

## English Relative Clause Extraposition: A Pedagogical Approach\*

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**Lee, Seung Han. 2017. English Relative Clause Extraposition: A Pedagogical Approach.** *Linguistic Research* 34(Special Edition), 49-68. This paper proposes a pedagogical approach that L2 learners of English should acquire a relative clause extraposition (RCE) through an explicit grammar teaching. RCE construction is a marked feature in English, but the extraposition is frequently employed in English. Thus, understanding it in an appropriate manner plays a significant role in acquiring the target language. In doing so, we first introduce the grammatical properties of a total of 597 examples of RCE construction from COCA and BYU-BNC and then emphasize the importance of a corpus-based grammar teaching in L2 classroom. Some of its characteristics are the indefiniteness of a subject NP, the dominance of passive voice, and the heaviest grammatical weight within an extraposed relative clause. Infinitival RCE construction also has an identical behavior with finite RCE construction. With the help of the discourse-based classification of RCE construction, Discourse-New-Old-RCE stays on the top in the frequency rate, thus implying that it is appropriate to employ RCE construction when a speaker or writer wants to convey a discourse-new information within a subject NP and puts a discourse-old content within an extraposed restrictive relative clause. Considering these corpus findings, the grammar teaching should not be given in itself, but involved with the discourse or sociolinguistic factors. Subsequently, we elaborate on a wide range of variables to facilitate the acquisition of the corpus-based RCE construction: age, register, proficiency level, markedness, strategy, transferability, structuralization, generalization process, motivation. In order to acquire RCE construction, L2 learners are more likely to be adults with an advanced level of formal English skills with consciousness of a marked feature of the extraposition phenomenon. An intensive grammar instruction and deductive reasoning also need to be introduced in the acquisition process, thus ultimately leading us to realize the fundamental reasons to employ RCE construction: grammatical weight and focus effect. (Chonnam National University)

**Keywords** RCE, corpus, grammar teaching, L2, extraposition

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\* The main idea of this paper was brought from Lee (2017). I thank three anonymous reviewers for comments and suggestions. All errors and misinterpretations are of course mine.

## 1. Introduction

English frequently extraposes a restrictive relative clause at the sentence final position, resulting in a discontinuous noun phrase. As one postverbal behavior, a modifier is detached from its head, and simultaneously it is preceded by a main predicate. Such an English relative clause extraposition (hereafter RCE) construction is illustrated by the attested corpus examples in (1):

- (1) a. [NP A study] [VP was [VP[*en*] done]] [AdvP recently] [that looked at the effect of joint ventures on the over-utilization of services].  
(COCA, 1992, SPOK)
- b. [NP Several designs of absorbtion towers] [VP are [AP available]] [which incorporate various types of gas/liquid counteracting equipment].  
(BYU-BNC, 1842, B2D)
- c. [NP The guy] [VP was [VP[*en*] darned] [AdvP lucky] [who managed to get that club from my hand before his time was up].  
(COCA, 1996, MAG)
- d. [NP A group] [VP has grown up] [that does their business in gun traffic].  
(COCA, 1993, NEWS)
- e. Earlier in the afternoon, they had been perched in some brush ..., waiting for [NP some pilgrim] [VP[*inf*] to come along] [who looked well-heeled enough to rob].  
(COCA, 2008, FIC)
- f. I saw [NP one of my men] [VP[*inf*] being brought back] [who had been killed].  
(COCA, 1998, SPOK)

These RCE data violate a typical X-bar rule that a modifier or complement should reside within the same maximal projection with its head<sup>1</sup>. Other grammatical

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<sup>1</sup> The Complex Noun Phrase Constraint (CNPC): any element within a sentence which is dominated by a noun phrase with a lexical head noun cannot move out of the noun phrase by a

categories such as AP and AdvP can be preceded by a main predicate as shown in (1a), (1b), and (1c), increasing the distance between a head noun and its extraposed modifier. These properties of RCE construction can be schematized as a template like (2):

