

Reference and Substitution as Cohesion Devices in EFL Writing

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This paper aims to investigate the use of reference and substitution as cohesion devices by advanced Korean EFL writers and English native writers. Twelve research articles (totaling 218 pages, 93,033 words) written in English were collected in academic journals. Half of the research articles were prepared by Koreans and the other half were written by native writers. Several demonstrative pronouns, personal pronouns and demonstrative adverbs were selected as referential cohesion devices for this study. Three substitutional cohesion devices were also chosen. Their frequency was investigated at first, after which their preference was analyzed. There was not much difference in the overall use of cohesion devices between the two groups. Some devices were used by Korean writers more often than native ones. Reasons for this could be high English proficiency of Korean writers, their hyper-correction or the influence of Korean culture. Other more distinctive cohesion features such as conjunctions are recommended for analysis of cohesion in future research.

[cohesion/reference/substitution/EFL writing]

I. INTRODUCTION

When reading English writing that consists of more than one sentence, people can discriminate whether it is well organized or not. Well organized writing is usually easily comprehensible and gives readers an easy grasp of key subjects. Good organization means that writers wrote the material using unified, coherent and cohesive devices properly. On the other hand, writing which does not include adequate coherent and cohesive devices may not easily catch the interest of readers and is likely to be disregarded. However, it may

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not be easy to use coherent and cohesive devices properly based on the situation. To do this, writers should know their target audience before beginning to write and disperse information at an adequate pace considering the readers' rate of comprehension. Even if writers have splendid ideas, if readers have difficulty in understanding them, their work can be an exercise in futility.

One of the most important interests in academic writing has been to create coherent and cohesive writing in order to attain successful communication and support from the relevant discourse community (Cornor, 1984; Francis, 1989; Hinkel, 2001, 2004; Swales & Feak, 2004). It is much more difficult for non-native writers to write in English using appropriate coherent and cohesive devices (Hinkel, 2001, 2002; Swales & Feak, 2004). Sizable studies have been done on how non-native writers use coherent and cohesive devices differently, why they have these different devices, and what kind of teaching is helpful for them (Halliday & Hasan, 1976; Hinkel, 2001, 2002; Scarcella, 1984; Aktas & Cortes, 2008). From these studies, various misuses of coherent and cohesive devices were reported and analyzed. Even advanced non-native writers sometimes use them too much or too little (Hinkel, 2001). There may be several reasons: the low proficiency of English, interference by the mother tongue, insufficient knowledge about the readers and discourse community, and hyper-corrections, to name a few.

Thus, this paper aims to investigate how similarly and differently advanced Korean writers use cohesive devices, compared with advanced native ones, and why this happens. Twelve research articles (totaling 218 pages) written in English and published in leading journals in Korea and English speaking countries were randomly collected for this study. The journals published in Korea are *The Sociolinguistic Journal of Korea* and *Discourse and Cognition*, and the journals published in English speaking countries are *Journal of English for Academic Purpose* and *Linguistics and Education*.

Among various cohesive features, several referential and substitutional cohesion devices were chosen. There are a lot of referential cohesion markers. Of all the referential cohesion markers, demonstrative pronouns, personal pronouns and demonstrative adverbs were selected. Likewise, of various substitutional markers, the indefinite pronoun *one(s)* and other markers (*so, do*) were chosen. This study focused on their frequency and the reasons for similarities and differences of use between both groups of Korean and English writers. Hence, this study addressed the following research questions:

1. What kind of referential and substitutional cohesion devices do both groups prefer?
2. Why do they have similarities and differences in their use of referential and substitutional cohesion devices?

II. THEORETICAL BACKGROUND

1. The Concept of Cohesion

Cohesion is usually regarded as the notion of semantic relevance, i.e., the meaning of the expression is dependent on the meaning of another expression in discourse. The concept of cohesion originally devised by Halliday & Hasan (1976) went on to explain how linguistic features unite within a text. They define cohesion as what makes a sequence of words and sentences unified and hence interpretable as a text. Hinkel (2004) offers this definition:

“Cohesion refers to the connectivity of ideas in discourse and sentences to one another in text, thus creating the flow of information in a unified way.... Cohesion usually refers to connections between sentences and paragraphs...” (p. 279)

That is, cohesion is a semantic relation that connects a lexical item with other items in discourse. Compare the following sentences:

- (1) Mary bought the flowers. Tom will go to the library. My friend majors in physics in the university.
- (2) Mary bought the flowers. *She* gave them to her boyfriend. *He* was very happy with *them*.

