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**ACQUISITION STUDIES ON RELATIVE CLAUSES
AND THEIR RELEVANCE TO
KOREAN LANGUAGE EDUCATION**

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Acquisition Studies on Relative Clauses and their relevance to Korean Language Education

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1. Introduction

The teaching of relative clauses poses several challenges to the instructor of Korean as a foreign language (KFL) as to the sequence and method of teaching. However, as we shall explore in this paper, relativization has attracted much attention in the field of Second Language Acquisition (SLA) that may be of assistance. Although the majority of this research has focused on learners of English rather than Korean, the findings can – with suitable interpretation – be applied successfully to the Korean language classroom. In order to do this successfully, we have to be aware of key differences between relative clauses in Korean, English and other languages and also bear in mind key differences between KFL and EFL.

Much of the research into relative clause acquisition has stemmed from attempts to apply cross-linguistic syntactic theories predicting the ease of relative clause production and comprehension to language learning. This paper will begin by reviewing these theories, before critically analyzing four acquisition studies that set out to test them. Finally, the findings will be applied to Korean language education, taking into account salient features of relativization in Korean.

2. The Accessibility Hierarchy Hypothesis

Keenan and Comrie's study of data from over fifty languages shows that although all languages seem to allow relativization on the subject, the accessibility of other constituents to relativization differs cross-linguistically. However, Keenan and Comrie (1977) demonstrated that this variation is by no means random, proposing a hierarchy explaining the accessibility of different constituents to relativization. This Accessibility Hierarchy (AH) Hypothesis is formulated as follows (Keenan and Comrie 1977: 66):

Subject (SU) > Direct Object (DO) > Indirect Object (IO) > Oblique Object (OBL) > Genitive (GEN) > Object of Comparison (OCOMP)

The AH states that, if a language can relativize a certain position on the hierarchy, it can also relativize any position to the left but not necessarily to the right. To attest this hierarchy, Keenan and Comrie provide examples of languages that show all possible restrictions on relativization

that this theory implies: from languages that allow relative clauses to be formed only on the subject, through to languages that allow relativization on all positions, as shown in the table on the following page. The data showed very few instances of languages with “gaps” in the hierarchy; for example, there were no languages that allowed subject and indirect object relativization, but not direct object relativization.

Positions accessible to relativization ¹	Example language
S only	Malagasy
S, DO	Welsh (Primary strategy of relativization)
S through to IO	Basque (restricted dialect)
S through to OBL	Catalan
S through to GEN	French
S through to OCOMP	English

As for Korean, Yeon (2003: 38) demonstrates with the following examples that relative clauses can be formed on the first four slots in the hierarchy:

- (1) Subject: [Mary에게 대학에서 영어를 가르친] John
 [Mary-eykey tayhak-eyse yenge-lul kaluchin] John
 Dat college-Loc English-Acc teach-Rel
 “John who taught Mary English at college”
- (2) Direct Object: [John이 Mary에게 대학에서 가르친] 영어
 [John-i Mary-eykey tayhak-eyse kaluchi-n] yenge
 Nom Dat college-Loc teach-Rel English
 “The English which John taught Mary at college”
- (3) Indirect Object: [John이 대학에서 영어를 가르친] Mary
 [John-i tayhak-eyse yenge-lul kaluchin] Mary
 Nom college-Loc English-Acc teach-Rel
 “Mary, to whom John taught English at college”
- (4) Oblique Object) [John이 Mary에게 영어를 가르친] 대학
 [John-i Mary-eykey yenge-lul kaluchin] tayhak
 Nom Dat English-Acc teach-Rel college “The college at which
 John taught Mary English”

¹ Adapted from data in Keenan and Comrie (1977: 69-74). Constituents were labeled according to surface structure. In a language such as Malagasy, which only allows relativization on the subject, the direct object and indirect object can be relativized by promoting them to surface subject through use of the passive voice and the so-called circumstantial voice. See Comrie (1981: 152) for examples of these phenomena in Malagasy.