- (2) NP<sub>i</sub>[subject]+VP[*finite* or *infinite*]+(XP[Adjunct])+[Extraposed Relative  
[GAP <NP<sub>i</sub>>]]

A main predicate accounts for infinite tense such as *to*-infinitive and gerundive as well as finite tense. Not only does this schema allow an adjunct to be inserted in front of an extraposed pronoun, but it also urges an extraposed relative clause to be discharged with a filler, NP<sub>i</sub>, co-indexed with its head noun. In addition, the template well differentiates RCE construction from other idiosyncratic structures:

- (3) a. The argument is made [that one oil infrastructure projects is really not going to affect climate change that much].  
(COCA, 2015, SPOK)
- b. [A study that looked at the effect of joint ventures on the over-utilization of services] was done recently.
- c. This [is] [a goal] which the use of force alone can not achieve.  
(COCA, 2002, NEWS)

The examples like (3) are different from RCE construction for several reasons. In (3a) there is no gap in a clausal complement, whereas in (3b) a relative clause does not follow a main predicate. The NP *a goal* in (3c) is a filler for its immediately following modifier, not an adjunct. The template in (2) allows only a subject NP and a gap within an extraposed relative clause to be co-indexed, but *a goal* in (3c) is a predicative complement of copula *be*. Thus, the sentence like (3c) is not licensed as RCE structure.

RCE construction is a marked feature in English, but the extraposition is frequently employed in English. Thus, understanding it in an appropriate manner plays a significant role in acquiring the target language. It has been claimed to be

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transformational process (Kim and Lim, 2008; Kim and Sells, 2008).

employed by the grammatical weight within the postposed constituent (Quirk et al., 1985; Wasow, 2002; Francis, 2010; Francis and Michaelis, 2014; Francis and Michaelis, 2017). On the other hand, the extraposition is said to be used for producing focus effect (Göbbel, 2013; Lee, 2017). At this point, from the pedagogical perspective, we face several questions, ‘How second language (L2) learners acquire the corpus-based RCE construction?’, ‘Should they approach it deductively or inductively?’, or ‘Is an explicit form-focused instruction more effective for the acquisition of RCE construction than implicit grammar teaching?’. In this respect, this paper proposes a pedagogical strategy to lead L2 learners to acquire the corpus-based RCE structure effectively. In doing so, we first introduce the corpus findings of RCE construction and then emphasize the necessity about a corpus-based instruction in L2 classroom.

## 2. Grammatical Properties: Corpus Findings<sup>2</sup>

To better delve into the grammatical properties of RCE construction, we adopted BYU-BNC (Brigham Young University-British National Corpus) and COCA (Corpus of Contemporary American English), containing 100 million words of British English and 410 million words of American English respectively<sup>3</sup>. We identified all RCE examples by using devised 99 combination structures of part of speech (POS). Only a total of 597 instances were extracted: 256 ones from BYU-BNC and 341 ones from COCA corpus. This understanding of the corpus findings of RCE construction will promote the acquisition of the target language in an appropriate manner.

### 2.1 Indefiniteness/Definiteness of a Subject NP

A subject NP of RCE is featured into two categories: indefiniteness and definiteness. The indefiniteness (89.45%) takes up bigger portion than the definiteness (10.55%).

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2 This corpus findings are partially in accordance with Lee and Uhm (2017)'s paper.

3 The corpus data are available at <http://corpus.byu.edu> and <http://corpus.byu.edu/coca/>.

- (4) a. A group **has grown up** that does their business in gun traffic.  
 b. **The guy was darned** lucky who managed to get that club from...

As repeated here again, *a/an* (53.37%) is the most prevalent in the indefiniteness, whereas *the* (58.73%) is the most frequently occurring definite article.

## 2.2 Predicate Types

The most predominant predicate type turns out to be passive voice (84.09%) like (4b), whereas intransitive (11.89%) like (4a) stays on the secondary place. On the other hand, adjectival predicate (4.02%) is relatively rare as follows:

- (5) Several designs of absorption towers **are available** which incorporate various...