Sentences in (1) do not look related and it is difficult to understand the discourse situation, but sentences in (2) have some pronouns (i.e., *she*, *her*, *them*, *he*), whose meanings should depend on the preceding sentences and are connected to each other. These cohesive devices, such as pronouns, make the sentences tied and interpretable in one reading. Proper ties among sentences help readers repeat the topic implicitly and grasp the key point without difficulty.

2. The Concept of Reference and Substitution

Cohesion is generally classified into two categories: grammatical and lexical cohesion. Lexical cohesion is done by choosing a specific lexical item. Here is an example:

- (3) *Men* usually like sports.

Women prefer soap operas on TV. (Lexical cohesion - Contrast)

In these sentences, there is not any grammatical tie between the two sentences. But, due to the lexical item *men* and *women*, we can easily find the relationship between them. This

is one example of lexical cohesion.

Grammatical cohesion has four categories: *reference*, *substitution*, *ellipsis* and *conjunction*. This paper focused on reference and substitution, thus, sample sentences were taken regarding reference and substitution. At first, *reference* is defined as the meaning of an expression dependent on another expression within a context. Here are the examples of reference:

- (4) Tom brought me a book.
It is very interesting. (Demonstrative pronoun)
- (5) I have a pear and an apple.
Which do you want? (Interrogative pronoun)
- (6) He bought some apples.
Some are already rotten. (Indefinite pronoun)
- (7) Tom sent for a doctor.
He was very calm at that moment. (Personal pronoun)
- (8) She sang Ave Maria and a rock song.
 I prefer *the former* song to *the latter*. (Noun phrase pro-form¹)

In these examples, the expressions in italics do not have their own denotation, so their meanings utterly depend on the other expressions in the text. With these operations, sentences are understood as tied and readers can keep continuity within sentences. Hence, it can be said that these referential expressions perform the function of cohesion, which ties and organizes relations naturally between sentences.

Next, *substitution* usually means a gap-filler that represents some grammatical features. Readers should consider the previous sentences to know what is substituted. Here are some examples:

- (9) He was asked to leave the room.
 But, he refused to *do so*. (do so = leave the room)
- (10) I have an old car.
 He has a new *one*. (one = car)

¹ *Pro-form* is usually defined as the expressions which replace another parts of sentence or text, and depend on them for its meaning. *The former* and *the latter* in the sentences of (8) are examples of pro-forms of adjectives.

From the sentences in (9), *do so* substitutes *leave the room*. Readers should refer to the previous sentence to know the meaning of *do so*. In the sentences of (10), *one* refers to *car*. In this way, substitution is one of the cohesive devices which tie sentences. Items of substitution are *one(s)*, *do* (*does, did*), *so, not*, and etc..

There are many other cohesive devices besides these features, but this paper focused only on reference devices (demonstrative pronouns, personal pronouns and demonstrative adverbs) and substitution types (*so, do, one(s)*).

3. Literature Review

Since Halliday and Hasan (1976) developed the concept of cohesion, a great many studies have been carried out on the effect of cohesion features within a text. Many studies were conducted in order to clarify what synthetic and lexical features are used for cohesion in a text as well as how and when they decide the text's clarity and communicative effect (van Dijk, 1985, 1997; Coulthard, 1985; Tadros, 1994).

A considerable number of studies reported that various synthetic and lexical features reveal themselves as their cohesive markers in the text such as demonstratives, conjunctions, enumerative nouns², and subordinate clauses (Leech, Rayson & Wilson, 2001; Biber et al, 1999; Shapiro & Hudson, 1997, Flowerdew, 2003; Aktas & Cortes, 2008).

On the other hand, some researchers pointed out that some cohesion markers were overused in L2 writing and suggested that they should be taught carefully (Chafe, 1985; Hinkel, 2001, 2002; McCarthy, 1991).

Research about the use of cohesion in English text written by Korean writers has also been done. Chung (2002) classified the cohesion devices in English discourse, while Ahn (2003) investigated the relation between types of English discourse and conjunctions as a cohesion device.

Kim (2003) studied the use of conjunctions as a cohesion device in spoken English. Kirk (2004) tried contrastive analysis of cohesive devices in English and Korean texts in translation. Jeon & Eun (2007) compared cohesion devices used in the abstracts of doctoral dissertations written by Korean and American writers. Eun (2008) analyzed the use of personal pronouns in the introduction sections of English research articles prepared by Korean and native writers.