As for the fifth slot in the hierarchy, Keenan and Comrie's data shows that this position can only be relativized in Korean when a pronoun is retained, as in the following example (Keenan and Comrie 1977: 74):

- (5) 자신/본인의 개가 총명한 그 사람
casin-/ponin-uy kay-ka chongmyenhan ku salam
Pro-Poss dog-Nom intelligent-Rel that person
 "That person whose dog is intelligent"

However, the final slot on the hierarchy, the object of comparison, cannot be relativized, as noted by Yeon (2003: 39):

- | | | |
|------------------------------------|---|--------------------------------|
| (6) John ^o 이 Mary보다 크다. | → | *[John ^o 이 큼] Mary |
| John-i Mary-pota khuta | → | *[John-i khun] Mary |
| Nom than taller | | Nom taller-REL |
| "John is taller than Mary." | | "Mary who John is taller than" |

The Accessibility Hierarchy (AH) Hypothesis does not only predict which constituents relative clauses can be formed upon. Moreover, the hierarchy implies that the further constituents are to the left, the easier and more frequently they are relativized. Keenan and Comrie (1977: 88) claim that this is because the AH reflects the psychological ease of comprehension: "the lower a position on the AH, the harder it is to understand relative clauses formed on that position". Relativizing constituents towards the right of the hierarchy often results in more marked or awkward structures, such as the genitive relativisation in Korean shown above. With regard to language acquisition, the concept of difficulty implies that the less accessible positions should be more problematic for learners to master.

Two other theories exist that predict the ease with which learners will relativize different constituents are the Parallel Function Hypothesis (PFH) and the Perceptual Difficulty Hypothesis (PDH). The PFH predicts a tendency to interpret the grammatical function of the relative pronoun as being the same as its antecedent. Therefore, in the examples below, (7) would be easier to interpret than (8), as in (7) the head noun and the relative pronoun serve the same function in their respective clauses (subject), whereas in (8) they serve different functions (object and subject):

- (7) The people [who live in that house] are lazy.
 (8) I know the people [who live in that house].

However, as discussed in more depth by Doughty (1991), despite promising initial findings, the PFH has now largely been largely disproved.²

As for the PDH, this hypothesis predicts that, due to short-term memory limitations,

² See Doughty (1991: 437) for discussion of relevant research.

sentences that involve center-embedding of relative clauses are more difficult than those involving right- or left-embedding. Thus, a sentence such as (9), in which the head noun is the subject and the relative pronoun the object, is more difficult than a sentence such as (10), in which the head noun and the relative pronoun both function as objects:

(9) The people [**who we know**] live in that house.

(10) I know the people [**who you saw.**]

Doughty (1991) reports mixed findings regarding the PDH and an absence of any acquisition studies that have emanated from it.

Given the lack of success of the PFH and the lack of data regarding the PDH, the current study will be limited to discussion of acquisition studies related to the Accessibility Hierarchy Hypothesis. However, we do believe that SLA research may benefit from more experimentation into the reliability of the PDH, although this would be of more relevance to EFL than to KFL.

3. Studies in Relative Clause Acquisition

This section will describe the methodology and findings of four studies into the acquisition of relative clauses. The first three studies test the reliability and implications of the Accessibility Hierarchy Hypothesis; the fourth questions traditional methods of relative clause teaching.

3.1 O’Grady, Lee and Choo (2001)

Research Summary: O’Grady W., Lee Miseon and Choo Miho (2001) “The Acquisition of Relative Clauses by Heritage and Non-Heritage Learners of Korean as a Second Language: A Comparative Study.” <i>Hankuko kyoyuk</i> (Journal of Korean Language Education 12/2: 283-294.	
Subjects	61 native English speakers at a US university
Target Language	Korean
Findings	Subjects comprehended subject relative clauses easier than direct-object relative clauses. Heritage learners of Korean do not have an advantage over non-heritage learners when it comes to morphosyntax

O’Grady, Lee and Choo (2001) investigated the abilities of learners of Korean at the University of Texas to comprehend relative clauses and, in particular, to make use of morphosyntactic clues to differentiate between subject and direct-object relativization. Whereas the distinction between subject and object relative clauses in English is realized by word order, in Korean, the difference is established by a subtle turn in case marking (O’Grady, Lee and Choo 2001: 284):

- (11a) Subject relative clause:
남자를 좋아하는 여자
namja-**lul** cohaha-nun yeca
man-**Acc** like-Rel woman
“The woman who likes the man.”