Interestingly, all predicate types of RCE construction hold an external argument featured with [AGENT -].

## 2.3 Grammatical Weight

The grammatical weight within an extraposed constituent has been said to be a trigger for the extraposition, so we investigated the grammatical heaviness, adopting word-based measures employed by Francis and Michaelis (2017).

Table 1. Grammatical Weight

	Subject NP	Predicate	Extraposed Relative Clause
Average#	2.26	2.64	11.27

The weight within an extraposed relative clause is always the heaviest. A syntactically heavy and complex constituent is not easy to process, so extraposing it can provide speakers and listeners with more time to reformulate and understand the utterance. Thus, the extraposition is highly associated with language production and comprehension (Arnold et al., 2000; Wasow, 2002; Hawkins, 2004).

## 2.4 Infinitival RCE

We found only total 22 infinitival RCE instances, but we cannot ignore this data in order for L2 learners to acquire RCE construction properly:

- (6) a. Earlier in the afternoon, they had been perched in some brush ...,  
       waiting for **some pilgrim to come along who** looked well-heeled  
       enough to rob.  
       b. I saw **one of my men being brought back who** had been killed.

As repeated here, *to*-infinitive as well as gerundive plays a role as a verb predicate, but they share the identical behavior with finite RCE construction: the indefiniteness of a subject NP, the predominance of passive voice, and the heaviest weight within an extraposed relative clause. One thing to notice is that *that*-extraposed pronoun is not used in the infinitival RCE construction.

## 2.5 Discourse-Based Classification of RCE

We delved into the information structure of RCE construction according to prior background and context, so the discourse status of a subject NP as well as an extraposed relative clause was encoded into several classifications. In other words, two information labels for an antecedent NP and its extraposed restrictive relative clause are described into "Discourse-Old" (i.e., prior context) or "Discourse-New" (i.e., no background information). The constituents with no prior mention of the referent itself are titled as "Discourse-New", whereas the items identified within background of preceding lines are interpreted as "Discourse-Old". Thus, four types of RCE construction are classified as follows:

### 2.5.1 TYPE I: Discourse-Old-Old-RCE

When both a subject NP and its extraposed restrictive relative are interpreted as a discourse-old information, it can be fully inferred or evoked from preceding text:

- (7) Proto-modernist painting, for example naturalist and impressionist pictures, are 'paintings of modern life'. That is, the content of such

paintings, unlike historicist painting, is modern life. For such content to exist in the **aesthetic realm**, modern life must exist in the social realm. This is **the beginning of an explanatory mechanism** which elucidates the relationship between social and aesthetic spheres. Now **such a mechanism** must be identified which connects content and form inside **the aesthetic realm**

(BYU-BNC, 1990, GW4)

An antecedent NP *such a mechanism* is evoked from *the beginning of an explanatory mechanism* within preceding lines. The information on *the aesthetic realm* within an extraposed relative clause is also introduced earlier.

### 2.5.2 TYPE II: Discourse–Old–New–RCE

Only a subject NP is evoked or inferable from prior context. The information within an extraposed restrictive relative is not identified or traced from preceding lines:

- (8) When these emotional strategies can not be used, then the FEASP-approach does not make any sense in educational practice and related research. Is there a relation between the application of the **FEASP-strategies** and the experience of certain types of emotions during instruction? .. The effectiveness of **the FEASP-strategies** is an important issue for instructional designers, because in instructional practice **only those strategies** will be used that significantly help to **solve practical problems**.

(COCA, 2001, ACAD)

A subject NP *only those strategies* in (8) is associated with the information on *FEASP-strategies* within prior context. However, the content within an extraposed restrictive relative is linked with no prior mention of background.

### 2.5.3 TYPE III: Discourse–New–Old–RCE

The information within an extraposed restrictive relative is inferred or evoked from prior context, but a subject NP is interpreted as a discourse-new content:

- (9) Additionally, **girls are more empathic than boys**, which may explain their greater sensitivity to the quality of the interparental relationship. For instance, adolescent **girls have been found to be more accurate** perceivers of marital conflict. Pertaining to the reverse effect of children on marriage, **no studies** could be found that consider **gender differences**.