In summary, a variety of research has been done regarding cohesion in English

² *Enumerative nouns* are differently labelled by researchers: *general noun* (Halliday & Hasan, 1976), *anaphoric noun* (Francis, 1986), *signaling noun* (Flowerdew, 2003), and *shell noun* (Aktas & Cortes, 2008). They are nouns whose meaning is dependent on the context. Examples of these nouns are 'fact, problem, subject, topic, issue'.

linguistics and education. This area is spreading over to translation studies. Research methods are being developed with the help of other methods such as computer software, as well.

III. METHODS

1. Data Collection

Two corpora were used in this study; one corpus consisted of research articles written in English and published in leading academic journals in Korea, and the other were research articles written by native speakers and published in world-famous academic journals. The journals published in Korea are *The Sociolinguistic Journal of Korea* and *Discourse and Cognition*. The ones published in English speaking countries are *Journal of English for Academic Purposes* and *Linguistics and Education*.

Twelve research articles from the above journals were collected. Since the purpose of the study is to investigate and compare the use of cohesion devices between advanced Korean and native writers, six articles written by Korean writers and six articles by native ones were chosen. Their academic fields were linguistics and English education. The details of corpora were shown in Table 1:

TABLE 1
Description of Corpora

Corpus	No. of article	Name of journal	No. of words
Korean writers	3	The Sociolinguistic Journal of Korea	19,217
Korean writers	3	Discourse and Cognition	19,950
Sub-Total	6		39,167
Native English writers	3	Journal of English for Academic Purposes	19,846
Native English writers	3	Linguistics and Education	34,020
Sub-Total	6		53,866
TOTAL	12		93,033

2. Procedure of Analysis

As explained in Table 1, twelve research articles (total 93,033 words) were analyzed. In the articles, the abstracts, key words, references and appendices were excluded, and only

main bodies were counted for the analysis. In the first stage of the analysis, the frequency of cohesive devices was counted using Microsoft Office Word 2007. In case of the demonstrative pronoun *that*, *that*, when used as conjunction or relative pronoun, they were excluded. *It*, when used as a slot filler or expletive, was also excluded. So was also recognized only when used as a substitution cohesion marker. It was excluded when used as a conjunction or amplifier. Thus, their use was translated one by one later, although their frequency was counted with the computer software in the first stage.

Since the two corpora chosen in this study were of different sizes (39,167 words for the Korean writing corpus and 53,866 words for the native writing corpus), the final frequency of cohesion markers was normalized³ to 10,000 words to conduct a more reliable comparison.

Cohesion devices chosen for this study were shown in Table 2:

TABLE 2
Details of Cohesion Devices Used in This Study

Cohesion		Cohesion device markers
Reference	Demonstrative Pronouns	this, that, these, those
	Personal pronouns	I (my, me), you (your, you, <i>pl.</i>), he (his, him), she (her, her), it (its, it), we (our, us), they (their, them)
	Demonstrative adverbs	here, there, now
Substitution	Indefinite pronoun	one(s)
	Others	so, do (does, did)

IV. RESULTS AND DISCUSSION

1. Answer to Research Question 1:

What kind of referential and substitutional cohesion devices do both groups prefer?

The preference on referential and substitutional cohesion markers between the two groups was investigated using Microsoft Office Word 2007. Here are the results of the investigation of the referential cohesion markers shown in Figure 1:

³ Biber, Conrad & Reppen (1988) defined *normalization* as a way to adjust raw frequency counts from data of different lengths so that they can be compared accurately. With this process, the raw frequency for several cohesion devices in data was divided by the number of words in data, and multiplied by the basis chosen for norming (10,000 in the study).

