and a different article (“se”) in [-specific] contexts. This article system is different from the one in English, which is distinguished by definiteness.

Based the comparison between the article systems in Samoan and English, Ionin et al. (2003, 2004) propose a parameter governing article choice. This parameter has a binary value, for definiteness and specificity. The detail of the article choice parameter is presented in (15).

(15) The Article Choice Parameter (for two-article languages) (Ionin et al. 2004:12)

A language that has two articles distinguishes them as follows:

The Definiteness Setting: Articles are distinguished on the basis of definiteness.

The Specificity Setting: Articles are distinguished on the basis of specificity.

The article choice parameter is proposed in the framework of Universal Grammar. So the classification is well suited to address the problem of L2 article acquisition. There is a lot of research related to the article choice parameter.

The article choice parameter suggests two possible choices for languages with an article system. Table 2.2 shows that articles may be grouped according to definiteness (such as in English) or specificity (such as in Samoan).

Article Grouping by definiteness				Article Grouping by specificity		
	+definite	-definite			+definite	-definite
+specific				+specific		
-specific				-specific		

Table 2.2 Article Grouping Cross-Linguistically: Two-Article Languages (Ionin et al. 2004:13)

2.4 Error Patterns of L2 Article Acquisition

If article choice is random, L2 article acquisition will have to use variability to account for. However, if there are some error patterns existing in L2 article acquisition, this will constitute evidence of non-random article choice during the L2 acquisition. Non-random article choice

means that the L2 acquisition will be constrained by some rules. A lot of evidence supports that error patterns indeed occur in L2 learners' production. This section will introduce two error patterns: article omission and article overuse. Each of them will give some evidence.

2.4.1 Article Omission

Article omission stands for the absence of “a” or “the” when either article should be overt. It is different from the zero article, which refers to the non-overt indefinite article. The zero article is grammatical. Article omission is usually treated as ungrammatical errors. This subsection will introduce modification of noun phrases as evidence of article omission.

2.4.1.1 Modification

Noun phrases are optionally modified by modifiers, such as adjectives. A number of studies observe that article omission occurs in this case. In other words, L2 learners tend to omit articles more when a noun is modified by an adjective (“a red apple”) than in simpler non-modified contexts (“an apple”). Sharma (2005) has made a conclusion of the absence of definite and indefinite articles. One of them is modification. The modification is categorized as bare, modified and quantified, as shown in (16). The bare modification (16a) is the case of noun phrases following articles directly. Example (16b) is the modified modification, where an adjective (“poor”) is used as a modifier of a noun phrase. Example (16c) illustrates the quantified modification, where “a lot of families” are a quantifying phrase. The quantified modification includes ranking adjective phrases (e.g. “the biggest apple”), quantifying phrases (e.g. “a number of apples”) and numeral phrases (e.g. “the third apple”). The basic property that these categories share is that their modifier either uniquely isolates the referent or quantifies the referent set (Sharma 2005:547).

(16) Modification (Sharma 2005:547)

- a. I worked as a bartender. (Bare)
- b. Bihar traditionally been a poor state. (Modified)
- c. It is a problem for a lot of families. (Quantified)

Some examples are given in (17) from the Indian-speaking L2 learners.

(17) Error samples of article omission (Sharma 2005:557)

- a. I studied in Gujarati, but Ø second language was English.

b. So it is easier for new generation to understand Ø whole concept of the new technology and everything.

c. And now he has one son and Ø second is on the way.

d. In fact you find Ø lot of Andhra guys here rather than Bangalorians.

e. So they went to India every year from day one. From Ø first year of birth till...

Sharma (2005) investigates 12 individuals acquiring English. They are first-generation adult Indian immigrants in California. The data are collected through interviews, ranging in duration from 1 to 2 hours. The 12 subjects are arranged into three groups. The result of the article omission of article choice is presented in Table 2.3 according to the type of modification in noun phrases. This result is statistically significant.

Group	Bare NPs		Modified NPs		Quantified NPs	
	n	%	n	%	n	%
1	83	43	45	58	26	92
2	379	29	186	49	113	78
3	250	16	124	17	83	28
Total	712	26	355	39	222	61

Table 2.3 Null Article Use According to Modification Type (Sharma 2005:558)

The table shows that the percentages of article omission in the context of bare NPs, modified NPs and quantified NPs are up to 26%, 39% and 61% respectively in total. This distribution indicates that the subjects preferred to omit articles in the case of modification, especially in the context of quantified NPs. Modification can be understood as the restriction of the potential referents of a noun phrase. Quantified modifiers are used to identify the referents uniquely. L2 learners maybe think that quantified modifiers have enough information for the referents. So they tend to omit articles in the context of quantified modifiers.

Snape (2007) investigates article omission in the context of the modified NPs when 30 Japanese subjects acquire English. The subjects are postgraduate students at the University of Essex. They are categorized as an intermediate group and an advanced group according to their score of taking the Oxford Quick Placement Test (2001). Snape compares suppliance of articles in Art+N contexts and Art+Adj+N contexts. Fifteen native speakers are used as a control group. The subjects take an oral production task which consists of a total of 113 items. One example is shown in (18).

(18) Oral production task (Snape 2007:401)

At Colchester North station, an elderly woman's daughter watched a young man run quickly down platform three to catch the next train to London. The daughter of the elderly woman caught the same train, but took her time, strolling down the platform. 'I thought the train was leaving' the young man said. 'They cannot find a driver', the elderly woman's daughter replied.

Prompts: **station, elderly woman, daughter, young man, train to London, driver**

The result is presented in Table 2.4. The result includes article omission in the contexts of bare NPs and modified NPs. This table shows that the performance of the intermediate and advanced groups is significantly different from that of the native controls. Article omission is confirmed to occur in the contexts of bare NPs and modified NPs.

	Singular definites		Singular indefinites	
	Art+N	Art+adj+N	Art+N	Art+adj+N
Intermediate (15)	35/175 (20%)	6/32 (19%)	46/214 (21%)	42/89 (47%)
Advanced (15)	30/215 (14%)	5/33 (15%)	19/237 (8%)	19/100 (19%)
Native controls (15)	0/247 (0%)	0/46 (0%)	0/210 (0%)	0/131 (0%)

Table 2.4 Article Omission in Singular Definite and Singular Indefinite (Snape 2007:402)

2.4.2 Article Overuse

Huebner (1983) studies one adult Hmong-speaking learner of L2 English. Huebner finds that the learner supplied "the" across all environments in the beginning period. But this learner supplies "the" with the context of [+HK] later. Master (1987) investigates the production of L2-English learners from five different L1 backgrounds. Master also claims that "the" is associated with [+HK].

Parrish (1987)'s longitudinal study of English by an LI-Japanese speaker argues that it is not totally random although article choice of this learner is not target-like. Parrish finds 9.4% the overuse in the contexts of [+SR, -HK].

Thomas (1989) investigates the acquisition of English articles by L1 and L2 learners. Thomas finds that child L1 learners frequently supply the definite article in referential indefinite contexts and adult L2 learners also overuse the definite article. Although Huebner's and Master's findings suggest that "the" is related with the contexts of [+HK], Thomas (1989) argues the data from both of the studies show overuse of "the" in indefinite [+SR, -HK] contexts.

Ionin et al. (2003) study the production from L1 Russian and L1 Korean learners of English. Both of languages have no article systems. Examples are extracted from the written production data which are collected from these learners of English. The target article for all underlined DPs is “a”, because the referent is not previously mentioned in (19).

(19) Error samples of article overuse (Ionin et al. 2003:246)

a. I lost the health tooth, and I have realized after some time how it was valuable for me. It happened unexpectedly – I bit off the solid sweet and that is all: my nice – facial! – tooth was fractured.

b. The most valuable object that I have received is the ball and the signature of the famous baseball player is signed on it.

		L1-Russian participants (N=37)			L1-Korean participants (N=37)		
Category	Target	%the	%a	%null	%the	%a	%null
Definite	The	85%	14%	1%	83%	14%	3%
Specific indefinite	a	44%	46%	10%	24%	71%	5%
Nonspecific indefinite	a	11%	80%	9%	7%	89%	4%

Table 2.5 Article Overuse in Singular Contexts (Ionin et al. 2003:252)

The result is presented in Table 2.5. According to this result, Ionin et al. (2003) find that L2 learners with no article system will overuse in the contexts of specific indefinites.

Ko et al. (2010) extend the studies of Ionin et al. (2003, 2004). Ko et al. (2010) introduce a new concept: Presuppositionality, as shown in (20), Presuppositionality is not marked by the Standard English article system (Ko et al. 2010:222).

(20) Presuppositionality (Ko et al. 2010:220)

A sentence of the form [pres α] ζ presupposes that there exists at least one individual which is α and asserts that there exists at least one individual which is both α and ζ .

The overt partitive is one type of indefinite expressing presuppositionality. The overt partitive presupposes existence without presupposing uniqueness, such as “one of the apples” or “two of the apples”. The indefinite context is classified as [+partitive] and [-partitive]. [+partitive] is true if and only if it is compatible with an overt partitive, as shown in (21a). There is a set of puppies presupposed in (21a). An indefinite context is [-partitive] if and only if it is not compatible with an overt partitive, as shown in (21b).

(21) Examples of partitive (Ko et al. 2010:224)

a. Janet went to a pet shop and saw five puppies and six kittens there. After much deliberation, she chose *a puppy/one of the puppies*. [+partitive]

b. Janet was walking down the street when she heard somebody whine. She looked down, and was surprised to see *a puppy/#one of the puppies*. [-partitive]

Indefinite Contexts	(Incorrect) use of the	(Correct) use of a	Article Omission
[+partitive]	(27.5%)88/320	(66.9%)214/320	(6%)18/320
[-partitive]	(4.4%)7/160	(93.1%)149/160	(2.5%)4/160

Table 2.6 Article Overuse in Partitive Contexts (Ko et al. 2010:238)

Ko et al. (2010) investigate the production of 20 adult L1 Korean learners of L2 English. The subjects take a forced-choice elicitation task. The result is given in Table. The results show that L2 learners tend to overuse definite articles “the” in partitive contexts.

Chapter 3 Universal Grammar and the L2 Acquisition

3.1 Universal Grammar and the L1 Acquisition

Following Chomsky (1965), the native language linguistic competence of speakers can be addressed during the L1 acquisition in the frame of an abstract and unconscious linguistic system. Chomsky (1965) proposes that the L1 acquisition is constrained by Universal Grammar (UG). UG is supposed to be part of an innate biologically endowed language faculty (Chomsky 1965). UG provides a genetic blueprint, determining in advance what grammars can (and cannot) be like (White 2003:2). UG consists of invariant principles and parameters. Invariant principles are common to all languages. One of invariant principles is that a sentence must have a subject. Parameters are variable from languages to languages with a limited number of built-in options (settings or values). These options allow for cross-linguistic variation. Parameters are usually supposed to be binary. In other words, they have only two settings which are predetermined by UG. So UG allows L1 learners to master grammars beyond exposed input.

UG is motivated by a problem where the input that L1 learners are exposed to underdetermine unconscious knowledge of languages that L1 learners acquires. It means that a mismatch occurs between the input and the output. This mismatch gives rise to what is known as the problem of the poverty of the stimulus (POS) or the logical problem of language acquisition (White 2003:4). Children always manage to learn their first language and achieve mastery of their native language. However, they achieve this under deficient L1 input and no explicit instruction during their acquisition. They are able to know or induce whether expressions are acceptable or unacceptable. But the problem is how they induce their grammars from deficient input. UG argues that children are supposed to be born with built-in knowledge of principles and parameters. L1 input is exposed to children to activate parameters of the first language.

The L1 acquisition starts with the child's initial state (S_0) in the framework of UG. This initial state is built-in with children in advance of L1 input. UG consists of the initial state. With the increasing exposure of the primary linguistic data (PLD), children will determine the L1 grammar. According to L1 input, children will set parameters of UG to specific values of their native language. Children finally achieve a steady state grammar for their native language (S_S). This model of the L1 acquisition is showed in Figure 3.1.

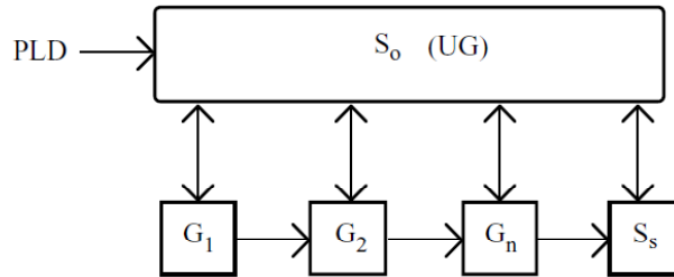


Figure 3.1 Model of the L1 Acquisition (White 2003:3)

3.2 UG and the L2 Acquisition

Whether can UG be involved in the L2 acquisition? The answer is still controversial. In comparison with the L1 acquisition, L2 learners already have their native languages when they begin to acquire a second language. In order to determine whether UG is involved in L2, we would need to find out grammars which are underdetermined in both the L2 and the L1. In other words, POS occurring in the L2 acquisition has to be confirmed. Two conditions should be hold if the L2 acquisition is constrained by UG (White 2003). These two conditions are listed as follows.

(a) The phenomenon being investigated must be underdetermined by the L2 input. That is, it must not be something that could be acquired by observation of the L2 input, including statistical inferencing based on frequency of occurrence, on the basis of analogy, or on the basis of instruction (White 2003:23).

(b) The phenomenon should work differently in the L1 and the L2. That is, it must be underdetermined by the L1 grammar as well. In this way, transfer of surface properties can be ruled out as an explanation of any knowledge that L2 learners attain (White 2003:23).

These two conditions guarantee that knowledge must be beyond L2 input and L1 grammar. Only when these two conditions are hold, the POS problem can be confirmed to be involved in the L2 acquisition. The confirmation of the POS problem will support that the L2 acquisition is UG-constrained. There are a lot of existing researches to investigate whether POS happens in the L2 acquisition. The Overt Pronoun Constraint (OPC) is discussed here to provide evidence of POS. OPC is related to subject pronouns. OPC could not be acquired on the basis of L2 input and L1 grammar.

