ABSTRACT
        A study examined the acquisition order of English
article functions, and attempts to explain the results in terms of
transfer and language universals. Subjects were French, German,
Japanese, and Korean students, aged 10-15 years, studying English as
a second language in schools in Seoul, Korea. All were administered a
test consisting of 18 multiple-choice questions, 16 error-correction
items, and 19 composition questions. Each item had a context
description in the student's native language, intended to elicit a
particular article function. Article functions were classified in six
categories: deictic reference; exophoric reference; anaphoric
reference; non-specific reference; generic reference; and nominative
function. It was found, as anticipated, that the French and German
students, whose first language has an article system, earned higher
scores than the Japanese and Korean students. It was also found that
the acquisition order of English article functions was similar
regardless of the existence of an article system in the native
language. In all groups, functions of "the" appeared to be acquired
in this order: deictic reference; anaphoric reference; then exophoric
reference. Acquisition of functions of "a" shows a slightly different
order according to group background conditions. Contains 22
references. (Author/MSE)

Abstract

The Acquisition of Article Functions
in English as a Foreign Language

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This study examines the acquisition order of English article functions and explains the results in terms of transfer and language universals, through a test given to beginning English learners between the ages of 10 and 15 who are students of the French School, the German School, the Japanese School and a few Korean schools in Seoul, Korea.

The following htpotheses were preposed:

1. French and German English learners with an article system in thier first language ([+Art] group) will earn higher scores in the designed test than Japanese and Korean learners without it ([-Art] group).

2. The acquisition order of English article functions in all testee groups will be similar irrespective of the existence of an article system in their first languages.

In order to prove these hypotheses, the test, which was composed of 18 multiple choice questions, 16 error correction items and 19 composition questions was administered. Each item has a context description designed to derive a parrticular article function.

The article functions were classified into six categories on the basis of Karmiloff-Smith's classification; deictic reference, exophoric reference, anaphoric reference, non-specific reference, generic reference, and nominative function.

The first hypothesis was confirmed by the wide difference of mean value between the [+Art] group and the [-Art] group.

The second hypothesis was examined by the Spearman Rank Difference Correlation Coefficient(SRDCC) among the testee groups. The SRDCC between the German and Japanese testees was .9?? and that of German and Korean groups was also .900. The other SRDCCs also proved to have high or medium correlation coefficients.

In all testee groups, the "the" functions appear to be acquired in the order of deictic reference, anaphoric reference, and then exophoric reference, while the acquisition of the "a" functions shows a slightly different order according to each group's background conditions.

The Article Acquisition in English as a Foreign Language

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1. Introduction

The acquisition of the English article system is one of the most interesting fields in teaching English as a foreign language. The native speaker of English can acquire the English article system around the age of three well enough to use it automatically, although they cannot explain systematically why they used the particular article in that context. However, the student who learns English as a foreign language can easily correct the errors they make according to the rules, when thet are told of the existence of errors, but they have a tendency to make the same errors repeatedly.

Kim(1992) reasons that the difficulty of correct use of English articles comes from the inherent characteristics of English articles which are not content words, but function words which are based on abstract relations with the other elements in a sentence. However, Yamada and Matsuura(1982) explain that Japanese students have difficulty in using English articles, because the Japanese language does not have 'specific' and 'nonspecific' concepts in itself and does not differentiate the noun feature with [+count] or [-count]. In order to explain the difficulty of English article acquisition, Kim took the intralinguistic view, and Yamada and Matsuura took interlinguistic view.

If the comparison between a group with an article system in its native language and a group without an article system in its native language can be made, it will offer interesting information about the acquisition of the English article system.

The study of the English article system can be approached in three aspects: syntactic, semantic, and functional. This study approaches it in terms of a function, not only because the use of English articles goes beyond a sentence unit but also because a function, in my opinion, is more approapriate to explain the English article system. In order to find the acquisition order of English article functions, this study offered a test to four groups of beginning learners of English. They are the

French School students in Seoul, the German School students in Seoul, the Japanese School students in Seoul and Korean school students in Seoul The former two groups have an article system in their native language (hereafter [+Art] group), and the latter two groups do not have an article systen in their native language (hereafter [-Art] group).