FIGURE 1
Frequency of Demonstrative Pronouns & Adverbs per 10,000 Words

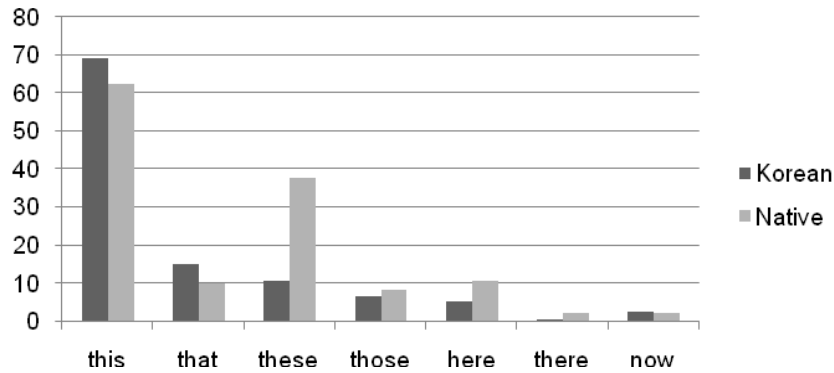


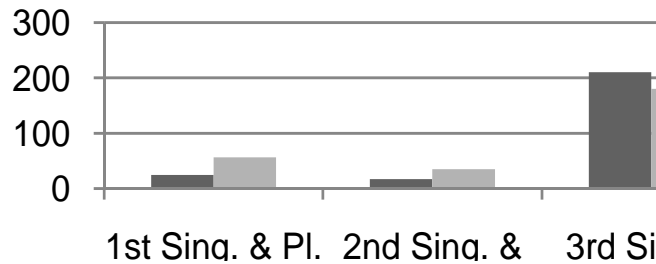
Figure 1 shows that the use of demonstrative pronouns by Korean writers is not much different from their use by native writers. The use of *this* and *that* by Korean writers is slightly higher than native writers. On the other hand, the use of *these* and *those* by native writers is higher than Korean writers. With this result, it can be said that there is not a significant difference in the use of demonstrative pronouns.

In the case of demonstrative adverbs (*here*, *there*, *now*), native writers use *here* more often than Korean writers, while *now* is preferred by Korean writers. In the case of *there*, though it is preferred by native writers, its use is insignificant for the two groups.

It can be said that Korean writers use demonstrative adverbs as similarly as native writers. Their use may be burdensome for Korean writers, for it is unmarked that the expressions mentioned before are repeated as the original form in their following sentences, not substituted as any other pro-form in Korean language (Lee & Chae, 1999: 151).

Next, the results of the investigation of the use of personal pronouns are shown in Figure 2:

FIGURE 2
Frequency of Personal Pronouns per 10,000 Words



According to Figure 2, Korean writers use third person pronouns more often than native writers, while they use first and second person pronouns less often than native writers. The reason will be discussed in the answer to Research Question 2.

The frequency of substitutional cohesive markers was also investigated, and here are their results shown in Figure 3:

FIGURE 3
Frequency of Substitutional Cohesion Devices per 10,000 Words

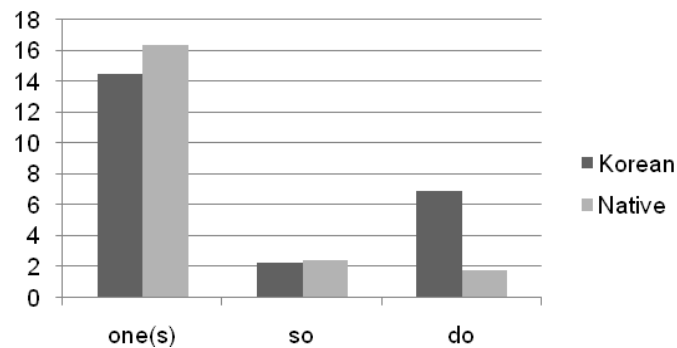


Figure 3 shows that Korean writers are eager to use substitutional cohesion devices, keeping up with native writers. Like referential cohesion markers, it is not easy for Korean writers to use these cohesion devices even though they are advanced writers. The feature of this cohesion device is marked in Korean language (Kirk, 2004; Lee & Chae, 1999). Every language has its own cohesion device system. The interference of L1 is sometimes strong enough to overwhelm a lot of the practices of the target language. In any case, they seem to overcome the interference of L1.

2. Answer to Research Question 2:

Why do they have similarities and differences in their use of referential and substitutional cohesion devices?

The results of the investigation of cohesion devices were discussed in the above answer section of Research Question 1. The results report that there are not significant differences between the two groups, but rather just a small difference. In this section, the reasons why these similarities and differences exist were analyzed.

First, in the case of demonstrative pronouns and adverbs, their use by both groups was not much different, but rather almost the same. Demonstratives are prominent features of cohesion. Moreover, they are relatively easy to use, so many L2 writers tend to use them too often in some cases (Hinkel, 2001).