3.2.1 Overt Pronoun Constraint

Existing languages can be classified into two groups according to whether or not subject pronouns must be phonetically realized. One group is [-null subject] languages, where pronouns must be overtly expressed like English. Another group is [+null subject] languages where pronouns maybe are null. In comparison with in [-null subject], pronouns take the form of an empty category (PRO) in [+null subject] languages. [+null subject] languages include Romance languages such as Spanish and Italian, east Asian languages such as Chinese, Japanese and Korean.

In order to compare the difference between [+null subject] languages and [-null subject] languages, the examples in (1) are taken from White (2003:5). Example (1a) and (1b) are in English. (1b) is ungrammatical, because English forbids null subject. A Spanish example and a Japanese example are given in (1c) and (1d) respectively, where null subjects are allowed.

(1) a. John believes that he is intelligent.

b. *John believes that PRO is intelligent.

c. Juan cree que PRO es inteligente.

John believes that is intelligent.

‘John believes that (he) is intelligent.’

d. Tanaka-san wa PRO kaisya de itiban da to itte-iru.

Tanaka-Mr TOP company in best is that saying-is

‘Mr Tanaka says that (he) is the best in the company.’

Overt pronouns are still legal in [+null subject] languages. Both overt and null subject pronouns are allowed in [+null subject] languages. The difference between overt and null pronouns is their use distribution in [+null subject] languages. The comparison result is listed in Table 3.1.

	[+Null subject] languages		[-Null subject] languages
	Null pronouns	Overt pronouns	Overt pronouns
Referential antecedents	Yes	Yes	Yes
Quantified antecedents	Yes	No	Yes
Discourse antecedents	Yes	Yes	Yes

Table 3.1 Antecedents for Embedded Subject Pronouns in White (2003:8).

OPC is originally proposed by Montalbetti (1984). It is stated as follows: In languages that permit an overt/null pronominal alternation, an overt pronominal must not have a quantified NP as antecedent (Montalbetti 1984).

In order to address the difference of antecedents, two Spanish examples (2a and 2b) are given. Example (2a) illustrates a referential antecedent (PRO) which refers to John. Example (2b) shows a quantified antecedent (PRO) which refers to nobody.

(2) PRO (White 2003:6)

a. [Juan_i cree [que PRO es inteligente]]

John_i believes that (he) is intelligent

b. [Nadie_i cree [que PRO es inteligente]]

Nobody_i believes that (he) is intelligent

In [+null subject] languages, overt and covert pronouns can refer to someone else in the discourse. This is same as the use of overt pronouns in English. However, this results in the ambiguous meaning in a sentence with a quantified expression as the main-clause subject and with a null subject in the embedded clause. The null subject may either be bound to the quantifier, or may refer to some other individual in the discourse (discourse antecedents).

However, the use of overt pronouns is more restrict in [+null subject] languages. It cannot be supplied in quantified antecedents in contrast with overt pronouns in [-null subject] languages. Whether does POS occur when L2 learners with a [+null subject] language acquire a [-null subject] language? The previous two conditions have to be discussed.

Firstly, L2 learners cannot induce L2 grammar from L2 input. In comparison with discovering the restriction on the basis of L1 input in the L1 acquisition, it is much of a challenge for the L2 learners to induce abstract knowledge. From Table 3.1, the contexts are similar for the use of overt and covert pronouns. They take similar referential, quantified or discourse antecedents. The difference of their usages is subtle. L2 input cannot trigger L2 learners to induce this difference between null pronouns and overt as far as bound variable status is concerned. As a result, frequency of occurrence in the input is unlikely to provide any useful clue for L2 learners to master when pronouns may be supplied. In addition to this, Perez-Leroux and Glass (1999) and Kanno (1997) suggest that classroom input does not

appear to be helpful in inducing OPC in a [+null subject] language, too. This issue is not discussed in L2 Spanish textbooks or taught in L2 classrooms. Kanno (1997) makes the same observations for L2 Japanese. Based on these two points, abstract knowledge of the interpretative restriction on overt pronouns is underdetermined by the L2 input. So it satisfies the first of the above two conditions.

Secondly, L2 learners cannot master this abstract knowledge of OPC from their mother tongue, when the first language is a [-null subject] language, such as English. Because of lack of null subject usage in [-null subject] language, overt pronouns in English are restricted in the different way from the [+null subject] languages. It is impossible for L2 learners to transfer the L1 grammar to master the appropriate distinction of L2 grammar. It shows that an investigation of the acquisition of [-null subject] languages (such as Japanese) by native speakers of [+null subject] languages (such as English) would also meet the second condition.

The result of Kanno (1997) indicates that the English-speaking Learners of Japanese are sensitive to OPC in finite embedded clauses. Perez-Leroux and Glass (1999) confirms that the OPC is also operative in the acquisition of Spanish. These constitute evidence for continued access to UG. So OPC suggests that the L2 acquisition has a logic problem of language acquisition. The L2 acquisition is constrained by UG. UG allows the representation of subtle and abstract distinctions during the L2 acquisition. This representation could sometimes not be from the L1 grammar or the L2 input.

3.3 The Initial State in the L2 Acquisition

The term “initial state” is variously used to mean the kind of unconscious linguistic knowledge that the L2 learner starts out with in advance of the L2 input and/or to refer to characteristics of the earliest grammar in White (2003:58). The earlier research regarding UG in the L2 acquisition did not pay attention to the initial state until the middle of 1990s.

No access is one of earlier work of the initial state. No access argues that the L2 acquisition is different from the L1 acquisition. The L1 and L2 acquisitions cannot be addressed in the same framework of UG. One proposal for no access is Fundamental Difference Hypothesis in Bley-Vroman (1989). This hypothesis proposes that the L2 acquisition has no UG access. L2 learners will use general learning strategies, such as distributional analysis and analogy. This hypothesis tries to figure out the reason of the different acquisition patterns between the L2 acquisition and the L1 acquisition. In this view, more attention is paid to the difference of the L2 acquisition. However, this view is difficult to address the bilingual L1 acquisition. Flynn

and Martohardjono (1994) and Epstein et al. (1996) point out that the bilingual L1 acquisition would be hard to account for, using this view. The two languages that a bilingual child is acquiring will often require contradictory parameter settings. It is well known that bilingual children manage to acquire two different grammars.

So this thesis believes that UG access must occur in the L2 acquisition. But the extent of UG access is controversial. Following the assumption of White (2003), it is supposed that (a) UG is constant; (b) UG is distinct from the learner's L1 grammar; (c) UG constrains the L2 learner's interlanguage grammars.

In addition to these, L1 transfer exists during the L2 acquisition. Based on these above assumptions, the initial state can be the grammar of the mother tongue to some extent. However, L1 transfer has a different impact on the L2 acquisition in different hypotheses. According to the extent of L1 transfer, the initial state can be divided into the FAFT hypothesis, the minimal trees hypothesis, and the valueless features hypothesis.

3.3.1 The Full Access Full Transfer Hypothesis

The FAFT hypothesis is proposed in Schwartz and Sprouse (1994, 1996). This hypothesis assumes that the initial state of the L2 acquisition is constituted by L1 grammar, including the parameter settings of L1. Full transfer means that the initial state is made up of the L1 grammar excluding specific lexical items. Full access means that UG is fully accessed during L2 development when interlanguage is needed to restructure. This makes it possible to reset parameters during the L2 acquisition. In order to validate the FAFT hypothesis, evidence has to be found to argue for L1 properties in the interlanguage grammar and restructuring away from the L1 grammar.

One of recent examples of experimental research supporting the FAFT hypothesis is provided by Yuan (1998). Yuan (1998) investigates Chinese reflexive "ziji" by the Japanese-speaking and English-speaking learners. Chinese reflexive "ziji" can take a long-distance antecedent, such as (3), and a local one. There is a similar reflexive in Japanese. By contrast, English reflexives can only take a local antecedent both in finite and non-finite clauses. Yuan (1998) wants to validate whether the L2 acquisition has benefit from a similar grammar structure between L1 and L2. There are 81 subjects in the empirical study consisting of 24 Japanese-speaking and 57 English-speaking learners of L2 Chinese, and 24 Chinese native speakers who serve as a control group in Yuan (1998). The experiment in Yuan (1998) is that all

subjects are asked to perform a multiple-choice comprehension task. The related result is showed in Table 3.2.

(3) Zhangsan renwei Lisi jingchang bu xiangxin zijii.

Zhangsan think Lisi often not trust self

‘Zhangsan think that Lisi often does not trust self.’

L2 Group	Ziji Acceptances (%)
Japanese-speaking group	92
Intermediate English-speaking group	53
Advanced English-speaking group	71
Native speaker group	94

Table 3.2 Long-distance Antecedents from Embedded Finite Clauses (Yuan 1998)

The English-speaking and Japanese-speaking groups behave differently to learn Chinese “ziji” at the same proficiency level. The learners with L1 Japanese master the long-distance usage of “ziji”. Their performance has no significant difference in comparison with that of the native speakers of Chinese. By contract, the learners with L1 English are much less likely to accept long-distance antecedents for the reflexive. Their performance differs significantly from those of the Japanese-speaking group and from the native speakers of Chinese. The reason is that Japanese has a long-distance reflexive which is similar to Chinese. But English does not have the similar reflexive.

The Japanese-speaking group and English-speaking groups treat long-distance reflexives differently. This means that L1 has an impact on the L2 acquisition. This result supports full transfer. On the other hand, the advanced English speaking group can manage to acquire the long-distance properties of “ziji” to some extent. This provides support of full access. As a result, Yuan’s result provides evidence of the FAFT hypothesis.

The similar result is presented in Dugarova (2007). Dugarova investigates the Russian-speaking and English speaking groups to learn Chinese reflexive “ziji”. In comparison with Chinese reflexive “ziji”, the Russian reflexive “sebja” can only take a local antecedent in finite clauses. But it will take either a long-distance or a local antecedent in non-finite clauses. Dugarova adopts the same experiment design as Yuan (1998). Dugarova finds that Russian speakers of all groups acquire long-distance subject binding in finite clauses at rather low rates (5%-28%). This can be addressed by L1 influence on the L2 grammar, because long-distance subject binding in finite clauses is not allowed in Russian. English speakers of all

groups manage to master long-distance subject binding both in finite and non-finite clauses. This suggests that English learners are able to acquire the long-distance subject binding property which is not present in English. So the finding of Dugarova (2007) also supports the FAFT hypothesis.

3.3.2 Minimal Trees Hypothesis

The Minimal Trees Hypothesis (MTH) is proposed in Vainikka and Young-Scholten (1994, 1996a, b). Similar to the FAFT hypothesis, MTH argues that the initial state is a grammar, with early representations based on the L1. In contrast with the Full Access Full Transfer hypothesis, only parts of L1 grammars are used in the initial state. L1 transfers into the L2 acquisition is only confined to lexical projection, excluding functional categories. Functional categories are available in the UG inventory in MTH. Functional categories will emerge gradually, when L2 input is exposed to learners. So interlanguage development takes the form of a gradual development of functional structure. Lower level functional projections (such as IP) appear before higher level projections (such as the CP).

Vainikka and Young-Scholten investigate the performance of the adult L2 acquisition of German via spontaneous and elicited production data. L1 groups in their study include Turkish and Korean which have head-final VPs like German, and Spanish and Italian which are head initial. According to MTH, lexical categories with headedness characteristics will transfer, but no functional categories transfer. Vainikka and Young-Scholten (1994) find that over 95% of VPs are head final in the case of the three least advanced Turkish and Korean speakers. This shows evidence for L1-based headedness of VPs in the early grammar.

There are a lot of research findings against MTH. For example, Dube (2000) finds that functional categories instantiated in the learner's first language transfer to the initial state of L2 syntactic development. Nakajima (1996) argues that overt-that and null-that are independent heads occupying different C positions, namely a CP-type head and a Top-type C head. So in English the traditional CP node is divided into two functional heads: a CP-type C for overt-that and a Top-type C for null-that clauses. However, only CP-type C is found in Zulu. In the finding of Dube (2000), top-type C instantiated in the subjects' L1 is active in their initial state grammar. So this suggests that properties of L1 functional categories transfer.

3.3.3 Valueless Features Hypothesis

Eubank (1993/94, 1996) proposes the valueless features hypothesis. This hypothesis claims that the initial state maintains the L1 grammar with weak transfer. L1 lexical and functional

categories are present in the earliest interlanguage grammar. This is same as the FAFT hypothesis. However, their feature values of L1 functional categories do not transfer. Features are valueless or 'inert' in the initial state. These L2 feature strengths will be acquired during the L2 acquisition. Feature values are neither weak nor strong in this hypothesis (White 2003:79).

(4) a. Mary [often [_{VP} watches television]]

b. Mary watches_i [often [_{VP} t_i television]]

White (2003:79)

Eubank argues that the finding of White (1990/91) shows the support of this hypothesis. This hypothesis predicts that finite verbs can alternate between raising and not raising. The French-speaking learners of English accept both of the verb word orders in (4a) and (4b) in early stages. The finite verb has raised out of the VP in (4b), but the finite verb has not raised in (4a). The word order in (4a) supports this hypothesis, because this order could be impossible under a strong transfer.

However, the finding of Yuan (2001) argues against this hypothesis. Yuan investigates the French-speaking and English-speaking learners to acquire Chinese. Chinese is a language with weak features and lacks verb movement. The surface of (4a) is grammatical. But the surface of (4b) is ungrammatical. English has the property of weak feature strength like Chinese. But French has the opposite strength. The Valueless Features Hypothesis predicted the French-speaking and English-speaking groups should have the same value for this property and behave in the similar way. However, the result shows against this prediction.

3.4 Summary

There is evidence for a logic problem for the L2 acquisition. It shows that the L2 acquisition is UG-constrained. However, the initial state of the L2 acquisition is still controversial. This thesis argues that L1 transfer has an influence on the initial state. The initial state of the L2 acquisition will reflect L1 transfer to some extent. Theories about the initial state include the FAFT hypothesis, minimal tree hypothesis and valueless features hypothesis. L2 input will trigger subsequent development. With the increasing exposure of L2 input, L2 learners can master non-L1 categories via access UG. This thesis argues that the FAFT hypothesis is the initial state in L2 article acquisition. The findings and hypotheses of L2 article acquisition

can validate the FAFT hypothesis. This hypothesis can also address the problems of L2 article acquisition.