- (11b) Direct Object relative clause:
남자가 좋아하는 여자
namja-**ka** cohaha-nun yeca
man-**Nom** like-Rel woman
“The woman who the man likes.”

O’Grady, Lee and Choo also set out to discover whether “heritage learners” (“students who receive significant exposure to Korean at home while growing up” (O’Grady, Lee and Choo 2001: 284)) were at an advantage when it came to comprehending the intricate morphology and syntax of Korean.

The test itself involved locating the person or object in a picture identified by a relative clause – some subject and other direct object - and circling the appropriate person or object. For example, for sentence (11a), the subjects were provided with three pictures. One showed a man and woman standing side-by-side, the second showed the same man and woman, but with love hearts going from the man to the woman and the third showed the same man and woman, but with love hearts going from the woman to the man. The subjects would thus be expected to circle the woman in the third picture.

Results upheld Keenan and Comrie’s hierarchy in that both heritage and non-heritage learners comprehended subject relative clauses far better than direct-object relative clauses. However, the performance of heritage learners was not significantly better than or different in any way to their non-heritage counterparts (O’Grady, Lee and Choo 2001: 286). The authors conclude that the advantage heritage learners enjoy in other areas such as vocabulary, comprehension and pronunciation does not extend to morphosyntax (ibid, p292).

O’Grady, Lee and Choo draw great significance to “a very peculiar error” (ibid, p.289) made by many learners in both groups; that is, following English word order and picking the first noun as the head of the relative clause. The sentence below, for example, was misinterpreted as meaning “the man who likes the woman.”

- (12) 남자가 좋아하는 여자
namja-ka cohahanun yeca
man-Nom like-Rel woman
“The woman who the man likes.”

The authors speculate that, as “comparable errors have not been reported in the acquisition of English by speakers of Korean ... it is somehow easier for Korean speakers to

learn the head-initial relative clauses of English than it is for English speakers to learn the head-final relative clauses of Korean”. Although this premise is an interesting one that would merit further study, more extensive research is surely required in order to uphold such a claim. Besides, the fact that the listening test only contained relative clauses in isolation instead of imbedded in full sentences may have resulted in confusion and therefore may have actually induced errors such as that noted above. Identifying a situation from an isolated relative clause is unnatural, as it is often the context itself that clarifies the meaning of such constructions. Indeed, the intricate case markers of Korean are often dropped altogether in spoken language when the meaning can be inferred from context. With all case marking dropped, the noun phrase in (13) would be grammatical in spoken language and could be interpreted either as a subject or object relative clause:

(13) 남자 좋아하는 여자

Namja cohahanun yeja

Man like-Prs yeca

“the woman who likes the man” OR “the woman who the man likes.”

Of course, in many situations the case marking must be retained to clarify the meaning. However, it is difficult to imagine a situation in which the context – at very the least the matrix sentence in which the noun phrase is embedded – does not provide a sizeable clue to meaning. We will discuss the central role of semantics and pragmatics above syntax in the interpretation of Korean relative clauses in section 4.2.

3.2 Aarts and Schils (1995)

Research Summary: Aarts, F. and Schils, E. 1995. “Relative Clauses, the Accessibility Hierarchy Hypothesis and the Contrastive Hypothesis”. <i>International Review of Applied Linguistics in Language Teaching</i> 33: 47-63.	
Subjects	96 Dutch University students
Target Language	English
Findings	Subjects found constituents to the right of the Accessibility Hierarchy Hypothesis to be more difficult to relativize. Instruction was found to have a positive effect on student’s production of relative clauses.

Whereas the experiment of O’Grady, Lee and Choo (2001) only provided evidence supporting the Accessibility Hierarchy Hypothesis regarding subject and direct object relativization, Aarts and Schils (1995) set out to test the ease with which learners produced relative clauses on every position of the hierarchy. The ability of 96 Dutch university students learning English to produce relative clause sentences were assessed by carrying out twenty sentence combination tasks as in the following example (Aarts and Schils 1995: 48):

- (14a) The man was fired.
- (14b) He had forgotten to lock the safe.
- (14c) The man who had forgotten to lock the safe was fired.

The students were then provided with lectures on relative clause construction and were tested again. Results of the second test showed “considerable progress in students’ performance”³, although the authors recognized that they could not be certain that this was due to instruction as there was no control group (Aarts and Schils 1995: 50).