(COCA, 2007, ACAD)

An antecedent *no studies* in (9) is not identified within preceding lines. On the other hand, the information on *gender differences* within an extraposed relative clause is fully inferable within prior context.

#### 2.5.4 TYPE IV: Discourse–New–New–RCE

When both a subject NP and its extraposed restrictive relative are not traced or evoked from prior background, they are all discourse-new:

- (10) The media has become timid and measure their coverage with trepidation. The closing of the oldest television station raised concerns, and by late May and early June of 2007, demonstrations by Chavez's opposition filled the streets of Caracas. Chavez has threatened to ask the peoples from the hills (shantytowns) to descend and help him bring order. The very poor, so far, have been blindly loyal to him. Though concern for freedom of expression is real, **several laws** have been enacted that are generally considered **positive among social and moral circles**.

(COCA, 2007, ACAD)

As described in (10), there is no prior clue and background to facilitate our understanding of the information within a subject NP and an extraposed restrictive relative clause.

Following this criterion, we checked the frequency of use for each type of RCE construction:

Table 2. Discourse-Based Classification of RCE Construction

	Old-Old	Old-New	New-Old	New-New
Ratio	5.19% (n=31)	4.86% (n=29)	61.31% (n=366)	28.64% (n=171)

As given in Table 2, Discourse-New-Old-RCE (i.e., n=366) stays on the top in the frequency rate, whereas Discourse-New-New-RCE takes up the secondary status. This finding implies that it is appropriate to employ RCE construction when a speaker or writer wants to convey the discourse-new information within a subject NP. A discourse-old content is highly inclined to stay within an extraposed restrictive relative clause.

### 3. Perspectives on Grammar Teaching

Grammar helps learners to achieve both accuracy and fluency in the acquisition of a target language (Celce-Murcia, 1991). Grammarless instruction can lead them to acquire a broken, ungrammatical, pidginized structure of the foreign language. Traditionally, L2 learners were said to naturally move forward several stages of the development to acquire separate grammatical rule (cf. Krashen, 1981). Actually there exist some simple grammatical rules to be automatically acquired, but they often face complex grammatical structures that are not automatically learnable or go beyond their ability to master. Thus, Ellis (2006) asserts that L2 teachers should explicitly teach L2 learners the grammatical structures that are problematic to understand. What is more, the explicit grammar teaching should focus on the L2 learners who have already proceeded beyond intermediate level of L2 acquisition rather than primitive L2 beginners.

One of major methodological approaches about the grammar teaching in second language acquisition (hereafter SLA) settings is that language production should be preceded by comprehension (Winitz, 1981). Language lessons should be planned around the contextualized and discourse-based functions, not around grammar (cf. Halliday, 1973). This has an implication that the traditional classroom emphasizing the explicit form-focused grammar should be converted into a new pedagogical grammar teaching, introducing discourse context (Conrad, 2000). When the grammar is acquired within a sentence-level system, it is not effective for L2 learners. For

example, most Korean teachers of English in primary and secondary schools do not have enough proficiency in language skills to teach native-like English (Uhm, 1998; Jeong, 2004). It is due to the grammar-focused instruction with decontextualization. In the same vein with this flow, the corpus-based study focusing on naturally-occurring language fundamentally changes the grammar teaching. It claims that the grammar teaching should accompany the context of a register. Consequently, the corpus findings are embodied in the grammar pedagogy, and then the varieties within a language become an indispensable part for the grammar teaching. The corpus-based grammar teaching provides L2 learners with the appropriate conditions for specific uses of a language because some certain structures are highly interrelated with their appropriate uses. Subsequently, L2 teachers do not have to rely totally on the native speakers' intuition about the grammaticality of a specific use. Furthermore, the frequency-based information like corpus concordance can determine the difficulty or ease of formulae in L2 acquisition of the grammar rules, thus enabling L2 teachers to decide how to teach them (DeKeyser, 2005).