Chapter 4 The Fluctuation Hypothesis

4.1 Introduction

This chapter will discuss the Fluctuation Hypothesis. This hypothesis is confirmed according to the production of the Russian-speaking and Korean-speaking learners. Both of the languages do not have article systems. This chapter will further check whether this hypothesis is able to be applied to languages with article systems and predict their results. Based on this validation, this chapter suggests that this hypothesis is only applied to the L2 acquisition of article systems when the L1 does not have an article system. The rest of this chapter is organized as follows. In Section 2, the Fluctuation Hypothesis will be introduced. In Section 3, the results of the Spanish-speaking, Arabic-speaking and French-speaking learners' article acquisition are discussed. In Section 4, all the results are discussed and compared together.

4.2 The Fluctuation Hypothesis

According to UG theory, L2 acquisition passes through several developmental stages that are referred to as interlanguages before they get more proficiency. These inter-languages are maybe not the first language or the second language of the learner. So some grammars in these interlanguages are usually considered as errors. This shows that these errors are necessary to be accounted for during the L2 acquisition. These errors are similar and have some patterns. There are some researches regarding article choice. Two common error patterns are article overuse and article omission.

The researches by Ionin et al. (2003, 2004) (henceforth IKW) investigate article overuse when L1-Russian and L1-Korean learners study English articles. IKW (2003) wants to address error patterns happening during acquiring English as a second language in the UG framework. This paper is based on two following points. Firstly, L2 learners can access parameter settings which do not exist in L1 and L2, following the idea of Finer and Broselow (1986). Secondly, the parameter-setting choice of L2 learners sometimes fluctuates. They sometimes choose one of them and sometimes use others. These points show that L2 learners have full access to UG. IKW (2003) proposes the Fluctuation Hypothesis.

(1) The Fluctuation Hypothesis (IKW 2004:15)

- a. L2 learners have full access to UG principles and parameter-settings.

b. L2 learners fluctuate between different parameter-settings until the input leads them to set the parameter to the appropriate value.

The Fluctuation Hypothesis supposes that all of parameter-settings are available to L2 learners. Due to insufficient input, their choice of parameter-settings will fluctuate between optional parameters.

IKW (2003) introduces article choice parameter (ACP) as a UG parameter-setting for article. The article choice parameter argues that article choice varies cross linguistically. This parameter includes definiteness and specificity. It is argued that article overuse is the result of a failure to supply article choice parameter. The article choice parameter is repeated in the following.

(2) The Article Choice Parameter (IKW 2003)

A language which has two articles can distinguish them as follows:

Setting I. Articles are distinguished on the basis of specificity.

Setting II. Articles are distinguished on the basis of definiteness.

According to this article choice parameter, the article systems of Samoan and English can be compared. The comparison result is showed in Table 4.1. From the table, Samoan and English distinguish articles in different places.

Context	Samoan	English
Non-specific indefinites	Non-specificity	Indefinite
Specific indefinites	Specificity	Indefinite
Definite	Specificity	Definite

Table 4.1 Comparison between Samoan and English (IKW 2003)

IKW (2003) postulates that ACP is used as a UG-constrained mechanism. So the two settings of ACP are available to L2 learners in a UG-constrained framework. L2 learners may fluctuate between two settings of ACP in the beginning of learning English. The reason is that L2 learners have no sufficient input initially. The article choice may be opt for the definiteness setting or the specificity setting. However, with the increasing of exposure to English, L2 learners are close to use English article correctly. This fluctuation of article may disappear. Based on these, the Fluctuation Hypothesis predicts the error patterns of L2 learners who study L2 English.

This hypothesis can be used to predict and explain these error patterns of L2 learners. Based on the Fluctuation Hypothesis and article choice parameter, article choice will fluctuate between definiteness and specificity.

The Fluctuation Hypothesis predicts article choice in L2-English. If a learner follows the definiteness setting, “the” is chosen when the context is definite. “A” is supplied when the context is non-specific indefinite or specific indefinite. However, the specificity setting is also available to learners. In this case, “the” is used when the context is definite and specific indefinite. “A” will be used for non-specific indefinite.

Context	Definiteness	Specificity	L2-English Fluctuation	
Non-specific indefinite	A	A	A	
Specific indefinite	A	The	A	The
Definite	The	The	The	

Table 4.2 The Fluctuation Hypothesis Predicts Article Choice of L2-English

From the above discussion, it can be predicted that L2 learners will probably supply articles in the context of non-specific indefinite and definite. But definiteness and specificity have a conflict in the context of specific indefinite. Whichever article setting is used in this case, learners fluctuate between definite and indefinite. This conclusion is summarized in the Table 4.2. The fluctuation is marked as the black background color.

In order to validate this prediction, IKW (2003) investigates the fluctuation between definiteness and specificity when a group of L1-Russian and L1-Korean learners study English. Both Russian and Korean had no article system. In this case, L2 learners have no any knowledge regarding using articles. So their first language will have no influence on the article choice.

However, in the framework of the UG-constrained system, the first language is used as the input of the L2 language. Because of the lack of articles in Russian and Korean, the ACP would not have been set in the languages prior to exposure to English. So L2 learners will shows fluctuation between the specificity setting and definiteness setting when L2 learners study English. Specifically, L2 learners overuse “the” with the specific indefinite DPs.

4.2.1 Experimental Design

The participants were 50 L1-Russian learners at the mean age of 38 and 38 L1-Korean learners at the mean age of 28. Most of the participants had been exposed to English as children or adolescents in their native countries, but intensive exposure to English did not

begin for any of the participants until they arrived in the US as late adolescents or adults (IKW 2003:249). English was intensively exposed to them for more than one year when they live in the US. They were divided into two groups: intermediate and advanced L2-English learners. In comparison with them, seven adult L1-English speakers performed the expected choice of the target article in the given tasks.

The main task is a forced choice elicitation test. This test is made up of 56 short dialogues. Each dialogue has a missing article. The L2 learners have to choose from “a/an”, “the”, and null in the context of singulars and from some, the, and null in the context of plurals. The context types include the following: non-specific indefinite contexts with narrow scope, no scope interaction and denial of speaker knowledge, specific indefinite contexts with wide scope, certain modification and no scope interaction, and definite contexts. Those experimental contexts are listed in the following (3~12) from IKW (2003:250).

(3) Singular specific indefinite (wide scope over an operator)

In a “Lost and Found”

Clerk: Can I help you? Are you looking for something you lost?

Customer: Yes... I realize you have a lot of things here, but maybe you have what I need.

You see, I am looking for (a, the, --) green scarf. I think that I lost it here last week.

(4) Singular specific indefinite (use of certain)

In a school

Becky: Tom seemed very nervous to me. I think he is having problems in class. Do you know why he is so nervous right now?

Ben: **He is going to meet with (a, the, --) certain professor – someone that Tom is really afraid of.**

(5) Singular specific indefinite (no scope interactions)

At a university

Rob: Hi Katie - can you help me? I need to talk to Professor Christina Jones, but I have not been able to find her. Do you know if she is here this week?

Katie: Well, I know she was here yesterday. **She met with (a, the, --) student - he is in my physics class.**

(6) Singular non-specific indefinite (narrow scope)

In a clothing store

Clerk: May I help you?

Customer: Yes, please! I have rummaged through every stall, without any success. **I am looking for (a, the, --) warm hat. It is getting rather cold outside.**

(7) Singular non-specific indefinite (no scope interactions)

Visitor: Excuse me - can you help me? I am looking for Professor James Smith.

Secretary: I am afraid he is not here right now.

Visitor: Is he out today?

Secretary: No, he was here this morning. **He met with (a, the, --) student... but I do not know where Professor Smith is right now.**

(8) Singular non-specific indefinite (denial of speaker knowledge)

At a university

Professor Clark: I am looking for Professor Anne Peterson.

Secretary: I am afraid she is out right now.

Professor Clark: Do you know if she is meeting somebody?

Secretary: I am not sure. **This afternoon, she met with (a, the, --) student – but I do not know which one.**

(9) Plural specific indefinite (wide scope)

Phone conversation

Jeweler: Hello, this is Robertson's Jewelry. What can I do for you, ma'am? Are you looking for a piece of jewelry? Or are you interested in selling?

Client: Yes, selling is right. **I would like to sell you (some, the, --) beautiful necklaces. They are very valuable.**

(10) Plural non-specific indefinite (narrow-scope)

Phone conversation

Salesperson: Hello, Erik's Grocery Deliveries. What can I do for you?

Customer: Well, I have a rather exotic order.

Salesperson: We may be able to help you.

Customer: **I would like to buy (some, the, --) green tomatoes. I am making a special Mexican sauce.**

(11) Singular definite

Richard: I visited my friend Kelly yesterday. Kelly really likes animals - she has two cats and one dog. Kelly was busy last night – she was studying for an exam. So I helped her out with her animals.

Maryanne: What did you do?

Richard: **I took (a, the, --) dog for a walk.**

(12) Plural definite

Rosalyn: My cousin started school yesterday. He took one notebook and two new books with him to school, and he was very excited. He was so proud of having his own school things! But he came home really sad.

Jane: What made him so sad? Did he lose any of his things?

Rosalyn: Yes! **He lost (some, the, --) books.**

4.2.2 Results and Discussion

The test results of the main task are listed in the two tables: Table 4.3 and Table 4.4. Based on the two results, the overuse of “the” in specific indefinite is higher than in the context of non-specific indefinite at the both cases of L1-Russian and L1-Korean. The overuse of “the” is more in singular contexts than in plural contexts. The error patterns are similar in the

context of singular and plural. "The" is accurately supplied in the context of definite and "a/some/null" can be also appropriately supplied in the context of non-specific indefinites. But article choice is more interchangeable in specific indefinites. This is consistent with the prediction of the Fluctuation Hypothesis. According to these results, the Fluctuation Hypothesis is confirmed.

Context	Expected article	L1-Russian (N=37)			L1-Korean (N=37)		
		%the	%a	%null	%the	%a	%null
Definite	The	85	14	1	83	14	3
Specific indefinite	A	44	46	10	24	71	5
Non-specific indefinite	A	11	80	9	7	89	4

Table 4.3 Article Choice in Singular Contexts (IKW 2003:252)

Context	Expected article	L1-Russian (N=37)			L1-Korean (N=37)		
		%the	%some	%null	%the	%some	%null
Definite	The	53	16	31	62	17	21
Specific indefinite	some/ Ø	27	53	20	19	53	28
Non-specific indefinite	some/ Ø	11	66	22	2	78	20

Table 4.4 Article Choice in Plural Contexts (IKW 2003:253)

Whether is the Fluctuation Hypothesis independent of the Full Access Full Transfer hypothesis? This Fluctuation Hypothesis is actually consistent with the Full Access Full Transfer hypothesis. The Full Access Full Transfer hypothesis argues that the initial state is the entire L1 grammar including abstract features and functional categories. When L2 learners fail to identify the relevant structure in their L1 grammar, they need to restructure their L2 grammar in accordance with UG. Parameters that have not been set in the L1 will then have to be set in the L2. So when the first language lacks definiteness markers, L2 learners have to access UG and set the ACP. But this parameter has a binary value. Until the learner has built up enough evidence to set the ACP, the article choice will fluctuate between the two available values. So the interlanguage grammars of L2 article acquisition might not be the same as the L1 and L2 grammars. It is a UG constrained grammar. With increasing exposed input, the interlanguage grammars of L2 learners can be close to the L2 grammar.

It is also interesting to know whether the Fluctuation Hypothesis applies to other kinds of languages, in particular to languages that have article systems that are different from the English one. According to the FAFT hypothesis, L1 transfer will transfer the definiteness setting of the ACP to the interlanguage grammars in such cases. As a result, these L2 learners will not fluctuate between definiteness and specificity. This predicts that the Fluctuation

Hypothesis should have no effect when the first language has an article system. Let us consider a few examples in the next section.

4.3 The Fluctuation Hypothesis and the Role of the L1

The Fluctuation Hypothesis should only apply to the L2 acquisition of articles when the L1 has no article system. When the L1 has an article system overlapping with the English article system, whether does article choice still exhibit fluctuation in the context of specific indefinites? Given full transfer, we expect the L1 as the initial stage. In other words, the parameter is already set. It is also interesting to investigate what we can expect when the article system is only partially overlapping. In this section, the results of the Spanish-speaking, French-speaking and Arabic-speaking learners will be discussed.

4.3.1 L1 with an Overlapping Article System: Spanish

4.3.1.1 Comparison

Like English, Spanish is a language with marked definiteness (Lyons 1999). Spanish definiteness is distinguished by definiteness and not by specificity. In Spanish, the article system is made up of the definite article (el, la, los, las) and the indefinite article (un, una, unos, unas), as shown in (13) and (14) (García Mayo 2009:23):

(13) Isabel quiere entregarle el premio al ganador

Isabel want-3sg present clitic the prize to the winner

“Isabel wants to present the prize to the winner

(a) ... pero él no quiere que ella se lo entregue. [+specific]

but he not want-3sg that she clitic clitic give-3sg

but he does not want her to give it to him.”

(b) ... pero tendrá que esperar a que termine la carrera. [-specific]

but have-3sg-fut that wait to that finish-3sgs the race

but she will have to wait till the race finishes.”

(14) Carlos quiere casarse con una médico

Carlos want-3sg marry with a physician

“Carlos wants to marry a physician

(a) ... aunque siempre está discutiendo con ella en el hospital. [+specific]

although always is-3sg arguing with her in the hospital

although he is always arguing with her in the hospital.”

(b) ... aunque todavía no conoce a ninguna. [-specific]

although still no know-3sg obj none

although he has not met one yet.”