As predicted by Keenan and Comrie (1977), the subjects did in general experience more difficulty in relativizing constituents to the left of the hierarchy on both the pre- and post-tests. The one exception was that the results showed more errors with subject relativization than with direct object relativization, contrary to the hypothesis. However, Aarts and Schils (1995: 54) note that many of the “mistakes” with subject relativisation were “due to the fact that students relativized the first rather than the second sentence”, producing sentences such as (15) instead of (14c):

- (15) The man who was fired had forgotten to lock the safe.

Despite being grammatically correct, Aarts and Schils were consistent with other acquisition studies using this sentence combination method in considering sentences such as these as “errors”. Rather than displaying any inadequacy in students’ abilities to produce subject relativization, such “errors” seem to highlight the confusion that this sentence combination method can cause to learner’s basic understanding of the function of relative clauses. The acquisition study of Nakamori (2002), to be evaluated in section 3.4, throws further doubt on the sentence combination method.

3.3 Eckman, Bell and Nelson (1988)

Research summary: Eckman, F.R., Bell, L., Nelson, D. 1988 “On the Generalization of Relative Clause Instruction in the Acquisition of English as a Second Language”. <i>Applied Linguistics</i> 9/1: 1-20.	
Subjects	36 overseas students in the US with different L1s.
Target Language	English
Findings	Learners taught relativization on only one position on the hierarchy could generalize their learning to other constituents to the left, but not necessarily to the right.

The findings of O’Grady, Lee and Choo (2001) and of Aarts and Schils (1995) have clearly supported the idea that foreign language learners will find the relativization of constituents to

³ Ibid, p.50. See Appendix II for a full summary of the results.

the left of the Accessibility Hierarchy Hypothesis easier and those to the right more difficult. However, does this mean that we should teach relative clauses in ascending order of difficulty? Eckman, Bell and Nelson (1988) propose that, on the contrary, focusing only on teaching the relativization of the least accessible constituents may be beneficial. Such a proposal is based on the claim that it is the most marked aspects of a target language that allow the learner “to gain maximum generalization of his/her learning” and learners are therefore “able to do easier (i.e. less marked) things by virtue of having learned to do more difficult (i.e. more marked) things.” (Eckman, Bell and Nelson 1988: 4).

36 ESL students at a US university were split into four groups: three experimental and one control and each received one hour of instruction. The first experimental group was instructed in subject relativization, the second group in direct object relativization and the third group in oblique object relativization. The control group was instructed in a different area of English unrelated to relativisation. Pre-tests, post-tests and instruction all involved sentence combination tasks similar to those used by Aarts and Schils (1995).

Results of the post-test showed that, as predicted by Eckman, Bell and Nelson (1988), the group instructed on the oblique object scored the highest. Though some generalization did occur from right to left along the hierarchy – the subject group generalized their learning somewhat to the object position – virtually all generalization took place in the opposite direction: from less to more accessible constituents.⁴

In a review of this experiment, Cook (1993: 144) is unreserved about the “fascinating implication” of these results: “where implicational universals are concerned, students should actually be taught the most difficult set of structures *first* rather than last.” However, Eckman, Bell and Nelson (1988: 12) themselves are more cautious, noting that their experiment did not explore the possibility of “whether results similar to ours could have been obtained by teaching all three relative clause structures, allocating the one-hour instruction time as follows: ten minutes on the subject, twenty minutes on the object, and thirty minutes on the object of a preposition.”

3.4 Nakamori (2002)

Research Summary: Nakamori Takayuki. 2002. “Teaching Relative Clauses: How to handle a bitter lemon for Japanese learners and English teachers”. <i>ELT Journal</i> 56/1: 29-40.	
Subjects	320 Japanese junior high school students
Target Language	English
Findings	Learners taught through the “linear method” often struggled to understand the function of relativization, whereas learners taught using the “hierarchical method” experienced no such difficulties.

The three acquisition studies we have looked at so far have produced some fascinating findings regarding the teaching of relative clauses. However, the actual methodology used in the

⁴ *Ibid*, p.11. See Appendix III for a full summary of the results.

tests and instruction of the three experiments left something to be desired. O'Grady, Lee and Choo's use of incomplete sentences devoid of context was perhaps misleading for the subjects. Moreover, we have seen how the sentence combination method of Aarts and Schils was confusing for learners. Eckman, Bell and Nelson also relied on this sentence combination method, as have numerous other researchers such as Doughty (1991) and Gass (1979).