On the other hand, it is also a debatable issue whether an explicit grammar teaching is effective in L2 acquisition. The explicit learning is associated with an input featured with the regularities and rules which can be consciously captured, whereas an implicit teaching is characterized with unawareness and unconsciousness of what have been learned. L2 learners should explicitly learn the grammar rules that are consciously verbalizable and are unclearly understood (Uhm, 2000; Ellis, 2006). Even they should be deductively aware of how a grammatical pattern or feature works. This explicit instruction greatly facilitates L2 acquisition, especially when introducing marked and salient grammatical patterns (Long and Robinson, 1998; Schulz, 2001; DeKeyser, 2005). For example, most L2 learners suffer from internalizing the marked properties like RCE construction. The extraposition phenomenon is too idiosyncratic and complicated for low-level L2 learners to understand, so the explicit and deductive pedagogical approaches should fully reflect the register-specific use as well as the discontinuous syntactic structure of RCE construction even if it is rarely covered in all registers. Furthermore, most of L2 students cannot learn the grammatical properties of RCE construction without difficulties, so L2 teachers need to feel the necessity to differentiate the academic levels of students.

Last, we move to the importance of the explicit form-focused instruction in the L2 classroom. The focus on linguistic forms, functions, or structures leads into the

successful L2 learning, so it is appropriate to consider how much and to what extent the explicit form-focused teaching should be given in the L2 settings (Ellis, 2006). Schulz (2001) claims that L2 learners benefit from the explicit form-focused instruction in L2 acquisition. Poole (2005) also asserts that it is an effective approach to acquire problematic and overt grammatical forms that L2 learners suffer from the difficulties in language production. Even the focus on form instruction enables L2 teachers to easily correct L2 learners' errors. In his study, US learners of Spanish, who had the explicit form-focused teaching, expressed more accurate Spanish verbs. In addition, the focus on linguistic forms can be much more successful when it is done under discourse-based and contextualized teaching.

#### 4. Pedagogical Strategy for RCE Construction

Considering the significance of the explicit form-focused instruction in the grammar teaching as well as the corpus findings of RCE construction introduced earlier, we feel the necessity of incorporating two aspects into L2 acquisition in order to learn the target language in an appropriate manner. Thus, we propose pedagogical variables to determine the acquisition of RCE construction, taking into consideration Celce-Murcia (1991: 463) and Ellis (2006)'s approaches<sup>4</sup>.

##### 4.1 Age

Age is an indispensable factor for L2 acquisition (DeKeyser, 2005). L2 learning is considerably interacted with the increasing age. There are two conflicting positions as to whether the grammar teaching should be given in the early stages of L2 acquisition (Ellis, 2005). According to the first one, young and low-level L2 learners cannot fulfill the meaning-centered activities because of the lack of L2 knowledge, so they necessarily start to have the explicit form-focused instruction. The other is that immature L2 learners need to learn the grammar naturalistically through the exposure to L2 input (Hughes, 1979). Only after they fully develop the grammar knowledge, L2 teachers should introduce the explicit grammar teaching. The young

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4 Schachter (1991) defines L2 learners' variables to determine the efficacy of L2 grammar teaching: motivation, age, learning style, aptitude.

L2 learners naturally acquire the simple grammatical structures, not going beyond the initial stages of L2 acquisition. Their grammatical accuracy will be accelerated with the help of only the explicit grammar teaching at later stages. We stay tuned on this claim. In L2 settings, fully full-fledged and aged L2 learners are more cognitively matured enough to comprehend the complex grammatical properties of a specific use. Thus, L2 teachers should consider this age factor when they introduce a marked feature like RCE structure to L2 learners. The explicit grammar teaching about the extraposition should be avoided for young L2 learners, but it should be recommended when L2 learners are over adolescents or adults.