4.3.1.2 Prediction of the FH

The Fluctuation Hypothesis is not expected to affect the L2 article acquisition of the Spanish-speaking learners. They should not fluctuate between the features [\pm definite] and [\pm specific] because Spanish has an article system in which the ACP should already be set on definiteness. It can be predicted that the Spanish-speaking learners will have the performance of use of “the” in all definite categories and accurate use of “a” in all indefinite categories, with no effect of specificity.

Context	[+definite] (target:THE)	[-definite](target:A)
[+specific]	Correct use of the	
[-specific]		Correct use of a

Table 4.5 Predictions of Article Choice (García Mayo 2009:24)

Advanced learners are expected to be more accurate than low-intermediate learners.

4.3.1.3 Experimental Design

The participants were made up of 60 Spanish-speaking adults and 15 English-speaking adults. The English-speaking adults were used as a control group. The Spanish-speaking adults were divided into two groups according to the evaluation result of the Oxford Quick Placement Test (Syndicate U.C.L.E., 2001). This study had no beginner group because beginner groups were doubtful to handle the experimental task. The detail information is showed in Table 4.6.

This study used the same forced-choice elicitation task in IKW (2004). The test took place in a classroom. The learners were asked to fill out information about age, age of first exposure to English, setting of exposure etc. The test happened last.

Group	Age range	Proficiency level	Score range	Classroom English (years)
A: L1 Spanish (n=30), 17F/13M	18-24 (mean:19.6)	Low-intermediate (mean:31)	31-38	9-15 (mean:13.3)
B: L1 Spanish (n=30), 14F/16M	21-30 (mean:22.5)	Advanced (mean: 51)	48-53	10-18 (mean:13.8)
C: L1 English (n=15), 6F/9M	20-31 (mean: 21.7)			

Table 4.6 Participants (García Mayo 2009:24)

4.3.1.4 Experimental Result and Discussion

The test result of the low-intermediate group is showed in Table 4.7. From the table, the low-intermediate group can make correct article choice of “the” in the definiteness contexts, whether the contexts are specific or non-specific. They also used correctly “a” in the context of indefinites with or without specificity.

	+def (target the)		-def (target a)	
	The	A	The	A
+spec	100%	0%	6.25%	93.75%
-spec	100%	0%	1.25%	98.75%

Table 4.7 Low-intermediate Learners: Definiteness vs Specificity (García Mayo 2009:27)

It is also noticed that “the” was used in the context of indefinites. However, the percentage of this erroneous use is low. The percentage of “the” in [-def, +spec] and [-def, -spec] are 6.25% and 1.25% respectively. It shows that “the” choice is more often in [-def, +spec] than in [-def, -spec]. As a result, “the” in the indefinite contexts is chosen more in specificity. This is in line with IKW (2004).

	+def (target the)		-def (target a)	
	The	A	The	A
+spec	99.2%	0.8%	1.6%	98.4%
-spec	97.5%	2.5%	0%	100%

Table 4.8 Advanced Learners: Definiteness vs Specificity (García Mayo 2009:28)

The test result of the 30 advanced Spanish-speaking learners is showed in Table 4.8. Similar to the performance of the low-intermediate group, “the” is available in the indefinite and specific contexts. There is only one advanced learner choosing “the” in this case.

Unlike the performance of the low-intermediate group, “a” is available in the definite contexts both with specificity and without specificity. In detail, two advanced learners out of thirty used “a” in [+def, -spec]. The percentage of “a” in [+def, +spec] and [+def, -spec] are 0.8% and 2.5% respectively. It shows that “a” choice is more often in [+def, -spec] than in

[+def, +spec]. As a result, “a” in the definite contexts is used more in the non-specific contexts.

Table 4.9 compares the performance between the low-intermediate group and the advanced group. As we can see, there are two contexts in which there is a statistically significant difference between the low-intermediate and the advanced groups. These are the [-definite, +specific] and [+definite, -specific] contexts. The statistical analysis shows that the advanced group made correct target more accurately than the intermediate group in the former context, while the performance of the intermediate group is better than that of the advanced group in the former. However, the wrong use of the definite article by the low-intermediate group in the [-definite, +specific] context is due to just three participants out of thirty (García Mayo 2009:30). The other significant difference in the [+definite, -specific] context is due to two learners in the advanced group that miss three items each (García Mayo 2009:30).

Context	Low-intermediate	Advanced	Difference
[+def, +spec] the	100% (240/240)	99.2%(238/240)	Non-significant (p=0.16)
[+def, -spec] the	100% (240/240)	97.5%(234/240)	Significant (p=0.01389)
[-def, +spec] a	93.75% (225/240)	98.4%(236/240)	Significant (p=0.0098)
[-def, -spec] a	98.75% (237/240)	100%(240/240)	Non-significant (p=0.081)

Table 4.9 Comparisons between Low-intermediate and Advanced Groups (García Mayo 2009:30)

Table 4.9 shows that it has no difference between the intermediate group and the advanced group in total, because of the high percentage of correct article choice.

4.3.2 L1 with Partially Overlapping Article System: French and Syrian Arabic

When the L1 has an article system overlapping with the English article system, article choice does not exhibit fluctuation in the previous subsection. If L1 has a partially overlapping article system, is the Fluctuation Hypothesis able to predict their results? This subsection will compare French and Syrian Arabic with English respectively and discuss whether the Fluctuation Hypothesis can predict their productions.

4.3.3 The French Article System and Prediction of the FH

4.3.3.1 Comparison

French is a definiteness-based language, not a specificity-based language. It has an article system to encode definiteness. However, bare nominal phrases are ungrammatical in French. This is different from English. An overt article surface has to be needed in all singular, plural and mass contexts. The French article system is described in Table 4.10.

French articles	definite	Indefinite
masculine singular nouns	Le	Un
feminine singular nouns	La	Une

Table 4.10 French Article System (Deprez et al. 2010)

From the table, the definite and indefinite surfaces also depend on number and gender in addition to definiteness. The examples (15) are drawn from Sarko (2009:48). The examples (15a-e) are singular nominal phrases, and the examples (15f-g) are indefinite plural and mass nouns. Example (16) describes a context of definite and non-specific.

(15) a. Tu as laissé dans le jardin le livre que tu as acheté hier (def. sg. masc.)

“You left the book which you bought yesterday in the garden.”

b. La jungle est un endroit dangereux (def. sg. fm.)

“The jungle is a dangerous place.”

c. Les médecins pensent que la rougeole réapparaît (def. pl. masc. and fm.)

“Doctors think that measles is coming back.”

d. Je me suis trouvé une belle maison en Ecosse (indef. sg. fm.)

“I have found myself a lovely house in Scotland.”

e. Voulez-vous voir un Picasso? (indef. sg. masc.)

“Do you want to see a Picasso?”

f. Je lui ai offert *(des) roses (indef. pl. masc. and fm.)

“I gave her Ø roses.”

g. J’ai acheté *(du) beurre.

“I bought Ø butter.”

(16) [+Definite, -Specific] (Deprez et al. 2010)

At the hairdresser’s

A: Bonjour madame. Je voudrais parler avec le coiffeur de mon fils, mais je ne

sais pas qui c’est.

‘Good morning, madam. I would like to speak with the hairdresser of my son, but I NEG know NEG who it is’

Pourriez-vous m’aider?

Could you me help

‘Could you help me?’

B: Oui, bien sur

‘Yes, of course’

4.3.3.2 Predictions

Syrian Arabic has overt article forms that encode definiteness. According to the FAFT hypothesis, the Arabic-speaking L2 learners will choose “the” in definite contexts.

Syrian Arabic lacks indefinite markers. It is an interesting question whether there is an abstract indefinite D. If there is an underlying indefinite D, the Fluctuation Hypothesis will have no effect, because of full transfer. Otherwise, the intermediate Arabic-speaking group will fluctuate between using “a” and “the” with [-definite, +specific] NPs.

4.3.4 The SA Article System and Predictions of the FH

4.3.4.1 Comparison

Arabic has the definite article *él* preceding the noun. It does not have gender and number features. Arabic does not mark the indefinite. However, it is argued in Standard Modern Arabic that indefinites bear the morphological marker “n” known as Nunation (Tanwin) (Deprez et al. 2010). But In Arabic, the definite duals and plural common nouns may carry both the definite article and nunation (Sarko 2009:47). So the “n” cannot be used to mark noun phrases as indefinite. An example in [-definite, +specific] is given in (17).

Arabic articles	definite	Indefinite
singular nouns	Él	

Table 4.11 Arabic Article System

(17) [-definite, +specific] (Deprez et al. 2010)

In a shop

A: Hél tabhathin-a 3én chayi-n ya sayidati

Do search of thing oh madam

‘Are you searching for something, Mandam?’

B: Na3ém, inani abhathu 3én Ø hakibat-I-n sawda-a taraktouha houn

Yes am I search of Ø bag-a black left-it there

‘Yes, I am searching for a black bag that I left there.’

4.3.4.2 Predictions

French has overt encoding surfaces of definite and indefinite article to encode definiteness. This is similar to the English article system. As a result, the Full Access Full Transfer hypothesis will predict that the performance of the French-speaking L2 learners should not fluctuate between the two parameter settings of the Article Choice Parameter for English.

French disallows the surface of bare NPs. Full transfer will result in overuse overt article forms in English indefinite mass/plural contexts.

4.3.5 Experimental Design

The number of the subjects in this study was 84. All of the subjects were university-level undergraduates or postgraduates. The subjects were made up of 57 L1 Syrian Arabic-speaking (SA) learners, 18 French-speaking learners and 9 English native controls.

These subjects received the proficiency test to evaluate their proficiency in English with the Oxford Quick Placement Test. They were divided into intermediate and advanced proficiency groups.

Two tasks were used to evaluate their performance of L2 article acquisition in English, including a story recall task and a forced-choice elicitation task. Because this section only wants to compare and confirm the validation of the Fluctuate hypothesis, the result of the forced-choice elicitation task will be discussed. The story recall task is not used in IKW (2003, 2004).

The forced-choice elicitation task follows the one in IKW (2004). The test consists of 68 short dialogues, including 32 dialogs in definite contexts and 36 dialogs in indefinite contexts. There are also some improvements, in comparison with the one in IKW (2004).

Firstly, the text information of the dialogue was designed in Arabic or French, which makes the subjects to understand the contexts easily. But the target sentence was in English.

Secondly, the subjects were to choose one of four optional items followed the dialogue, including “the”, “a/an” or Ø. They were randomized.

4.3.6 Results and Discussion

The result of the article choice by the subjects is showed in Table 4.12, where the contexts are count singular and [+definite, ±specific]. The performance of the Arabic-speaking and the French-speaking subjects is at the same level as that of the native-speaking subjects. The percentage of the target choice for “the” is higher for the L2 learners than it is for the native English control group in [+def, +spec] contexts (93%). The percentage of the target choice for “the” is close to 100%. Independent samples t-tests show that neither group of L2 speakers differs significantly from the native English control group in count singular contexts (Sarko 2009:53). For the speakers of both L1s, the results of the advanced groups are better than the corresponding results of the intermediate groups. As a result, the result of [+definite, ±specific] count singular contexts is consistent with the Full Access Full Transfer hypothesis.

	[+def, +spec]			[+def, -spec]		
	The	a/an	Ø	The	a/an	Ø
SA Intermed. (n=36)	94%	4%	2%	92%	6%	2%
Fre Intermed. (n=10)	94%	6%	0%	98%	2%	0%
SA Adv. (n=21)	99%	1%	0%	99%	1%	0%
Fre Adv. (n = 8)	98%	2%	0%	98%	2%	0%
NS controls (n=9)	93%	7%	0%	100%	0%	0%

Table 4.12 Choice of Articles in [+definite, ±specific] Count Singular Contexts (Sarko 2009:53)

	Count Plural			Mass		
	The	a/an	Ø	The	a/an	Ø
SA Intermed. (n=36)	90%	1%	9%	92%	6%	2%
Fre Intermed. (n=10)	76%	8%	16%	74%	1%	25%
SA Adv. (n=21)	94%	2%	4%	83%	0%	17%
Fre Adv. (n = 8)	91%	0%	9%	92%	0%	8%
NS controls (n=9)	100%	0%	0%	94%	0%	6%

Table 4.13 Choice of Articles in [+definite, +specific] Plural and Mass Contexts (Sarko 2009:54)

The result of the article choice by the subjects is showed in Table 4.13, where the contexts are [+definite, +specific] plural and mass. In [+definite, +specific], a one-way ANOVA between the intermediate group and the native controls on use of “the” showed a significant difference (Sarko 2009:54). This means that the overall performance of the intermediate

group is less accurate than that of the native control group. Both the Arabic-speaking and French-speaking intermediate groups have a significant difference with the native controls inceptively. The main error pattern is \emptyset in [+definite, -specific] plural contexts. However, the overall performance of the advanced group is native-like and has no significant difference from the native control group.

In the [+definite, +specific] mass contexts, the result is similar to the [+definite, +specific] plural contexts. The overall performance of the intermediate group is less accurate than that of the native control group. The overall performance of the advanced group has no significant difference from the native control group. \emptyset is also used in [+definite, +specific] mass contexts. The percentage of \emptyset (22% and 25%) is more in mass contexts than in [+definite, +specific] plural contexts.

The results in Table 4.12 and Table 4.13 show that the overall performance of selecting “the” is consistent with full transfer, because both Arabic and French have a definite surface. The overall performance of the advanced groups is better than that of the intermediate group. This is consistent with UG. With increasing exposed input, L2 learners will improve their performance.

However, the results also show that \emptyset is unexpectedly selected by the intermediate group in the plural and mass contexts. It means that the subjects have not understood how English utters definite in count plural and mass contexts. The reason maybe is that variability of form in the input may, for the intermediate proficiency learners, have given rise to variability in mapping from representations to forms in speakers’ grammars (Sarko 2009:60). This shows that the Fluctuation Hypothesis cannot address article omission of L2 article acquisition.