Takayuki Nakamari, a teacher at a Japanese junior high school, had long been frustrated with teaching relative clauses by means of combining two sentences, calling this the "linear method." Nakamari (2002: 30) proposes that this method is illogical as "nobody in the real world is likely to produce two separate sentences first, and then connect them with a relative pronoun."

The results of a translation test taken by two classes of eighty pupils taught using the linear method showed the common occurrence of a very serious error. Many students missed the concept of relativization altogether and mistook relative clauses as sentence connectors that worked something like "and". Consider the following example (Nakamari 2002: 35):

- (16) Sentence: I know a man who is a doctor.
Correct Translation: watashi-wa isha dearu otoko-o shitteita.
Student Translation: watashi-wa otoko-o shitteite, sonohito-wa ishadesu
(= I know the man, and the person is a doctor.)

Two other classes of eighty were taught by what Nakamori refers to as "the hierarchical teaching method." Instead of combining two sentences, this method begins by eliciting the noun phrase using visual props and then inserting it into a matrix sentence as shown below (Nakamari 2002: 31):

- (17)
Elicited noun phrase: *The dog which is running over there*
Inserted into matrix sentence: *The dog which is running over there* is called Spot.

Although the translation test showed that Japanese students taught this way still produced errors, the kinds of mistakes that occurred were fewer and of a different kind. Revealingly, students made very few of the "and" errors that had been so common amongst the groups taught by the linear method.⁵

Nakamari's findings cast doubts over the acquisition studies that used the two-sentence connection to evaluate their subjects' performance. It should be bemoaned that such excellent research projects at the cutting-edge of SLA relied so heavily on such an outdated and obviously flawed method of teaching relativization.

4. Implications for KFL

In this section, the findings of the four research projects reviewed will be applied to Korean

⁵ Ibid, p.36. See Appendix IV for a full summary of the results.

language teaching. The importance of considering salient features of Korean relativization and the role of Korean language education will be emphasized.

4.1 Dangers of the linear method

Based on the findings of Nakamari (2002), the most immediate implication for KFL is the avoidance of the linear method when teaching relative clauses. The linear method is especially unsuitable for teaching a language such as Korean that contains relative clauses that are not always derived directly from a free-standing sentence, such as in the following example:

- (18) 오바이트하지 않는 술
obaithuhaci anhnun swul
vomit neg alcohol
(a) Alcohol that doesn't vomit.
(b) Alcohol that does not make you vomit.

Although the clause seems to literally mean (a), our knowledge of the world tells us that, as alcohol cannot vomit itself but can certainly make you vomit, the correct interpretation of the sentence is (b). The clause contains no causative element akin to the “make” in the English translation. As Korean has a productive system of analytical causation, this clearly shows that the relative clause is not derived directly from the corresponding free-standing sentence (19a), which is nonsensical. To express the idea of alcohol not making you vomit in a simple sentence, the causative *-key hada* is required as in (19b):

- (19a) ?이 술은 오바이트하지 않는다.
i swul-un obaithuhaci anhnunta..
This alcohol-Top vomit Neg
“? This alcohol doesn't vomit.”
- (19b) 이 술은 오바이트하게 하지 않는다.
i swul-un obaithuhakey haci anhnunta,
This alcohol-Top vomit-Caus Neg
“This alcohol does not make you vomit.”

Although the two-sentence combination may go some way to explaining relativization in English transformation grammar, it is clearly insufficient in describing Korean relative clauses. Teaching Korean relativization according to the English principle of “relative-clause formation transformation”⁶ would ignore the central role of semantics and pragmatics in the interpretation of Korean relative clauses. Unlike in English, relativization in languages such as

⁶ See Langendoen (1970: 142) for a description of the transformation process by which two English sentences can be combined into one.

Korean cannot be interpreted primarily on syntax.⁷ Above all, whether the relative clause is derived from a simple sentence or not, we would uphold Nakamori's (2002) claim that teaching relative clauses using the linear method does not mirror the cognitive processes used in the natural production of such constructions.