#### 4.2 Proficiency Level

According to Lee (2017), one of participants, who was at a beginning level of proficiency, could not complete a questionnaire survey about RCE construction which is described as a high-level degree of difficulty. Lee (2015) claims that English object extraposition is a significant challenge for even upper-level L2 learners. For example, most of English as a foreign language (hereafter EFL) learners cannot properly show the differentiation of vacuous object extraposition from natural object extraposition:

- (11) a. Thy made it possible [for us to breathe]. (Lee, 2015: 70)  
 b. I resent it [that you had to pa double to get me enrolled there].

In the natural object extraposition like (11a) an intervening constituent is allowed to be positioned between a dummy *it* and an extraposed infinitival clause. On the other hand, in (11b), any constituent is prevented from residing between an expletive *it* and an extraposed clause. Frequently most Korean beginners of English suffer from disambiguating and clarifying both structures. Thus, L2 teachers should consider the L2 learners' proficiency level when introducing the extraposition phenomenon. Only when they are beyond the intermediate level, L2 teachers can introduce RCE construction with some feedback and correction.

#### 4.3 Register

RCE construction is more employed in the productive writing skill. It is strongly

associated with informational, careful production, and expository purpose as well as formal style rather than interpersonal, spoken, informal and casual conversation. In this study, 61.31% of the corpus data shows a consistent inclination that a subject of RCE holds discourse-new information, whereas an extraposed relative clause conveys the constituents with prior mention or background. In other words, RCE construction is more suitable when a speaker or writer wants to put no background information within a subject NP, and at the same time load discourse-old information within an extraposed relative clause.

#### 4.4 Markedness

When a grammatical pattern is deviant, infrequent, and unnatural, it is defined as markedness, whereas a basic, frequent, and natural feature is called unmarkedness (Ellis, 2006: 89). Thus, L2 teachers deploy an explicit grammar teaching for the marked features while they prefer an implicit and natural grammar instruction for the unmarked forms. For example, English relative clauses are classified as an unmarked feature, just modifying its head immediately (Mitsugi et al., 2010). However, when the relative clause is extraposed at the sentence final, violating the X-bar structure and then resulting in a discontinuous syntactic structure, RCE construction is definitely described as an idiosyncratic and marked behavior in English. Therefore, RCE structure should be explicitly taught as a marked feature in L2 classroom.

#### 4.5 Transferability

Some features of L1 at least influence the L2 acquisition (Ellis, 2006: 89). When the grammatical properties of L2 learners's mother tongue are more transferred into the L2 acquisition, the transferability further facilitates their L2 learning ability. If the classifiers, gender markers, and articles are present only in L2, it will not be easy for L2 learners to acquire the very different systems whose equivalent semantic and morphological notions does not overtly exist in L1 (DeKeyser, 2005). For instance, Korean learners of Japanese demonstrate an impressive performance in a reading test to check a processing pattern of subject and passive relative clauses like native Japanese speakers (Mitsugi et al., 2010). They feel that L2 processing is not totally different from Korean. On the other hand, English learners of Japanese feel

difficult to complete the identical test because Japanese is a head-last language which allows a prenominal relative clause. This logic is also applied to Korean learners of English, who learn RCE construction. In a head-last Korean, the extraposition results in an unnatural interpretation<sup>5</sup>:

- (12) keurwup-eun sungchanghae-ogoiss-ta  
 A group-Top grown up-PrsP-DEC  
 [chongkeolae-eseo keudeuleusaeop-eul wuyoung-ha-nun]  
 [gun traffic-in their business-ACC do-Pst-REL]  
 ‘A group has grown up that does their business in gun traffic.’

In contrast with the prenominal relative order, an English relative clause [*chongkeolae-eseo keudeuleusaeop-eul wuyoung-ha-nun*] "that does their business in gun traffic" is extraposed at the end of a sentence, thus conveying a totally idiosyncratic meaning. The conversion of English RCE construction into Korean RCE construction becomes a challenge for Korean learners of English. Therefore, L2 teachers should consider the transferability of the extraposition phenomenon from L1 to L2.