	[-def, -spec]			[-def, +spec]		
	The	a/an	\emptyset	the	a/an	\emptyset
SA Intermed. (n=36)	1%	98%	1%	31%	68%	1%
Fre Intermed. (n=10)	3%	97%	0%	5%	95%	0%
SA Adv. (n=21)	1%	99%	0%	23%	77%	0%
Fre Adv. (n = 8)	0%	100%	0%	3%	97%	0%
NS controls (n=9)	0%	100%	0%	0%	100%	0%

Table 4.14 Choice of Articles in [-definite, \pm specific] Count Singular Contexts (Sarko 2009:55)

The result of choice of articles in [-definite, \pm specific] count singular contexts is showed in Table 4.14. The over performance of all of the experimental groups in [-definite, -specific] singular contexts is the average percentage of 98.5% to select “a” or “an”, which is similar

and native-like. The independent samples t-tests shows there were no significant differences between the experimental groups and the native group. This means that both Arabic-speaking and French-speaking subjects selected the target of “a/an” correctly.

However, the Arabic-speaking intermediate group shows a significant difference from the native control group. By contrast, the French-speaking advanced group shows no significant difference from the native control group. The Arabic-speaking advanced group also shows a significant difference, but the French-speaking advanced group does not.

The results of the French-speaking groups are consistent with full transfer, because French has an indefinite surface. The Arabic-speaking groups select “the” and “a” in [-definite, +specific] singular contexts, but they select “a” correctly in [-definite, -specific]. This shows that the Arabic-speaking subjects fluctuate between “the” and “a/an” only in [-definite, +specific] contexts.

	[-def, -spec]			[-def, +spec]		
	The	a/an	Ø	The	a/an	Ø
SA Intermed. (n=36)	6%	7%	87%	22%	1%	77%
Fre Intermed. (n=10)	3%	7%	90%	5%	0%	95%
SA Adv. (n=21)	4%	0%	96%	23%	1%	76%
Fre Adv. (n = 8)	0%	0%	100%	6%	6%	88%
NS controls (n=9)	1%	0%	99%	3%	0%	97%

Table 4.15 Choice of Articles in [-definite, ±specific] Count Plural Contexts (Sarko 2009:56)

Table 4.15 presents the result of article choice in the count plural [-definite, ±specific] contexts. In the [-definite, -specific] contexts, both all of the Arabic-speaking and French-speaking groups used Ø, which is native-like in English. However, the intermediate Arabic-speaking group chose "the" more in the [-definite, +specific] contexts than the intermediate French-speaking group. The French-speaking group has no significant difference with the native control group. This shows that the French-speaking group can make a native-like article choice. But the intermediate Arabic-speaking group fluctuated between Ø and "the". In Arabic-speaking groups, the percentage of choosing “the” in [-definite, +specific] count plural contexts is higher than that in [-definite, -specific] count plural contexts. This is consistent with the Fluctuation Hypothesis.

Table 4.16 presents the result of article choice in the mass [-definite, ±specific] contexts. In the [-definite, ±specific] contexts, both of the Arabic-speaking and French-speaking groups use "a" to some extent. All of the Arabic-speaking and French-speaking groups have a

significant difference with the native control group. In the Arabic-speaking groups, the percentage of choosing “the” in [-definite, +specific] mass contexts is higher than that in [-definite, -specific] mass contexts. This is consistent with the Fluctuation Hypothesis.

	[-def, -spec]			[-def, +spec]		
	The	a/an	Ø	The	a/an	Ø
SA Intermed. (n=36)	9%	25%	66%	19%	19%	62%
Fre Intermed. (n=10)	5%	31%	64%	5%	40%	55%
SA Adv. (n=21)	7%	13%	80%	17%	3%	80%
Fre Adv. (n = 8)	2%	14%	84%	6%	13%	81%
NS controls (n=9)	3%	0%	97%	2%	6%	92%

Table 4.16 Choice of Articles in [-definite, ±specific] Mass Contexts (Sarko 2009:56)

4.4 Discussion

Section 3 has discussed whether the Fluctuation Hypothesis can predict the productions of L2 learners whose first languages have article systems. These article systems are overlapping or partially overlapping with the English article system. This section will put them together to confirm the validation of the Fluctuation Hypothesis.

In comparison with the English article system, Korea and Russian has no article marker. Spanish has a similar definiteness system. Arabic has an article system, but there is a null indefinite marker. French has a similar article system. However, there is a tiny different from English. French forbids bare NPs. The comparison result is showed in Table 4.17.

L1	Difference from English	The Fluctuation Hypothesis	Full Access Full Transfer
Korea	Lack of definiteness	Yes	Yes
Russia	Lack of definiteness	Yes	Yes
Spanish	English-like	No	Yes
Arabic	Lack of indefinite marker	No	Yes
French	Bare NPs are not allowed	No	Yes

Table 4.17 Comparison between L1s

Table 4.17 shows that the Fluctuation Hypothesis is only well-suited to explain the behaviour of L2 speakers with L1s without article systems. It cannot be applied to learners with an article system in their L1. This shows that the overall performance of L2 article acquisition is dependent on the L1 of the learners. So L1s have an influence on L2 article acquisition. For L2 learners whose L1 is article-less, the transfer of their L1 grammar to their L2 does not match the input of the L2. They have to access UG to deal with the input. As a result, they have to set the ACP. This is a binary value parameter that can be set according to definiteness or specificity. Because their L1 is article-less and has not set this parameter, L2 learners show fluctuation between definiteness and specificity. After they have been exposed to enough

input in their L2, the parameter will be set to one of the two values and the period of fluctuation will end.

However, the FAFT hypothesis can account for all of them, because the FAFT hypothesis takes an account into L1 transfer. For L2 learners whose L1 has an article system, L1 transfer makes them master definiteness D from L1 grammar. However, their interlanguages show difference according to their property of L1 article system. Spanish has an English-like article system so that the Spanish-speaking learners have an overall native-like performance of L2 article acquisition. Arabic lacks an indefinite marker. This leads to article overuse in [-definite, +specific] contexts for the L2 Arabic-speaking learners. Bare NPs are ungrammatical in French so that overuse of article can be predicted in the result of the French-speaking learners. These comparisons show that L1 transfer exists and L1 abstract features can be also transferred into the initial state. These results are consistent with the FAFT hypothesis during L2 article acquisition.

The FAFT hypothesis can predict the performance results of L2 learners of the given languages. The Fluctuation Hypothesis is a particular case of the FAFT hypothesis. The Fluctuation Hypothesis only works in L1s with no article systems. The Fluctuation Hypothesis constitutes evidence of the FAFT hypothesis.

Chapter 5 The Missing Surface Inflection Hypothesis

5.1 Introduction

This chapter will discuss the Missing Surface Inflection Hypothesis (MSIH), which is proposed in Prevost and White (2000). The MSIH is originally used to account for the L2 acquisition of verb functional categories. However, White (2003) applies the MSIH to account for article omission during the L2 acquisition. This thesis argues that the FAFT hypothesis can address L2 article acquisition. So it is interesting to investigate whether the MSIH is consistent with the FAFT hypothesis. The rest of this chapter is organized as follows. In Section 2, the MSIH will be introduced. In Section 3, the MSIH and article omission are discussed. In Section 4, all of the results are discussed and compared together.

5.2 The MSIH

Prevost and White (2000) investigate the L2 acquisition of verb functional categories. Prevost and White discuss whether L2 learners have unconscious knowledge of the functional projections and features underlying tense and agreement. Verb features will be checked in the inflection level. However, checking verb features involves in a raising, which depends on the richness of verb features. When verb features are strong, the verb has to raise overtly to the inflection to check feature. If verb features are weak, the verb will not raise overtly. A number of syntactic consequences result: in languages like French, the L2s being considered here, V features are strong; finite verbs raise, resulting in well-known alternations between the positions of finite and nonfinite verbs (Prevost and White 2000:104).

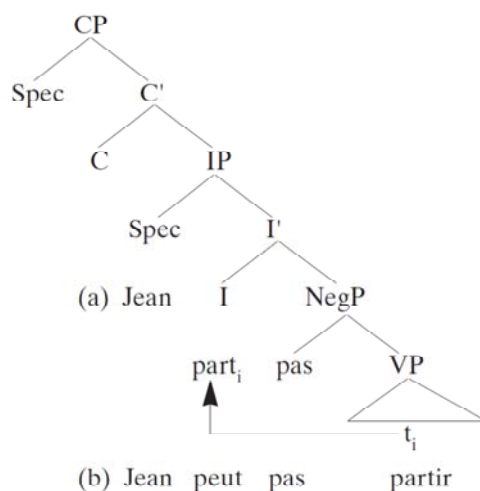


Figure 5.1 Verb Raising in French (Prevost and White 2000:105)

Figure 5.1 describes two possible word orders in French. Sentence (a) has raising to the inflection. This results in the finite verb preceding negation or adverbs. Sentence (b) has no raising. So the verb remains in the VP in (b).

It is well known that L2 learners exhibit optionality in their use of inflectional morphology, with tense and agreement markings sometimes being present and sometimes absent in L2 production data (Prevost and White 2000). This optionality does not only occur in the L2 acquisition, but is also found in the L1 acquisition. It even exists in the endstate grammar of the L2 acquisition. Most researchers agree that there is optionality in the L2 acquisition. However, the theoretical explanations for this optionality are controversial in both the L1 and L2 acquisitions.

5.2.1 Variability in the L1 Acquisition

There are two different approaches to the variability of verb tense and agreement in language acquisition. One idea argues that functional categories in the grammars of the L1 acquisition are different from adult grammars. For example, Optional Infinitive (OI) (Wexler, 1994) is proposed to address verbal inflection in children L1 acquisition. Children's main clauses fluctuate between having a finite or a non-finite main verb.

In addition to explanations based on functional categories, the variability of verbal inflection has been argued to be related to difficulties with the realization of morphological forms. Prevost and White (2000) summarize the existing accounts and show that they agree on the following points:

- (1) In the case of tense morphology, there may be variation between finite and non-finite forms but if a verb form is finite, it has finite properties, whereas if a form is non-finite, it has non-finite properties (Prevost and White, 2000:107).
- (2) In the case of agreement morphology, variation is between forms being present and appropriate, or being absent (Prevost and White, 2000:107).

Thus, the variability between finite forms and non-finite forms does not mean the random use of finiteness.

5.2.2 Variability in the L2 Acquisition

The L2 acquisition exhibits a similar variability in tense and agreement morphology. The accounts for variability in the L2 acquisition are still controversial. In the framework of

Universal Grammar, there are two kinds of accounts of the variable use. One account argues that the interlanguage grammar will contain abstract functional categories and features. The variable use of inflectional morphology is caused by difficulties related to identifying the appropriate morphological surface form. In other words, the difficulties are due to mapping problems from abstract categories to surface morphology. One approach of this kind is the MSIH (Prevost and White 2000). The MSIH assumes that the inflection is absent at the surface morphological level rather than at the abstract category level. The MSIH argues that non-finite forms are used as substitutes for finite forms. The default form of infinite verbs is supposed to be bare infinitival marker in the MSIH. When L2 learners do not know how to supply verb forms, they will supply a default form.

Another account argues that the variable use of morphology is caused by the lack of abstract categories. This is referred to as impairment in the L2 acquisition development. The impairment could be temporary or permanent. One view is that this impairment is global. In this view Universal Grammar will not constrain the L2 acquisition. Instead it is driven by linear sequencing. As a result, functional projections are not involved in the L2 acquisition. The valueless feature hypothesis is an example of a local impairment. Although functional categories exist in the initial state, the feature strength is impaired. L2 learners will fluctuate between two optional feature values. This results in variability in the realization of verbal inflection. The impairment hypothesis implies randomness in the use of inflectional morphology.

5.2.3 Predictions

If the MSIH is able to account for the variability of verbal inflection, finite forms, which are considered to be finite, will be only found in finite contexts. Non-finite forms are assumed to be substitutes for finite forms in some finite contexts.

The impairment hypothesis will predict the random placement of finite verbs because of the lack of feature values. The difference between them is the position of finite verbs, because finite forms only occur in finite contexts in the MSIH and occur randomly in the impairment hypothesis.

5.2.4 Results

In order to test this prediction, Prevost and White (2000) investigate four subjects. The information of these subjects is listed in Table 5.1. The subjects are interviewed once a month.

The whole study lasts for three years. Their spontaneous production data is examined to test the prediction.

	Abdelmalek	Zahra	Ana	Zita
L1	Arabic	Arabic	Spanish	Portuguese
L2	French	French	German	German
Age at onset	Adult	34	22	17
Number of files	25	25	17	25

Table 5.1 Subject and Interview Details (Prevost and White 2000:112)

The results of Prevost and White (2000) include verb finiteness and agreement. Finiteness is presented here to demonstrate the MSIH. The distribution of finite and non-finite forms in finite and non-finite contexts is showed in Table 5.2. Table 5.2 shows that the subjects were able to choose finite forms in finite contexts and infinite forms in non-finite contexts in most cases. Both finite forms and infinite forms are found in finite contexts and nonfinite contexts. However, the percentage of non-finite forms in obligatory finite contexts is 18.5% on average. By contrast, the percentage of finite forms in obligatory nonfinite contexts is 5.3% on average. The former is much higher than the latter. This means that the occurrence of finite forms is restricted to finite contexts, while non-finite forms can occur in both finite and nonfinite contexts.

	Subject	Obligatory finite contexts		Obligatory nonfinite contexts	
		+finite	-finite	-finite	+finite
L2 French	Abdelmalek	767	243 (24.1%)	278	17 (5.8%)
	Zahra	755	224(22.9%)	156	2 (1.3%)
L2 German	Ana	389	45(10.4%)	76	7 (8.4%)
	Zita	434	85(16.4%)	98	6 (5.8%)

Table 5.2 Overuse of Non-finiteness vs. Overuse of Finiteness (Prevost and White 2000:119).

From the above results on distribution of finite and nonfinite forms, their distributions are not similar. The distributions depend on the different contexts. This means that the choice between finite or nonfinite forms is not random. This result is inconsistent with the impairment hypothesis. This hypothesis argues that feature strength is impaired. In the impairment hypothesis, the distribution should not depend on the specific contexts, but should be random. In contrast, this result is consistent with the MSIH. The MSIH argues that verb functional category is available to the L2 acquisition. As a result, finite forms will appear in the finite contexts. Nonfinite forms appearing in the finite contexts are not real non-finite forms. These nonfinite forms will be assumed that L2 learners supply a default form in

the context of finite verbs. Finite forms rarely appear in the nonfinite contexts. This shows that finite features are available in the L2 acquisition development rather than being impaired.