4.2 Context and comprehension

Rather than employing the linear method, relative clauses should be presented by teaching the noun phrase in context, perhaps, as suggested by Nakamori (2002), utilizing pictures and other props, and then embedding it into a matrix sentence. Establishing context is especially vital in the case of a language such as Korean, which does not require all complements of a predicate to be present in a sentence and therefore allows relative clauses with multiple possible meanings:

- (20) [[책을 산] 학생]
[[chayk-ul san haksayng
book-Acc bought-REL student
(a) the student (who) bought a book
(b) the student (from whom) (someone) bought a book
(c) the student (for whom) (someone) bought a book

The translation in (20a), in which the subject of the predicate is the target of relativization, may seem the most likely interpretation. However, when the relative clause is embedded in a sentence such as in (21), the interpretation would almost certainly be as in (b):

- (21) 책을 산 학생한테서 사전도 샀다.
Chayk-ul san haksayng-hantheyse sacen-to sassda
Book-acc buy-REL student-Dat dictionary-too bought.
(a) ? (I) also bought a dictionary from the student who bought the book.
(b) (I) also bought a dictionary from the student from whom (I) bought a book

Similarly, in a context in which someone has been buying various gifts for students, (20) could be used to convey the interpretation given in (20c).

The following example also illustrates that the determination of the grammatical role of the target of the relativization does not crucially depend on the subcategorization of the predicate in the relative clause.

- (22) [[연 선생이 산] 백화점]이 어디에요?
Yon sensayng-i san paykhwacem-i eti-eyo?
Yeon-teacher-Nom buy-Rel dept.store-Nom where-is

⁷ See Matsumoto (1996) for a description of the semantic and pragmatic factors involved in interpreting Japanese relative clauses.

- (a) Where is the department store (which) Mr Yeon bought?
- (b) Where is the department store (in which) Mr Yeon bought (it)?

The choice between (22a) and (22b) largely depends on the interlocutors' knowledge about Mr. Yeon and about the place. If the interlocutors assume that Mr. Yeon cannot afford to buy the department store, the preferred interpretation would be (23b), whereas if he was a millionaire, (23a) can be a possible interpretation. This shows that different interpretations are potentially available in Korean depending on the possible semantic and pragmatic relationship between the head noun and the clause.

The research projects reviewed also show the importance of understanding the function of relative clauses. Especially when teaching learners in whose mother tongue relativization is achieved by very different strategies than Korean, it is essential that students understand the basic function of the sentences they are being taught. In the acquisition study of Doughty (1991: 445), a comprehension-based approach to teaching relative clauses is strongly advocated, based on the principle that "language acquisition cannot proceed in the absence of comprehension." In other words, students at elementary level must be provided with sufficient examples and explanation before moving on to controlled and free practice. The idea of comprehension includes both understanding the grammatical logic of the sentence and grasping the real-world meaning.

4.3 Order of Presentation

Returning finally to application of the Accessibility Hierarchy Hypothesis, the idea that students taught relativization of less accessible constituents are able to generalize their knowledge to more accessible constituents is indeed a fascinating one. However, we think it would be misguided for a KFL teacher to employ this theory directly by teaching elementary students relativization of less accessible constituents first. To do so amount to ignoring two vital aspects of the Eckman, Bell and Nelson's (1988) project. Firstly, that, as previously noted, this project did not compare the results of teaching only one type of relative clause with teaching every type. We therefore do not yet know whether only teaching one position low on the hierarchy is more effective than simply teaching every position. Secondly, and most importantly, although students of various levels were involved in the project, the pre-test results clearly show that none were total beginners who were being taught relativization for the first time.⁸ This is indicative of one large difference between EFL and KFL: the majority of EFL students have already received prior exposure to the language: even those in low-level classes are generally "false-beginners" who may, for example, have learned English grammar at school. However, in KFL, except generally in the case of heritage learners, students are learning from scratch. EFL instructors teaching low level classes are therefore attempting to activate and refine the knowledge students already have of the language, whereas their KFL equivalents are teaching that knowledge for the first time.