#### 4.6 Structuralization

The complexity of grammatical structures determines the level of difficulty in grammaticality (DeKeyser, 2005). The basic and simple word structure is naturally learned at the initial stages of L2 acquisition, but some of relatively advanced L2 learners or untutored immigrants cannot properly acquire more complex grammatical structures for themselves without instruction (cf. Klein and Dittmar, 1979). Thus, more complicatedly structuralized constructions like RCE structure are required to be explicitly taught in the L2 settings:

- (13) NP<sub>i</sub>[subject]+VP[finite or infinite]+(XP[Adjunct])+[Extrapolated Relative  
 [GAP <NP<sub>i</sub>>]]

As given here again, a subject NP of RCE construction is coindexed with an extraposed restrictive relative clause which needs to be discharged with a filler. A main

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5 Top: Topic marker/ PrsP: Present Perfect/ Pst: Present Tense/ DEC: Declarative/ ACC: Accusative marker/ REL: Relativizer

predicate is featured with finiteness or infiniteness, immediately followed by an adjunct optionally. Furthermore, L2 learners should be aware of additional remarkable properties: the indefiniteness of a subject NP, the dominance of passive voice within a predicate, and the heaviest weight within an extraposed relative clause.

#### 4.7 Strategy

We face an issue about whether a single instruction should address a single specific grammatical structure or a wide range of structures. The case when L2 teachers repeatedly shoot a pistol at one grammatical target is called "intensive" grammar teaching, whereas the behaviour to fire a shotgun at diverse grammatical targets is named "extensive" grammar teaching (Ellis, 2006). DeKeyser (2005) claims that the extensive instruction is appropriate when L2 teachers present a large number of grammatical structures over a period of time. On the other hand, the intensive instruction emphasizes a specific construction with the help of drills and practices, thus enabling L2 learners to use a marked structure they have partially acquired more accurately and fluently as well as move forward a series of stages associated with the acquisition of grammatical forms. For example, L2 learners who are already well-versed with restrictive relative clauses need to practice a discontinuous syntactic structure and the effectiveness of the extraposition in a short time. Only under such conditions, they feel the taste of RCE construction. Thus, the intensive grammar teaching accompanied with reading and practice is more suitable for the acquisition of RCE construction, ultimately leading L2 learners into the internalization of RCE structure.

#### 4.8 Generalization Process

L2 teachers should choose an inductive or deductive reasoning when introducing grammar rules to L2 learners. The generalization of the grammatical rules is derived from two processes: deduction of subsumed specific facts from a generalization and induction from specific instances to a general principle (Brown, 2007). L2 acquisition is largely associated with the inductive process. Lee (2015) claims that through Data Driven Learning, EFL learners themselves can induce grammatical properties and rules of English object extraposition. However, the traditional Grammar Translation also employs the deductive reasoning in the L2 acquisition. The deductive learning of marked

grammatical features often facilitates the L2 acquisition. In other words, although L2 learners could inductively challenge the generalization of RCE structure through this corpus-based study, they easily feel confused and difficult to differentiate RCE construction from other types of the extraposition like (7) under the absence of explicit and deductive grammar teaching. Thus, the deductive reasoning is indispensable for the acquisition of RCE construction.

#### 4.9 Motivation

Grammar rules can be violated due to the economy or perlocution of a specific form (DeKeyser, 2005). The meanings and purposes of the grammatical forms contribute to the difficulty of grammar. Thus, L2 learners should be well versed with the fundamental reason for the use of a particular grammatical structure. For instance, the extraposition phenomenon was assumed to be triggered when the grammatical heaviness within an extraposed relative clause increases more and more. On the other hand, Lee (2017) proposes that RCE construction is produced to maximize focus effect (i.e., degree of pitch increase) in order to convey a speaker or writer's main point remarkably. In other words, the extraposition of a relative clause results in more emphasis on a main predicate than its canonical construction. These facts manifest that RCE structure exists to achieve its particular purposes.