These results support the MSIH and goes against the impairment hypothesis. Abstract functional categories can be present in the L2 acquisition. This makes the MSIH consistent with the FAFT hypothesis.

5.3 The MSIH and Article Omission

The MSIH argues that the L2 acquisition involves functional categories. White (2003) uses the MSIH to account for L2 article acquisition. When it comes to L2 article acquisition, this means that the DP should be present in the development of the L2. If L2 learners cannot account for L2 input, they tend to use a default form to accommodate the L2 input according to the MSIH. In a language without articles, such as Chinese, \emptyset is supposed to be the default form. If this is the case, L2 learners with an L1 with no articles should exhibit more article omission than article overuse.

5.3.1 Arabic and French

Syrian Arabic and French have a functional category that expresses definiteness. Both of them have a definite article, but Arabic has no indefinite form.

5.3.1.1 Prediction

The MSIH predicts that the definite article will be selected accurately when it is used in both languages, but that article omission happens in indefinite singular contexts for the Syrian-speaking subjects. The French-speaking subjects, however, are expected to have a native-like performance. The MSIH also predicts that the default form is \emptyset . So the Syrian-speaking will be expected to choose \emptyset correctly in plural indefinite contexts. \emptyset is used as a substitute of an indefinite form.

5.3.1.2 Experimental Design

The subjects were 57 Arabic-speaking learners and 18 French-speaking learners of English. They had the same educational background as university undergraduates or postgraduates. Their proficiency level was evaluated according to the scores of the Oxford Quick Placement Test. Their personal information is listed in Table 5.3.

All the subjects had to do a story recall task. This task included 5 short stories. The stories were played on the computer. The stories would play twice. After that, some key items

(“prompts”) were used to help the subjects remember the stories. There was no time limit for the subjects to carry out the task. An example of a story is showed in (3).

Groups Number	Mean Age	Mean Formal English Learning	Mean length of residence in English-speaking area
Lower Intermediate Syrian	20.05	11.11	0.54
Upper Intermediate Syrian	23	14.18	0.54
Advanced Syrian	25.44	14.18	1.51
Very Advanced Syrian	31	15.81	3.42
Lower Intermediate French	21	20.40	0.02
Upper Intermediate French	23.40	11.60	1.22
Advanced French	21.50	11.17	7.68
Very Advanced French	21	9	4.50

Table 5.3 Subject Details (Sarko 2008:104)

(3) Once upon a time there was a man from my street who drank too much. He would visit a pub I know well after work, and only leave the pub when it closed. When he got home he would knock the coat-stand over, sing songs and frighten the cat. One day he stopped drinking. He joined a gym, ran a mile every day, and started eating fresh fruit. He became so full of energy that when he got home after work he would throw the door open, knocking the coat-stand over, sing songs and frighten the cat.

Prompts: man, pub, home, coat-stand, songs, cat, gym, mile, fresh fruit (Sarko 2008:105)

5.3.1.3 Results

The results are presented in definite contexts and indefinite contexts. Each group will be listed the choice percentage of the optional articles: “the”, “a/an” and Ø. The result in definite contexts is showed in Table 5.4. The result in indefinite contexts is showed in Table 5.5. The data of them is taken from Sarko (2008) but the percentage has been re-calculated in this thesis in order to make the comparison between article omission and article overuse easier.

As we can see from Table 5.4, both the Syrian-speaking and the French-speaking groups chose the target article progressively more accurately with increasing L2 input. The advanced groups exhibited better performance than the intermediate groups. This is consistent with UG access. UG argues that L2 learners will improve their performance with increasing exposure to L2 input.

Groups	The	a/an	Ø
Lower Intermediate Syrian	85.8%	1.4%	12.8%
Upper Intermediate Syrian	87.4%	1.6%	11%
Advanced Syrian	94.3%	0.1%	4.6%
Very Advanced Syrian	98.2%	0	1.8%
Lower Intermediate French	93.3%	1%	5.7%
Upper Intermediate French	96.2%	1%	2.8%
Advanced French	97.6%	1.6%	0.8%
Very Advanced French	98.1%	1.9%	0
Native	99.6%	0	0.4%

Table 5.4 Definite Contexts (Target “the”)

All groups are able to choose the target “the” at high accuracy levels. The percentage of correct answers is above 85% for all groups. Both Syrian Arabic and French have a definiteness form so that L2 learners chose “the” accurately in definite contexts.

Both the Syrian-speaking and the French-speaking groups have examples of article overuse and article omission in definite contexts. However, the percentage of article omission is higher than that of article overuse, except in the advanced and the very advanced French groups. However, both of two advanced French groups are native-like.

The French-speaking groups exhibited an overall better performance than the Syrian-speaking groups. The reason for this is that French has a similar article system to English. By contrast, Syrian Arabic lacks indefinite markers. The French-speaking groups present a native-like performance in definite contexts.

The MSIH predicts that L2 learners will tend to use a default form (Ø). The result in definite contexts is consistent with MISH prediction. In low proficiency level groups, the subjects tend to omit the article “the”.

The result from the indefinite contexts is showed In Table 5.5. All the groups make use of all the choices (“the”, “a/an” and Ø) in the singular indefinite context. However, the overall performance of the intermediate groups is worse than that of the advanced groups. The overall performance of the Syrian-speaking groups is worse than that of the French-speaking groups. The French-speaking groups have a native-like performance in their selection of singular indefinite articles. This is because the French article system is like the English article system.

Because of the lack of an indefinite marker in Syrian Arabic, Syrian-speaking subjects exhibit higher errors of article choice. Article omission contributes mainly to the errors of article

choice. According to the MSIH, learners with an L1 lacking the relevant form will use a default article to replace the target article. This default value is Ø. So the result of the singular indefinite contexts suggests that the default form is Ø for the Syrian Arabic-speaking subjects.

Groups	Singular: Target a/an			Plural: Target Ø		
	The	a/an	Ø	The	a/an	Ø
Lower Intermediate Syrian	9%	65.2%	25.8%	1.6%	4.9%	93.5%
Upper Intermediate Syrian	12.4%	74.2%	13.4%	3.5%	4.3%	92.2%
Advanced Syrian	7.4%	78.3%	14.3%	1%	2%	97%
Very Advanced Syrian	11.1%	85.2%	3.7%	2.6%	0	97.4%
Lower Intermediate French	2.6%	84.2%	13.2%	2.3%	2.3%	95.4%
Upper Intermediate French	4.8%	92.9%	2.3%	2.4%	7.3%	90.3%
Advanced French	8%	86%	6%	2.6%	0	97.4%
Very Advanced French	0	100%	0	0	0	100%
Native	8.7%	90.2%	0.1%	0	0	100%

Table 5.5 Indefinite Contexts

In the plural indefinite contexts, all groups exhibited native-like performance. This shows that Ø could be considered as the default form when it comes to article choice. This result is consistent with the predictions of the MSIH.

Because of the difference between the Syrian-speaking and French-speaking subjects in indefinite contexts, a test has to be carried out to determine whether these differences are statistically significant or not. The French-speaking subjects show no significant difference. However, the Syrian intermediate groups show the significant difference from the native controls in indefinite singular contexts. This result is consistent with explanation that this is due to the lack of indefinite markers in Syrian Arabic.

5.3.1.4 Discussion

The results reported here are consistent with the predictions of the MSIH. The MSIH argues that L2 learners are aware of various inflectional categories, in this case definiteness. The difference between French and Syrian Arabic is the absence of an indefinite surface form in Syrian Arabic. So the French-speaking subjects exhibit a native-like performance. In contrast, the Syrian-speaking subjects are only native-like in definite contexts. According to the MSIH, this is because the indefinite surface form is missing from the language of these speakers. The Syrian-speaking learners cannot identify indefinite forms from L1 grammars. Because of this, a default form is supplied in singular indefinite contexts when they fail to acquire article choice. This is consistent with the occurrence of article omission. The Syrian-speaking subjects are native-like in plural indefinite contexts. This shows that the default form is Ø.

These results are also consistent with the FAFT hypothesis. The FAFT hypothesis argues that functional categories are available in the L2 acquisition, similarly to the MSIH. The MSIH argues that due to a missing surface form, L2 learners will choose a default form. This default form is influenced by the first language. This is also consistent with the FAFT hypothesis. The thesis shows that the MSIH is a particular case of the FAFT hypothesis. However, the FAFT hypothesis is applied in a wider range.

5.3.2 Turkish

Turkish is an article-less language. However, the numeral *bir* (“one”) sometimes occurs in indefinite contexts. It expresses the same meaning as a singular indefinite article.

5.3.2.1 Prediction

In the framework of the MSIH, the definiteness functional category is assumed to be present in the L2 acquisition. Because Turkish has no article system, the default form can be expected to be \emptyset . As a result, article omission should be the main error type found in these speakers. The Turkish-speaking learners should exhibit highly accurate performance in plural indefinite contexts.

5.3.2.2 Experimental Design

White (2003) carries out a long-term case study to investigate fossilization. One part of this study investigates L2 article acquisition. I will only present and discuss this part of the study.

The subject in White (2003) was SD. Her initial testing took place when she was 50 years old. SD moved to Canada from Turkey at the age of 40. SD took a proficiency level test. The test results (93.75%) showed that she is at the advanced proficiency level.

She was interviewed four times in the course of a two-month period. She also did a number of written tasks. The fifth interview was made after an 18-month period. The first four interviews are referred to as Time 1. The results from these interviews show no difference. The fifth interview is referred to as Time 2.

5.3.2.3 Results and Discussion

Table 5.6 shows the percentage of article omission in obligatory contexts by SD. SD supplies appropriate articles in obligatory contexts most of the time. The overall performance at Time 2 is better than that at Time 1. This picture is consistent with L2 development. The increasing input in the L2 overtime overcomes the absence of functional category expressing definiteness in the L1.

	Plural morphology		Definite articles		Indefinite articles	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Obligatory Contexts	480	275	443	170	507	243
Omissions	63	27	114	48	204	94
% suppliance	87	90	73.5	71.75	59.75	61.25

Table 5.6 Article Omission in Obligatory Contexts (White 2003:136)

Article omission occurred in both definite and indefinite contexts. Recall that according to the MSIH, article omission is caused by the relevant form missing from the surface representation. The learner cannot supply the expected article. Instead of the expected article, the default form (\emptyset) is chosen.

It is also noticed that the percentage of article omission is different between definite contexts and indefinite contexts. The performance in definite contexts is higher than that in indefinite contexts. In other words, article omission tends to happen in obligatory indefinite contexts. Although Turkish has no definiteness form, there is a concept of specificity in Turkish. Definite contexts are specific. As a result, the Turkish-speaking learners have less article omission in obligatory definite contexts.

	Time 1	Time 2
Appropriate null determiner	552	332
*definite	27	11
*indefinite	29	10
%oversuppliance	9.2	5.9

Table 5.7 Article Choice in Bare NP Contexts (White 2003:136)

Table 5.7 shows the distribution of article choice in bare NP contexts. L2 learners tend to omit articles at Time 1 more than that at Time 2. L1 transfer has a greater effect in the beginning. The definite forms and the indefinite forms appear in bare NP contexts. They occur with approximately the same frequency at each time point. However, null articles are supplied correctly at more than 90%. This is consistent with \emptyset as a default form. The percentage of article overuse is much lower than that of article omission. So article omission represents the main error pattern.

These results are consistent with the predictions. The Turkish-speaking learners do not exhibit variability of article choice. The results support the MSIH. Their error patterns are also constrained with the FAFT hypothesis. Turkish has no article system. So it is reasonable to assume that \emptyset is used as a default form. This shows that L1 transfer has an impact on the L2 acquisition.

5.4 Conclusion

This chapter has discussed whether the MSIH can be used to account for article omission of L2 article acquisition. This section will put them together to confirm the validation of the MSIH. This section also discusses whether the MSIH is consistent with the FAFT hypothesis.

The studies reported on in the present chapter are summarized in Table 5.8 for the three languages that have been discussed. Turkish is an article-less language. Syrian Arabic is supposed to have an article system, but it is absent of the indefinite marker. French has an English-like article system. The Turkish-speaking, Syrian-speaking and French-speaking learners exhibit different performance of L2 article acquisition. This shows that article errors happening in the L2 acquisition are not random.

L1	Feature	MSIH	FAFT	Variability
Turkish	[-article]	Yes	Yes	No
Syrian Arabic	[-indefinite]	Yes	Yes	No
French	English-like	Yes	Yes	No

Table 5.8 Hypotheses for Article Omission

Article omission is the main error type. This is inconsistent with variability of article choice. If learners exhibit variability of article choice, the variability would be indicative of an absence of the definiteness category. Why does variability hypothesis exist for the L2 acquisition? One of the reasons is that the L2 acquisition is complicated. Because of L1 transfer, the performance of L2 article acquisition exhibits more variability. This leads to the more complex results of L2 article evaluation. However, error patterns indeed exist behind the complicated results. Variability cannot predicate them.

Different L1s result in different L2 acquisitions. The Turkish-speaking learners have no articles in their L1 and cannot identify definiteness in the L2 input. They cannot get the rule of definiteness from the L1 grammar. This results in a missing surface of definiteness. In this case, they supply a default form. The default form is \emptyset , because Turkish is an article-less language. Although there is a numeral in Turkish, the definiteness category does not exist. So it is reasonable to suppose that the default form is a bare NP form. The experimental result also confirms this supposition. They make article choice accurately in plural definite contexts. Their performance is native-like in these contexts. However, article omission and article overuse happens in obligatory definite and indefinite contexts.

Syrian has no indefinite markers. So the Syrian-speaking learners make article choice accurately in definite contexts, but article omission and article overuse appear in the

indefinite contexts. Article omission is the main error type. It shows that the Syrian grammar has an influence on L2 article acquisition. The missing surface can account for article omission.