Two hypotheses were created.

First, the [+Art] group will demonstrate better scores than the [-Art] group.

Second, the acquisition order of English article functions will be similar between the groups.

The first hypothesis was based on the assumption that transfer from the native language will facilitate the foreign language learning. The second hypothesis presupposes that there is an inherent hierarchy of difficulty in English article functions.

The previous studies about the English article acquisition dealt with the acquisition order of 'a', 'the', and 'null' descriptively, while this article treats the acquisition order of the divided functions of 'a', 'the' in second language acquisition and tries to explain the result in regards to the first language.

This study takes the functional approach to the English article study and presupposes that the results of longitudinal study and cross-sectional study correspond to ech other (De Villiers & De Villiers 1973). In addition, this article is based on the insistence that the number of errors indicates the difficulty of acquisition.

2. Literature Review

2.1 English Article Acquisition as a First Language

Maratsos(1974) measured the understanding of definite and indefinite article system through story-telling whose subjects were 40 children aged 32 months to 60 months. He concluded that specific/ nonspecific uses were acquired around the age of three, but definite/ indefinite uses were acquired after the age of four.

Zehler and Brewer(1982) created a context drawing an article use, which has a blank in the position of an article. The following is an example.

(1) And now this little boy is going to go to school. And he's walking to school, and as he's walking, he looks down [researcher makes a doll look down] and he sees _____.

The result showed that 'a' and 'null' were used at first, 'the' appeared next, and then the overuse of 'the' occurred.

Karmiloff-Smith(1979) researched French children aged 2 to 11 and concluded that the nominative function is acquired around three, the deictic refernce function, around 3, exophoric reference function, around 6, non-specific reference function, around 8, anaphoric reference function, around 8 ~ 9, and generic reference function, after 8 ~ 9.

2.2 English Article Acquisition Study as a Foreign Language

Mizuno(1986) researched English article error types which Japanese high school students and university students made. He classified English article errors into a co-occurrence error, a word-order error, an underextension error, an overextension error and a substitution error. He observed that a co-occurrence error and a word-order error appeared early and declined considerably and the overextension error were made at the intermediate and high levels.

Master(1987) interviewed 20 learners of English with 5 groups of different first language. They were Chinese, Japanese, Russians ([-Art] group), German and Spanish ([+Art] group). The result was that [+Art] groups produced larger number of correct answers than [-Art] group. The acquisition order of the English articles was 'null' > 'the' > 'a' in [-Art] group and it was 'the' > 'null' > 'a' in [+Art] group.

2.3 The Classification of the English Article Functions

There are several classifications of the English article functions by scholars. This study selected Karmiloff-Smith's classification of the English article functions, on the grounds that it treats the main functions of the English articles and avoids too minute a classification. This makes it easier to analyze the beginning foreign language learners' data.

Karmiloff-Smith classified French article functions into the deictic reference, the exophoric reference, the non-specific reference, the anaphoric reference, and the generic reference, and added the nominative function.

The deictic reference is considered to involve the speaker using an indexical definite referring expression together with paralinguistic markers such as gaze, head motion, finger pointing, etc. (e.g. 'Give me the pencil' in a context where several pencils are present, but an indexical gesture at the moment of uttering the determiner enables the addressee to identify the referent).

The exophoric reference is taken to imply a distance between speaker and his utterance. It involves the choice by the speaker of a definite referring expression when a referent is the only member of its subclass in the current extra-linguistic setting, and the choice of an indefinite referring expression when the referent is one of several idertical ones (e.g. 'The boy pushed the red car' versus 'The boy pushed a car'). Exophoric reference thus means taking into account the 'relationship' between objects in the extralinguistic setting, rather than the speaker's subjective involvement with an object upon which he is focusing all his attention. Unlike deictic reference, exophoric reference does not involve any inplicit or explicit spatial markers.