All these variables are summarized to explain how L2 learners acquire RCE construction as follows:

Table 3. Determiners of Grammar Teaching

Determiners	Less Explicit	Focus on Form	More Explicit
		⇐ ⇒	e.g., RCE construction
Age	Children	Adolescents	Adults
Proficiency Level	Beginning	Intermediate	Advanced
Register	Informal		Formal
Markedness	Unmarked		Marked
Transferability	More-Transferred		Less-Transferred
Structuralization	Simple-Structured		Complex-Structured
Strategy	Extensive		Intensive
Generalization Process	Inductive		Deductive
Motivation	Less-Explained		More-Explained

Table 3 was generated from combining Celce-Murcia (1991: 465) and Ellis (2006)'s study with what we introduced here. As more factors are placed on the left extreme side of the grid, the importance of the explicit grammar teaching becomes lessened. On the other hand, when determiners are more associated with the features on the right side of the grid, the necessity to explicitly teach the grammar to L2 learners is strengthened. For example, when Korean learners of English acquire RCE construction, they are more likely to be adults with an advanced level of formal English skills. They are fully taught to employ RCE structure in the expository and formal registers with consciousness of the complex and discontinuous structure of a restrictive relative clause. With the help of an intensive grammar instruction with drills and practices, they deductively learn the marked feature of the extraposition which is idiosyncratic in Korean's syntactic structure. Through this learning process they ultimately know the fundamental reasons to employ RCE construction: grammatical weight and focus effect within context.

## 5. Discussion and Conclusion

This study proposed a pedagogical approach to describe how L2 learners of English acquire a corpus-based RCE construction. In doing so, we first introduced the grammatical properties of a total of 597 examples of RCE construction from COCA and BYU-BNC and then emphasized the importance of a corpus-based instruction in L2 classroom. Some of characteristics are the indefiniteness of a subject NP, the dominance of passive voice, and the heaviest grammatical weight within an extraposed relative clause. Infinitival RCE construction also has an identical behavior with finite RCE construction. In addition, with the challenge of the discourse-based classification of RCE construction, we noticed that Discourse-New-Old-RCE stays on the top in the frequency rate, thus implying that it is appropriate to employ RCE construction when a speaker or writer wants to convey the discourse-new information within a subject NP and puts the discourse-old content within an extraposed restrictive relative clause.

More importantly, the corpus-based grammar instruction enables L2 teachers to provide L2 learners with the appropriate conditions for specific uses of a language. Further, the grammar teaching should not be given in itself, but involved with the

discourse or sociolinguistic factors. Accordingly, RCE structure must be considered within context. We elaborated on a wide range of variables to facilitate the acquisition of the corpus-based RCE construction: age, register, proficiency level, markedness, strategy, transferability, structuralization, generalization process, motivation. L2 learners who want to acquire RCE construction are more likely to adopt the explicit grammar instruction. In the process of the acquisition, they are mainly adults with an advanced level of formal English skills. They can fully employ RCE structure in the expository and formal registers with consciousness of the discontinuous structure of a restrictive relative clause. The intensive grammar instruction with drills and practices as well as deductive learning is also employed for the acquisition of the marked feature. Through this learning process they ultimately know the rudimentary reasons to use RCE construction: grammatical weight and focus effect.

On the other hand, we have no choice but to face several issues about this paper. First, we need to prove the effectiveness of an explicit grammar teaching for the acquisition of RCE construction with the help of the comparison between an implicit and explicit teaching. The range of all variables introduced here are also vague and broad, so future research needs more to establish narrowly bounded variables in order to verify their influence on L2 acquisition. Another point to notice is that on the one hand we introduce the importance of a discourse-based grammar teaching, but on the other hand, we provide the necessity of a form-focused instruction in the acquisition of RCE construction. Two arguments conflict each other, so more definite definition should be explored for L2 learning. Last, in terms of learners' proficiency level, this study proposes that it is appropriate to introduce RCE construction only when L2 learners are beyond the intermediate level. However, the choice between production and comprehension is a double-edge sword, so L2 teachers also need to teach RCE construction for L2 beginners and intermediate learners from the perspective of comprehension.

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Received: 2017.08.15.

Revised: 2017.09.14.

Accepted: 2017.09.20.