French has a similar article system to English. So the performance of the French-speaking subjects is native-like. The experimental results confirm this. It shows that it is easier for L2 learners to acquire article systems if their native language has definiteness markers. The L1 grammar helps them to make the correct article choice.

Based on the above discussion, the results support the MSIH. They are also consistent with the Full Access Full Transfer hypothesis. Both these hypotheses argue that that functional category expressing definiteness (DP) is available in the L2 acquisition. L1 transfer happens during the L2 acquisition.

However, the MSIH has some limitation when it comes to L2 article acquisition. It is not always easy to decide a default form based on the first language. \emptyset is usually used as a default form. It is more reasonable to assume that \emptyset is the default in article-less languages. However, it is difficult to suppose \emptyset as default form in language with definiteness. Instead of a missing surface, L1 transfer is more suited to account for article omission during L2 article acquisition. L1 transfer has an impact on article error patterns in different contexts. The frequency of article omission is not the same in article-less languages and language with articles. The FAFT hypothesis is better to address them.

Chapter 6 Articles as Adjectives Accounting for Article Error Patterns

6.1. Introduction

This chapter will introduce another account for L2 article acquisition in the context of L2 learners without an article system. This account proposed in Trenkic (2009) argues that L2 learners without an article system analyze articles as adjectives which are optional for a communication. This assumption can be used to account for article overuse and article omission. After the overview of this account, this chapter also compares this account with the FAFT hypothesis.

Some languages have no article systems, where nominal phrases are encoded as bare nouns (N=NP). These languages can be said to lack the syntactic category determiner (Lyons 1999). However, Trenkic (2009) argues that all languages have demonstratives. Demonstratives, possessives, numerals behave in many ways like adjectives. Suffice it to say here that like adjectives, and unlike articles, they are used only when there is a true communicative need for the concept they encode to be expressed, for example to make potentially ambiguous reference clear by indicating the referent's distance from the speaker / hearer (demonstratives) or the referent's relation to them (possessives) (Trenkic 2009:123). Before L2 learners with no article system have acquired article choice, their interlanguages do not require article presence. So the L2 learners think that the function of L2 articles is only to express certain meanings which put some restrictions on nouns in the early stages, not to signal a coming noun phrase.

In order to confirm this idea, the acquisition steps have to be addressed. L2 learners of English are supposed to undergo the following steps.

(1) Three acquisition steps (Trenkic 2009:124)

Step 1: Learning two new forms – “the” and “a/an”.

Step 2: Figuring out their primary function as noun markers, i.e. determiners.

Step 3: Establishing the meanings associated with these forms (i.e. whether the referent is uniquely identifiable or not)

These steps have been identified in the early development of children acquiring English as the native language. Children acquiring English as a native language are able to supply articles in 90% of contexts where English-native adults use articles, when they are around three years old. Although children can supply articles, articles are not always used correctly. This shows that the learning order of English articles is to figure out the structure of articles firstly. After some practice of articles, the learners will understand further the usage of the articles in English.

The acquisition order suggests that L2 learners do not acquire the grammatical function until they reach the third step. The primary focus of L2 learners is on the meaning of articles, not on their grammatical function. It is likely that because of their similarities with demonstratives and numerals, articles are perceived as new procedural adjectives whose meanings need to figure out (Trenkic 2009:124). In this case, the L2 learners have already learned the article forms and have figured out their primary function. That is to say, they have achieved the second step in the above acquisition steps. L2 learners have acquired the meaning of articles. They know articles are noun markers, but they analyze them as procedural adjectives in the context of no article systems. This results in defining the new meaning of definite and indefinite as procedural adjectives. The definite and indefinite articles are distinguished according to whether the target can be identified. The definitions of them are showed in (2).

(2) Articles analyzed as procedural adjectives (Trenkic 2009:125)

The: adj. definite (that can be identified)

A: adj. indefinite (that cannot be identified)

(3) Two forms in L2 article choice (Trenkic 2009:125)



If this idea is applied to L2 article production, two optional forms will be available to L2 learners of English. Example (3) is used to illustrate this. In this example, a L2 learner of English whose first language has no articles wants to refer to an existing and unique cat. The L1 grammar tends to use a bare NP form, cat. This is also consistent with rational

communication. However, the L2 grammar has an overt definite form, the cat. This form signals that the cat can be identified and is a noun. This is consistent with L2 grammar.

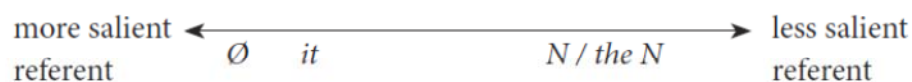
The problem is how L2 learners make the choice between the two optional forms. Trenkic (2009) argues that there are two important factors that influence the choice. One factor is the association strength of the referential form. In early L2 article acquisition, the association strength is strong with L1 grammar. Because of the article absence in L1, the relevant form is also consistent with the discourse-pragmatic expression. This means that the strength from L1 grammar is stronger than from L2 grammar.

Another factor is the cognitive mechanisms of language processing. Because of the limited capacity of working memory, the L2 learner tends to choose the less complex of two optional forms. The bare NP is supposed to be simpler than the definite surface. The higher complexity of a surface will result in a higher consumption of working memory. As a result, the choice of the definite form will be costly. So L2 learners prefer to use the bare NP at an early stage of L2 article acquisition when their L1 has no articles.

6.2 Information Load Hypothesis

Trenkic (2009) uses the information load hypothesis to explain the mechanism of article choice. A basic assumption of information load hypothesis is that there are work memory limitations in constructing and updating of the discourse model (Trenkic 2009). When a speaker uses a referring expression, two expressions exist in working memory at the same time. These two expressions are referential expressions and the representation of the previous discourse including that referent. Both of them are active during reference resolution and take memory space in working memory space. So the expressions have to compete for the limited resource of working memory. As a result, the more salient (hence active) the discourse representation of the referent, the bigger a chunk of the representational space it requires, making the processing of complex referential expressions more costly, and therefore dictating the use of simpler expressions (Trenkic 2009:131). If this hypothesis is applied to L2 article acquisition, the salient scale can be showed in (4).

(4) Saliency scale (Trenkic 2009:131)



In this saliency scale, the bare NP and definite NP are options to L2 learners of English. It means that the bare NP can be interpreted as definite. As a result, article choice will depend on the amount of working memory required. The more salient a referent, the more representational space it takes, leaving fewer resources available for its linguistic encoding (Trenkic 2009:132). L2 learners tend to choose the less salient expressions of a referent. Complexity of the bare NP representation is less complex than that of definite NP representation. So L2 learners with no article system prefer to the bare NP form. In order to explain this saliency scale, L2 article use of Serbian learners of English is given in (5) when Serbian learners took a picture-based oral story retelling task.

(5) Saliency of a referent (Avery and Radišić 2007)

“... but in the middle of the wallet there is *a lottery ticket*... he took *the lottery ticket*... He took the money and *the lottery ticket*... he checked *the lottery ticket*... to give back *lottery ticket*... the original owner of *lottery ticket*... he took money and *lottery ticket*...”

Example (5) provides support for this proposal. In this example, the first four article choices are made correctly. The first noun phrase in italics represents the first mention of the referent, so an indefinite is supplied. In the remainder of this monologue all references to this lottery ticket should use a definite form. However, bare NP surface is used to represent the referent. This production is in line with information load hypothesis. L2 learners with no article system tend to drop the definite article “the” because of the limited working memory.

6.3 Article Omission

It is reported that article omission is a more frequent error pattern than article overuse in L2 learners’ production in the previous chapter. Trenkic (2009) argues further that L2 learners of English tend to omit article more in adjectivally modified contexts than in non-modified contexts. This modified context is article + adjective + noun. By contrast, in non-modified context the article precedes the noun directly. These two contexts are asymmetric.

This error pattern can be easily addressed with the above proposed hypothesis. L2 learners of English with article-less native languages have two candidates from definite surface: bare NP and definite NP. So both adjective + NP and article + adjective + NP are available to them in modified contexts. This processing of reference resolution depends on memory resources. If they have to refer to them continuously, they tend to use the less complex surface to save

working memory. Bare NP is considered as a winner. The same processing happens in the non-modified contexts, where L2 learners make a choice between NP and article + NP.

But definite surfaces in modified contexts have higher complexity than definite surfaces in non-modified contexts. This leads to more article omissions in modified contexts.

6.4 Article Overuse

Articles' primary function as a syntactic class determiner is to signal nominal phrase. They are also used to express the identifiability status of a discourse referent. It is important to note that in terms of discourse identifiability, it is a referent's existence and uniqueness within a domain, and no other attributes of the referent, that constitute the criteria for identifiability (Trenkic 2009:135).

If L2 learners of English have not acquired article choice at the early stages, they fail to apply discourse identifiability and analyze articles as adjectives. Adjectives modify nouns and transfer some information regarding their properties. When articles are incorrectly analyzed as adjectives, articles as adjectives will have an identifiable property. The identifiable property would signal that the entity can or cannot be identified. The article "the" is analyzed as an adjective with the meaning "definite" which can be identified. "A" is analyzed as an adjective with the meaning "indefinite" which cannot be identified. Example (6) is used to understand this identifiable property.

(6) The woman = a woman that can be identified (in some way).

A woman = a woman that cannot be identified.

Trenkic (2009:136)

If L2 learners cannot correct article choices based on discourse identifiability, which identifiability is used? Trenkic (2009) proposes objective identifiability which is applied by L2 learners instead of discourse identifiability. The objective identifiability is not limited in the existence and uniqueness of a referent. It is also able to express an imaginable referent. Something that is inherently more imaginable may also be judged to be more identifiable ('you will know one when you see one') than something that does not have a stable/imaginable form (Trenkic 2009:136). As a result, L2 learners overuse articles before discourse identifiability is used correctly.

Butler's (2002) data constitutes evidence of the view that "the" is assumed familiarity with referents' identifying attributes. The Japanese-speaking learners of English took a cloze test. The sample (7) is drawn from their article choices. Because the women called "Shikibu Murasaki" is specific, "the" is supplied by the Japanese-speaking learners.

(7) ... For example, the world's first novel, called *The Tale of Genji*, was written almost 100 years ago by the Japanese noblewoman...

(Butler 2002:459)

Trenkic (2009) finds that the definite article is not significantly overused when reference is specific. So Trenkic argues that article overuse is not caused by article choice parameter, but the speaker's familiarity with the referent. L2 learners analyze articles as adjectives and use objective identifiability instead of discourse identifiability. As L2 learners will overuse "the" in some contexts.

6.5 Conclusion

This chapter gave a different explanation of article omission and article overuse from the framework of UG. The basic assumption is that articles are incorrectly analyzed as adjectives at the early stages by L2 learners. Because of the absence of articles in L1, bare NPs become an optional form to L2 Learners with no article systems. Two candidates (bare NPs and definite NPs) are available when they make article choice. It shows that L1 transfer have an effect on L2 article acquisition. The view of L1 transfer is consistent with the FAFT hypothesis. In comparison with the FAFT hypothesis, the hypothesis proposed in this chapter introduces the concept of the working memory during reference resolution. This concept is useful how L1 transfer have an influence on L2 article acquisition in detail.

The hypothesis proposed in this chapter has some disadvantages. Firstly, this approach cannot really account for development in the L2 acquisition. Although article errors still happen even in the final stage of L2 article acquisition, it is unlikely that L2 learners will always treat articles as objectives. If it is true, the L2 learners will never master the definiteness category. Secondly, this hypothesis was proposed for the contexts of L1 article-less language. It is difficult to assume that L2 learners with articles in their L1 would analyze articles as adjectives.

This hypothesis is in line with the FAFT hypothesis in L1 transfer. It also gives a direction how the FAFT hypothesis to investigate the article errors in L2 article acquisition in detail. The working memory resource is maybe a direction for it.

Chapter 7 Conclusion

As with many other linguistic phenomena, there is a sharp distinction between L1 and L2 learners when it comes to the acquisition of articles. L1 learners are always able to succeed in article acquisition. However, the final stage of L2 article acquisition is variable. The explanation of L2 article choice is still controversial. This thesis presents various hypotheses and findings that have been put forth regarding L2 article acquisition. This thesis argues that the FAFT hypothesis is able to account for L2 article choice. The existing hypotheses are consistent with the FAFT hypothesis.

Article errors of article choice usually occur in L2 article acquisition. One of the reasons for the occurrence of article errors is that the English article system is complicated. This makes it difficult for L2 learners to identify the rules from the L2 input during L2 article acquisition. A number of studies have observed these errors of article choice during L2 article acquisition. Two main error patterns are article omission and article overuse. It shows that L2 article acquisition is not totally random. So L2 article choice must be constrained by some rule.

This thesis argues that L2 article acquisition is UG-constrained. With the increasing exposure to the L2, learners can reduce the number of article errors in their production. However, the performance of L2 learners' article choice depends on L1 transfer. So error patterns are also influenced by L1 transfer. This thesis has investigated whether some existing explanations for article overuse and article omission are consistent with the FAFT hypothesis.

The Fluctuation Hypothesis is used to account for article overuse in the L2 acquisition. This hypothesis is consistent with the result of the Korea-speaking and Russian-speaking learners. The choice of article will fluctuate between definite and indefinite in the context of [+definite, -specific] and [-definite, +specific]. In order to validate this hypothesis, this thesis also investigated the findings of the Spanish-speaking, Arabic-speaking and French-speaking learners of English. In comparison with the English article system, Korean and Russian are article-less languages. Spanish has an article system similar to the English one. Arabic has an article system, but there is a zero indefiniteness marker. French has a similar article system, but is different from English because it does not permit bare NPs. As is shown in Chapter four, the Fluctuation Hypothesis is only well-suited to explain the acquisition of article system by L2 learners with L1 that do not have an article system. In this case, the L2 learners have to access UG to deal with the input. Because their L1 is article-less, they exhibit

fluctuation between definiteness and specificity. After they have been exposed to more L2 input, the fluctuation will disappear in the end. However, this explanation cannot be used to account for the L2 acquisition of articles when the learners have an L1 with an article system. When L2 learners' native languages have a similar article system, their performance does not show fluctuation. This shows that L1 transfer makes them master definiteness D from L1 grammar. Spanish has an English-like article system, and as a result that the Spanish-speaking learners have an overall native-like performance of L2 article acquisition. Arabic lacks an indefinite marker. This leads to the fluctuation in [-definite, +specific] contexts for the L2 Arabic-speaking learners. Bare NPs are ungrammatical in French, and consequently, overuse of articles can be predicted in the result of the French-speaking learners. The FAFT hypothesis can predict the performance results of L1 learners with article systems or with no article system, because L1 transfer is included in the FAFT hypothesis. However, the Fluctuation Hypothesis can only predict article acquisition fluctuation of L1 learners with no article system. So the Fluctuation Hypothesis is a particular case of the FAFT hypothesis.