Several studies reported that in several languages like Chinese, Japanese, or Vietnamese, there is much more elaboration using demonstrative pronouns than in English (Levinson, 1983; Palmer, 1994). With this influence of L1 cohesion devices and the low proficiency of the target language, L2 writing sometimes has too many demonstratives. Thus, Hinkel (2001) pointed out the limitation of demonstratives and recommended very careful teaching of them.

Next, first and second person pronouns were used more often by native writers, while third person pronouns were preferred by Korean ones. Here are some examples shown in (10) and (11):

(10) Finally, *the paper claims* that the perfectives show differential levels of... *This paper explored* the grammaticalization processes of certain SVCs that...

(excerpted from the articles by Korean writers)

(11) In this paper *I explore* a third angle on processes of change, one that receives relatively less attention and... Given these limitations, *I leave* unanswered the questions of what constitutes essayist literacy...

(excerpted from the articles by native writers)

It can be explained that Korean society is still under the influence of Confucianism, so modesty is favored rather than creativeness or originality. Korean writers also want support from readers, and so they show their respect to the readers. That is, third person pronoun may have been chosen as a hedging device in order not to reveal themselves. This explanation can be said to coincide with Hwang (1987) and Yum (1987).

Lastly, substitutional cohesive devices such as *one*, *so* and *do* are highly demanding

features in terms of correct use. However, the result shows that Korean writers are good at using them in the proper situation, keeping up with native writers' proficiency. In the case of the pro-verb *do*, Korean writers employ it more often than native ones. The Korean writers of research articles are usually English experts. They seem to overcome the L1 interference and successfully convert cohesion devices between L1 and English. One possible reason is hyper-correction, i.e., Korean writers intentionally use the pro-verb *do* often in order to make their writing look more natural and well organized. Too much use of it, though, sometimes looks rather unnatural.

In summary, there were not significant differences in the use of reference and substitution cohesion devices between the two groups. Korean writers seem to get over the L1 interference. It is true that every language has its own set of cohesive devices and preferred means for creating cohesive harmony (Hasan, 1984). With a lot of repetition and practice, Korean writers can be said to overcome the difference in cohesion between Korean and English and convert without much difficulty. In fact, we can find the hyper-correction in certain contexts. In the case of demonstratives, it is likely for some L2 writers to overuse them.

V. CONCLUSION

This paper aimed to investigate the similarities and differences of reference and substitution cohesion devices between advanced Korean and native writers and to identify the reasons they exist.

For this study, twelve research articles written in English and published in leading academic journals in Korea and English speaking countries were collected. Of them, six research articles were written by Korean writers and the other six articles by native writers.

Certain reference and substitution markers were chosen out of the various cohesion devices. Of the reference cohesion devices, demonstrative pronouns (*this, that, these, those*), personal pronouns and demonstrative adverbs (*here, there, now*) were chosen for this study. Of the substitutional devices, *so, do* and *one(s)* were selected.

The amount of data for both groups is not exactly the same, so the frequency per 10,000 words was counted using the software of Microsoft Office 2007. In spite of the initial count of this computer software, that was counted only when it was used as a demonstrative pronoun; that is, it was excluded when used as a conjunction or relative pronoun. Other cohesion devices *it* and *so* were also counted only when used as cohesion devices.

The results of the analysis reported that there were not significant differences between the two groups, but rather a small difference. This difference can be inferred to be from the

interference of the mother tongue, Korean, and from hyper-correction. Writers of research articles are regarded as English experts in Korea, and they are fully trained writers. Demonstrative pronouns are easy to use, so non-native writers use them too often.

The use of personal pronouns was also slightly different. Native writers preferred first and second person pronouns, while Korean writers preferred third person pronouns. It can be explained that Korean writers prefer support or modesty in discourse communities, whereas native writers prefer originality or creativity.

Some substitution cohesion devices (*do, so, one(s)*) were analyzed, too. These are burdensome for non-native Korean writers, but they used them without much difficulty. One possible reason is that the proficiency level of the Korean writers was advanced, so they were fully acquainted with the difference in cohesion between Korean and English. The code-switching in cohesion devices occurred appropriately. Rather, hyper-correction should be reduced (Hinkel, 2001).

It is true that every language has its own set of cohesive devices and preferred means for creating cohesive harmony. It can be said that Korean writers of research articles can convert their cohesion without much difficulty.

A deeper textual investigation of the more distinctive analyses such as conjunctions would be highly recommended in future L2 writing study. Different kinds of texts such as students' writing and business letters will also be recommended for the further study.

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Examples in: English**Applicable Language: English****Applicable Levels: College**

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