In the above example, 'The boy pushed a car' in a context of several identical cars, the use of the indefinite article does not necessarily imply non-specific reference, since the indefinite article is chosen by the speaker because of the characteristics of the extralinguistic setting. It could have been expressed by a partitive together with a definite referring expression, e.g. 'The boy pushed one of the cars.'

Non-specific reference, on the other hand, is considered to be closer to the generic function. However, whereas the generic use of the articles involves a conceptualized reference with no concrete instantiation thereof (e.g. 'The lion/a lion is an animal'), non-specific reference retains the notion of potential instantiation implying any non-particular member of a class' (e.g. 'Give me a cigarette'). The generic use of articles has no possible materialization (e.g. 'The cigarette is a danger to health'). The different uses of the indefinte article are to be clearly differentiated from the naming function, or, more precisely from what Lyons suggests

whould be called the 'appellative or nominative function' (Lyons 1977, vol. I, p. 217). Use of the indefinite article for nominating entities is very common in early discourse between child and caretaker, and it is suggested that small children will often decode a task which should call for the use of referential devices, rather as a task of nominating, i.e. giving a name to something.

The anaphoric reference is the only one which might be looked upon as involving purely intralinguistic procedures. It has the notion of substitution and reference back to a previously mentioned antecedent (e.g. 'I saw a pretty girl near your home. Do you know the girl?). Lyons divided associative anaphoric reference from anaphoric reference. The associative anaphoric reference is the use of 'the' in the case if a book is referred, then *the* pages, *the* author, *the* content, etc. can be used.

3. Research

3.1 Subjects of the Test

The subjects were French, German, Japanese, and Korean students who learn English in the schools in Seoul, Korea.

The French students have studied English once a week from the first grade through the fifth grade. Beginning the sixth grade, they have studied English three times a week. The subjects of this test were 22 students -- 7 sixth grade students, 6 seventh grade students, 5 eighth grade students, and 4 ninth grade students.

The German school students have studied English twice a week from the first grade to the fourth grade. Beginning in the fifth grade, they have had two English classes and two French classes a week. The subjects of this test were 5 fifth grade students, 16 sixth grade students, and 6 seventh grade students.

The Japanese school students began to study English four times a week from the seventh grade. 16 eighth grade students and 15 ninth grade students participated in the test.

The Korean school students started to learn English from the seventh grade. They have learned English four times a week. The test subjects were 48 ninth grade students and 46 tenth grade students.

The tester implemented a pre-test to 112 eighth and ninth grade Korean students. The result showed that most of the eighth grade Korean students could not answer the questions appropriately, so the test was applied to ninth and tenth grade students[1].

In order to control the English level of the testee groups, the tester counted the numbers of the classes the groups have studied. The range of the number of the classes was between 200 and 500.

3.2 Instrument of the Test

A test was designed which consisted of 18 multiple choice questions, 16 error correcting items, and 19 composition questions.

Each item had a context description in the testees' native language which was intended to derive a particular article function. For example,

(2) a. Sue was reading a comic book which seemed very
interesting. Nancy saw it and asked,
   "Where did you buy _____ book?   (multiple choice item)
                  (a, the, null)
   b. Tom was going to Bob's house. He saw a pretty girl coming out of the house next to Bob's. Tom wondered who she was. He asked Bob,
   "I saw a pretty girl next to your house. Do you know *a* girl?"
                                                     (   )
                                         (error-correcting item)
   c. Peter took a walk to a lake with Jane. There was a duck on the lake. Peter saw the duck earlier than Jane and yelled.
   "Look at _____."   (composition item)

4. Result

The first hypothesis was that the [+Art] group would demonstrate better scores than the [-Art] group. The median of each group was Figure 1.

Figure 1: The Medians and SDs of Each Group Tested

	Median	SD
French	79.6	7.42
German	89.2	5.12
Japanese	47.4	7.50
Korean	50.0	8.74

* SD: Standard Deviation

Figure 1 shows that the first hypothesis was proved at a glance.