The MSIH is applied to account for article omission of L2 article acquisition. This hypothesis argues that article omission does not occur because of the definiteness category is missing from the learners' grammars, but rather because the definiteness-marking is missing from the surface structure. This hypothesis also requires a default value for the missing surface when L2 learners cannot supply articles. The default value is usually \emptyset . This thesis investigates the result of the Turkish-speaking, Arabic-speaking and French-speaking L2 learners. The default value (\emptyset) is consistent with article-less Turkish. In the Arabic results, article omission and article overuse appear in indefinite contexts. Article omission is the main error type. It shows that the Syrian grammar has an influence on L2 article acquisition. The missing surface can account for article omission. In the French results, the performance of the French-speaking subjects was native-like. The experimental results confirm it. It is helpful for L2 learners if their native language has definiteness markers. These results confirmed the MSIH. They are also consistent with the FAFT hypothesis. Both of two hypotheses argue that the functional category expressing definiteness (DP) is available in the L2 acquisition. L1 transfer happens during the L2 acquisition.

Chapter 6 gives an explanation for article omission and article substitution errors outside of the framework of UG. This hypothesis assumes that articles are analyzed incorrectly as adjectives by L2 learners with no article system instead of definiteness. Two candidates are available when they make article choice, such as bare NPs and definite NPs. Because of the

absence of article systems in L1s, bare NPs become an optional form to L2 learners without article systems. This shows the effect of L1 transfer. This hypothesis is in line with the FAFT hypothesis in L1 transfer. It also gives an indication as to how the FAFT hypothesis can be used to investigate the article errors in L2 article acquisition in detail.

However, these investigated hypotheses try to use descriptions of error patterns to account for article overuse and article omission. The Fluctuation Hypothesis adopts fluctuation which describes the characteristic of article overuse. The MSIH uses a default null form to address article omission. The hypothesis in Chapter 6 argues that article overuse and article omission are incorrectly analyzed as adjectives. These error patterns are similar to the use of adjectives. These hypotheses have not taken account for L2 development or fossilization. The FAFT hypothesis addresses them in the framework of UG.

Above all, this thesis argues that L2 article acquisition is UG-constrained. Three existing hypotheses constitute support of the FAFT hypothesis. The FAFT hypothesis can be applied in a wider range.

Reference

- Avery, P. & Radišić, M. 2007. Residual optionality at the interface: The L2 acquisition of articles. *Paper presented at the EUROSILA 2007*, Newcastle upon Tyne.
- Bickerton, D. 1981. *Roots of language*. Ann Arbor, MI: Karoma Publishers.
- Bley-Vroman R. 1989. What is the logical problem of foreign language learning? in S Gass & J Schachter (eds.) *Linguistic Perspectives on Second Language Acquisition*. CUP New York: 41-68.
- Brown, Roger. 1973. *A first language: the early stages*. Cambridge, Mass.: Harvard University Press.
- Butler, Yuko Goto. 2002. Second language learners' theories on the use of English articles. *Studies in Second Language Acquisition*, 24: 451-480.
- Celce-Murcia, M., & Larsen-Freeman, D. 1999. *The grammar book: An ESL/EFL teacher's course (2nd ed.)*. Boston: Heinle & Heinle.
- Chomsky, Noam. 1965. *Aspects of the Theory of Syntax*. Cambridge: MIT Press.
- Deprez, Viviane and Sleeman, Petra and Guella, Hakima. 2010. Specificity Effects in L2 Determiner Acquisition: UG or Pragmatic Egocentrism? *Selected Proceedings of the 4th Conference on Generative Approaches to Language Acquisition North America (GALANA 2010)*, ed. Mihaela Pirvulescu et al., 27-36. Somerville, MA: Cascadilla Proceedings Project.
- Donnellan, Keith S. 1966. Readings in the Philosophy of Language. *Readings in the Philosophy of Language*.
- Dube, Busi. 2000. Where are the minimal trees? Evidence from early Zulu L2 subordination. *Second Language Research* 16, 3 (2000); pp. 233-265
- Dugarova, Esuna. 2007. Acquisition of the Chinese reflexive 'ziji' by Russian and English speakers, *Proceedings of the Fifth University of Cambridge Postgraduate Conference in Language Research*, Cambridge Institute of Language Research
- Epstein, Samuel, Suzanne Flynn, and Gita Martohardjono 1996. Second language acquisition: Theoretical and experimental issues in contemporary research. *Brain and Behavioral Sciences*, 19, 677-758.
- Eubank, L. 1993/94. On the transfer of parametric values in L2 development. *Language Acquisition* 3: 183-208.
- Eubank, L. 1996. Negation in early German-English Interlanguage: more Valueless Features in the L2 initial state. *Second Language Research* 12: 73-106.

- Finer, D. and E. Broselow. 1986. Second Language Acquisition of Reflexive-Binding. in S. Berman, J-W. Choe, and J. McDonough, eds., *Proceedings of the 16th Meeting of the North East Linguistic Society*, University of Massachusetts, Graduate Linguistics Student Association, Amherst, Massachusetts.
- Flynn S. and Martohardjono, G. 1994. Mapping from the initial state to the final state: the separation of universal principles and language specific principles. In B. Lust, M. Suñer and J. Whitman (Eds), *Syntactic theory and first language acquisition: cross-linguistic perspectives. Vol. 1: Heads, projections and learnability* (pp. 319–335). Hillsdale, NJ: Lawrence Erlbaum.
- Fodor, J. D. and Sag, I. 1982. Referential and quantificational indefinites. *Linguistics and Philosophy*, 5:355–398.
- Frawley, William J. (Editor) 2003. *International Encyclopedia of Linguistics*. 2nd edition, Oxford University Press (4 volumes).
- García Mayo, María del Pilar. 2009. Article choice in L2 English by Spanish speakers. In *Second language acquisition of articles: empirical findings and theoretical implications*, García Mayo & Hawkins (eds). John Benjamins Publishing Company.
- Heim, Irene. 1991. Articles and definiteness. Published in German as Artikel und Definitheit, in A. v. Stechow and D. Wunderlich (eds.), *Semantics: An international handbook of contemporary research*. Berlin: de Gruyter.
- Hewson, J. 1972. *Article and Noun in English*. The Hague: Mouton.
- Huebner, T. 1983. *A Longitudinal Analysis of the Acquisition of English*. Ann Arbor, MA: Karoma Publishers.
- Ionin, T., & Wexler, K. 2003. The certain uses of the in L2-English. In J. M. Liceras et al. (Eds.), *Proceedings of the 6th Generative Approaches to Second Language Acquisition Conference*, (pp. 150-160). Somerville, MA: Cascadilla Press.
- Ionin, T., Ko, H., & Wexler, K. 2004. Article semantics in L2 acquisition: The role of specificity. *Language Acquisition*, 12, 2-69.
- Kanno, K. 1997. The acquisition of null and overt pronominals in Japanese by English speakers. *Second Language Research*, 13 (3) 265-287.
- Ko, Heejeong, Ionin, Tania, & Wexler, Ken. 2010. The role of presuppositionality in *the Second Language acquisition of English articles*. *Linguistic Inquiry*, 41(2), 213-254.
- Lyons, C. G. 1999. *Definiteness*. Cambridge: Cambridge University Press.
- Master, P. 1987. *A cross-linguistic interlanguage analysis of the acquisition of the English article system*. Doctoral dissertation, UCLA.

- Master, P. 1994. The effect of systematic instruction on learning the English article system. In T. Odlin (ed.), *Perspectives in Pedagogical Grammar*, 99-122. Cambridge, U.K.: Cambridge University Press.
- Master, P. 1997. The English article system: Acquisition, function, and pedagogy. *System*, 25, 215-232.
- Master, P. 2002. Information Structure and English Article Pedagogy. *System*, 30(3), 331-48.
- Mey, Jacob L. 1993. *Pragmatics: An Introduction*. Oxford: Blackwell (2nd ed. 2001).
- Montalbetti, M. 1984. *After Binding: on the Interpretation of Pronouns*, Doctoral dissertation. MIT.
- Mosel, Ulrike and Even Hovdhaugen. 1992. *Samoan reference grammar*. Oslo: Scandinavian University Press.
- Myers, S. 1992. *In Search of the Genuine Article: A Cross-linguistic Investigation of the Development of the English Article System in the Written Compositions of adult ESL Students*. Doctoral dissertation. Florida State University.
- Nakajima, H. 1996. Complementizer selection. *The Linguistic Review* 13, 143-64.
- Odlin, T. 1989. *Language Transfer: Cross-linguistic Influence in Language Learning*. Cambridge: CUP.
- Parrish, B. 1987. A new look at methodologies in the study of article acquisition for learners of ESL. *Language Learning*, 37, 361-383.
- Perez-Leroux, A. T. and Glass, William, R. 1999. Null anaphora in Spanish second language acquisition: probabilistic versus generative approaches. *Second Language Research*. 15 (2) 220-249.
- Prévost, P. and White, L. 2000. Missing surface inflection or impairment in second language? Evidence from Tense and Agreement. *Second Language Research*, 16 (2), pp. 103-133.
- Robertson, D., & Sorace, A. 1999. Losing the V2 constraint. In E. Klein & G. Martohardjono (Eds.), *The development of second language grammars: A generative approach*. Amsterdam: John Benjamins.
- Sarko, G. 2008. Accounting for indefinite article a drop in the oral L2 English of L1 Syrian Arab speakers. *Essex Graduate Student Papers in Language and Linguistics*, 10, 97-115.
- Sarko, Ghissh. 2009. L2 English article production by Arabic and French speakers. In *Second language acquisition of articles: empirical findings and theoretical implications*, García Mayo & Hawkins (eds). John Benjamins Publishing Company.

- Schwartz, B.D. and Sprouse, R. 1994. Word order and nominative case in nonnative language acquisition: a longitudinal study of (L1 Turkish) German interlanguage. In Hoekstra T. and Schwartz B.D. (eds.), *Language Acquisition Studies in Generative Grammar*. Amsterdam: John Benjamins. 317-368.
- Schwartz, B.D. and Sprouse, R. 1996. L2 cognitive states and the full transfer/full access model. *Second Language Research* 12: 40-72.
- Sharma, Devyani. 2005. Language transfer and discourse universals in Indian English article use. *Studies in Second Language Acquisition* 27. 535-566.
- Sinclair, J. M. (Ed.). 1991. *Corpus, concordance, collocation*. Oxford: Oxford University Press.
- Snape Neal. 2007. Japanese speakers' article omission in L2 English: Evidence against the prosodic transfer hypothesis? In Belikova A., et al. (Eds.), *Proceedings of the 2nd Conference on Generative Approaches to Language Acquisition North America (GALANA)* (pp. 394-405). Somerville, MA: Cascadilla Proceedings Project.
- Thomas, M. 1989. The acquisition of English articles by first- and second-language learners. *Applied Psycholinguistics* 10: 335-555.
- Trenkic, Danijela. 2002. Form-meaning connections in the acquisition of English articles. In *EUROSLA Yearbook 2*, S. Foster-Cohen, T. Ruthenberg & M. Poschen (eds), 115-133. Amsterdam: John Benjamins.
- Trenkic, Danijela. 2009. Accounting for patterns of article omissions and substitutions in *Second language production*. In *Second language acquisition of articles: empirical findings and theoretical implications*, García Mayo & Hawkins (eds). John Benjamins Publishing Company.
- Vainikka, A. and Young-Scholten, M. 1994. Direct access to X'-theory: evidence from Korean and Turkish adults learning German. In Hoekstra, T. and Schwartz, B.D., editors, *Language acquisition studies in generative grammar: papers in honour of Kenneth Wexler from 1991 GLOW workshops*. Philadelphia, PA: John Benjamins, 265-316.
- Vainikka, A. and Young-Scholten, M. 1996a. Gradual development of L2 phrase structure. *Second Language Research* 12, 7-39.
- Vainikka, A. and Young-Scholten, M. 1996b. The early stages in adult L2 syntax: additional evidence from Romance speakers. *Second Language Research* 12(12), 140-76.
- Venuti, James Allen. 2011. *An Analysis of L2 Article Use in English*. Master thesis. Department of Curriculum, Teaching and Learning University of Toronto.

- Wexler, K. 1994. Optional infinitives, head movement and the economy of derivations. In Lightfoot, D. and Hornstein, N., editors, *Verb movement*. Cambridge: Cambridge University Press, 305–50.
- White, L. 1990/91. The verb-movement parameter in second language acquisition, *Language Acquisition*, 1, 337-60
- White, Lydia. 2003. *Second language acquisition and universal grammar*. Cambridge University Press.
- Yamada, J., & Matsuura, N. 1982. The use of the English article among Japanese students. *RELC Journal*, 13, 50–63.
- Yuan, B. 1998. Interpretation of binding and orientation of the Chinese reflexive ziji by English and Japanese speakers. *Second Language Research* 14: 324-340.
- Yuan, B. 2001. The status of thematic verbs in the second language acquisition of Chinese: against inevitability of thematic-verb raising in second language acquisition. *Second Language Research* 17, 248-272.
- Zobl, H. 1982. A direction for contrastive analysis: The comparative study of developmental sequences. *TESOL Quarterly*, 16, 169-183.