We would predict that teaching relativization of the oblique or the genitive first to

⁸ No students on any of the pretests scored "zero."

elementary students of Korean would result in considerable confusion. Alternatively, beginning with more accessible structures would assist learners in understanding the basic structure and function of Korean relative clauses, thereby providing a comprehension-based approach. However, more advanced students who have been previously taught or exposed to relative clauses may be able to improve their accuracy on all positions of relativization by being taught relativization of less accessible constituents. Such students would also benefit from the knowledge that object of comparison relativization is not possible in Korean and that genitive relativization is only possible with pronoun retention.

5. Conclusion

The acquisition studies reviewed in this paper have clearly shown the importance of research into the learning and teaching of relative clauses. This line of research has led us to question some of our most basic conceptions regarding acquisition, in particular the assumption that students should always be taught easier constructions first. However, at the same time, the projects have highlighted the undeveloped nature of SLA research. The fact that the majority of acquisition studies into relativization rely upon the flawed “linear” method of relative clause teaching is particularly disappointing. It is important that future research strives to incorporate teaching methodology that more closely resembles real-world language usage. It is also disappointing that the projects reviewed concentrated too much on syntactic factors at the expense of pragmatic and semantic elements.

Acquisition studies in this area using learners of Korean would be particularly welcome. Despite the universal nature of some of the findings, it is evident that relativization in Korean relies more on pragmatic and semantic factors than in English and also that KFL differs in vital aspects to EFL. We would especially like to test our assumption that elementary learners of Korean would learn relative clauses best by working from left to right along the hierarchy, whereas advanced learners could improve fluency of all positions by being taught relativization on less accessible constituents.

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Appendix I

Summary of results of O'Grady, Lee and Choo (2001)

Data of special relevance has been highlighted.

Comprehension scores for second-semester non-heritage students			
	Correct	Reversals*	Other
Subject relatives	76%	6.4%	17.6%
Dir. Obj relatives	17.6%	38.4%	52%
Comprehension scores for fourth-semester non-heritage students			
	Correct	Reversals*	Other
Subject relatives	70%	14%	16%
Dir. Obj relatives	46%	31%	23%
Comprehension scores for second-semester heritage students			
	Correct	Reversals*	Other
Subject relatives	65%	13.75%	21.25%
Dir. Obj relatives	41.3%	23.75%	35%

*"Reversal" refers to an error in which a subject relative clause is interpreted as a direct object or vice versa.

(Adapted from O'Grady, Lee and Choo, p.287)

Appendix II

Summary of results for Aarts and Schils (1995)

Number of Errors made by all subjects*		
	Test 1	Test 2
Subject Relatives	83	49
Direct Object Relatives	69	39
Oblique Object Relatives	112	51
Genitive Relatives	172	96
TOTAL	436	235

*If students made more than one error in the same sentence, this was counted as just one error. There were four questions in each category in both tests. (6 students took the tests. The maximum number of errors in each category was therefore 394.

(Adapted from Aarts and Schils, p.51, 54, 56. Results for “complement to the subject” relativization have been omitted, as this has not been covered in our study.)

Appendix III

Summary of results for Eckman, Bell and Nelson

Data of special relevance has been highlighted.

Number of errors per group by relative clause structure*						
Pre-test				Post-test		
	subject str.	object str	oblique str	subject str.	object str	oblique str
Subject Group	34	36	42	4	25	38
Object Group	32	32	42	10	12	38
Oblique Group	35	39	42	0	4	1
Control Group	27	30	42	23	30	42

*If students made more than one error in the same sentence, this was counted as just one error. There were seven questions in each category in both tests. Each group was composed of nine students. The maximum number of errors in each category was therefore 63.

(Adapted from Eckman, Bell and Nelson, p.10.)

Appendix IV

Summary of results for Nakamori

Data of special relevance has been highlighted.

Error Typology			
teaching methodology	WM*	MD	&
linear group 1	25.4%	32%	42.6%
linear group 2	27.3%	27.6%	45.1%
hierarchical group 1	45.4%	39.2%	15.4%
hierarchical group 2	49.3%	32.5%	18.2%

*WM means that the students translated the sentence “as if the relative clause modified the subject, after which the verb and the head noun follow it in the right branching relative clause”

MD means that the students “transferred the rightward modification direction of Japanese.”

& means that students “translated the sentences as if they were two distinct sentences connected with *and*.”

(Adapted from Nakamori, p.34,35.)