French and German have more complicated article system than that of English, and most rules of French and German article system correspond to those of English article system. However, Japanese and Korean do not have any article system in their languages, and Japanese and Korean students must learn all the rules of the English article system. This means that Japanese and Korean students have more burden in learning the English article system than French and German students do.

The second hypothesis was that the acquisition "order" of English article functions would be similar between four all groups. The acquisition order of English article functions in each group is Figure 2.

Figure 2: The Acquisition Order of English Article Functions for Each Group Tested

	nominative	deictic	exophoric (indef. exo.)	anaphoric (assoc. ana.)	non-specific
French(%)	15.2	8.0	15.2(18.2)	12.6(19.7)	30.7
rank	3.5	1	3.5(5)	2(6)	7
German(%)	6.0	1.3	6.7(8.0)	4.0(10.7)	5.3
rank	4	1	5(6)	2(7)	3
Japanese(%)	46.7	29.6	57.8(73.3)	44.4(60.0)	53.3
rank	3	1	5(7)	2(6)	4
Korean(%)	51.4	34	47.4(46.8)	42.0(48.9)	46.5
rank	7	4	5(4)	2(6)	3

* The generic function was excluded because it includes both 'a' and 'the'.

In order to compare the acquisition order easily, the Spearman Rank Difference Correlation Coefficients (hereafter SRDCC) were obtained. This was calculated in two ways. First, the indefinite exophoric reference and the associative anaphoric reference were excluded on the

ground that they are not very basic functions. Then, all the functions were taken into consideration to obtain the SRDCC.

The results are as follows;

(3) The SRDCCs between the groups which excluded the indefinite exophoric reference and the associative anaphoric reference were;

0.900	between German and Japanese groups
0.900	between German and Korean groups
0.825	between French and Japanese groups
0.700	between Korean and Japanese groups
0.675	between French and Korean groups
0.675	between French and German groups

(4) The SRDCCs between the groups which include the seven functions were;

0.929	between German and Japanese groups
0.750	between German and Korean groups
0.705	between French and Japanese groups
0.634	between French and German groups
0.536	between Japanese and Korean groups
0.438	between French and Korean groups

All SRDCCs show extremely high, high and medium correlation coefficients. The SRDCCs do not reveal any difference between the [+Art] and the [-Art] group. The second hypothesis – The acquisition order of English article functions will be similar between the groups – was proved.

In addition, the order of 'the' functions, excluding a generic function, appears relatively stable and demonstrates the order of deictic, anaphoric, and exophoric function in all groups while the order of 'a' functions are less stable. This may be the result of the inherent difficulty of the function itself.

In my opinion, the French and the German students might have intuitively obtained the information about the English article system through their native language acquisition, whereas the Korean and the Japanese students might not. While the French and German group could use their intuition in English article acquisition, the Japanese and Korean

students must rely upon the cognitive process to obtain the English article system. That is why the [-Art] group would have more difficulty in acquiring the English article system. The [+Art] group would demonstrate difficulty in the items different from their native language article uses. The [+Art] group students would experience negative transfer when they meet article uses of English different from their native language. So, they may take advantage of the cognitive process.

5. The limitations

This study is limited because it has treated only 'a' and 'the' with countable nouns, excluding 'null' article. This limitation resulted from the decision to search for a simple and clear test result. Therefore, it has limited the generalization of these findings on English article acquisition.

Another limitation is that the number of the testees is not large enough to generalize on the acquisition of articles in English as a foreign language.

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1) The result of the pre-test made the tester concerned about the adequacy of the Japanese eighth grade students. She estimated that Japanese and Korean students would show similar results in the test. However, the number of Japanese school students was so small that it could not exclude the eighth grade students. The tester decided to apply the test to eighth and ninth grade students of the Japanese School and to take advantage of the ninth grade students' results for the comparative purposes.

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