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교육학박사학위논문

L1 Influence on L2 Learning of English Resultative
Constructions: The Syntactic and Semantic
Structure of Korean Students' Interlanguage

영어 결과구문 학습에 미치는 모국어의 영향:
한국인 학습자 중간언어의 통사 및 의미 구조

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외국어교육과 영어전공

김수정

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by
Sujeong Kim

A Dissertation Submitted to
the Department of Foreign Language Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in English Language Education

At the
Graduate School of Seoul National University

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ABSTRACT

L1 Influence on L2 Learning of English Resultative Constructions: The Syntactic and Semantic Structure of Korean Students' Interlanguage

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The present study explores the syntactic and semantic structures of the resultative construction, with special reference to English and Korean. It also investigates native Korean-speaking English learners' comprehension and production of English resultative constructions (RC, hereafter).

Resultative constructions show considerable variations across languages (Eckardt, 2003; Legendre, 1997; Nakazawa, 2008; Napoli, 1992). English and Korean provide a case in point. English resultatives have been analyzed as complements denoting telic events (Goldberg, 1995; Kearns, 2007). The present study shows that one of the most representative resultative phrases in Korean, *AP-key* phrase, is best analyzed as an adjunct that can denote atelic sense.

Two experimental studies were undertaken to investigate Korean students' comprehension and production of English resultative constructions. Study I

(Comprehension Test) comprised an acceptability judgment task (AJT) and an elicited choice task (ECT), in which 99 Korean students and 17 native English speakers (NSs) participated. Study II (Production Test) was an elicited writing task (EWT), in which 97 Korean students participated.

The results of the AJT showed that the Korean students' comprehension of the target construction was significantly lower than that of the NSs. In contrast to the NS group, both high and low proficiency Korean learner groups failed to accept the grammatical RCs and failed to reject the syntactically and semantically ungrammatical RCs.

The ECT results showed an asymmetry in preferences for English RCs between the Korean learner groups and the NS control group. The NSs showed significantly higher preferences for English RCs than the two Korean learner groups. Given a choice, the learners preferred adjunct expressions over RCs. This result was expected based on the assumption that the L1 Korean resultative construction, which is an adjunct, would influence the learners' L2 behavior.

In the EWT, the Korean participants produced non-target-like sentences, using "adjunct-type" resultative phrases. This error also seems to result from L1 influence on the learning of L2 RCs, which has been observed in previous acquisition studies (Slabakova, 2002; Whong-Barr, 2005).

In a nutshell, resultative constructions in English and Korean differ syntactically and semantically, and the Korean students' comprehension and production of English resultative constructions were heavily influenced by their L1. Hence, due consideration needs to be given to developing systematic and efficient

ways to help Korean students learn English RCs.

Key Words: English resultative construction, Korean resultative construction,
L1 influence, syntactic structure of resultative construction,
semantic structure of resultative construction

Student Number: 2011-30430

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CHAPTER 1.

INTRODUCTION

This chapter first introduces the motivation and purpose of the present study. Subsequently, the scope of the investigation, the research questions, and the experimental hypotheses will be presented. This chapter closes with an outline of the dissertation's organization.

1.1. The Motivation and Purpose of the Study

Resultative constructions have been an intensively studied area of English grammar, with many studies focusing on the distinction between depictives and resultatives (Halliday, 1967; Huddleston & Pullum, 2002; Quirk, et al., 1985; Simpson, 1983) as presented in (1).

(1) John hammered the metal flat. [Resultative]

John ate the meat raw. [Depictive]

Although the two constructions appear to have the same structure (VP + NP + AP), they have different syntactic properties. A resultative is an argument of the verb and a depictive is an adjunct (Lee, 1996).

Recently, scholars who take a constructional view of grammar, have discussed the English resultative construction in terms of a syntax-semantics interface (Goldberg, 1995; Goldberg & Jackendoff, 2004; Hovav & Levin, 2001). For example, according to Hovav and Levin (2001), the event in a resultative must entail a change of state in the object NP.

Resultatives have been a focus of research cross-linguistically as well. For instance, Simpson (1983) shows that resultatives (resultative phrases) are complements in some languages (e.g., English) while they are adjuncts in others (e.g., Warlpiri). Several Studies have demonstrated that Romance languages (e.g., French, Catalan, Italian) do not allow AP-resultatives but only PP-resultatives or pseudo-resultatives (Legendre, 1997; Mateu, 2000, 2011; Napoli, 1992; Washio, 1997). Turning to East-Asian languages and German, there have been competing analyses on the complementhood of their resultatives (Eckardt, 2003; Huang, 1992; Huang, Li and Li, 2009; Jun, 2009; Müller, 2006; Nakazawa, 2008; Takamine, 2007; Washio, 1997).

As for Korean, its resultative constructions show similar properties to Simpson's (1983) Warlpiri-type languages in that resultatives can be predicable of an internal or external argument. Shim and den Dikken (2007) observed that Korean has two counterparts to English resultatives, as shown in (2a) and (2b)

- (2) a. Jim-i patak-ul hayah-key chilha-ess-ta
 Jim-NOM floor-ACC white-KEY paint-PAST-DC

b. Jim-i patak-i hayah-key chilha-ess-ta
 Jim-NOM floor-NOM white-KEY paint-PAST-DC
 ‘Jim painted the floor white.’

(Shim & den Dikken, 2007, pp. 5–7)

In (2), *patak* ‘the floor’ can be marked as either the accusative case (*patak-ul*) or the nominative case (*patak-i*). Moreover, recent research on the syntactic properties of Korean resultatives in the form of AP-*key* phrases seems to converge on an adjunct analysis (Acedo-Matellán, 2012; Hong, 2005; Kim & Maling, 1997; Ko, 2011, 2014, 2015b; Shim & den Dikken, 2007).

Korean EFL learners’ difficulties with the English resultative constructions (RC, hereafter) have been widely reported (Choi, 2015; Lee & Kim, 2011; Rah, 2014; Shin, 2010; Sung, 2012; Whong-Barr, 2005). Korean learners show significantly poor performance on the English RC although it is a criterial construction for the B2 level (intermediate-advanced) of the CEFR (Common European Framework of Reference) (Hawkins & Buttery, 2010). These difficulties are considered mainly due to the crosslinguistic differences between English and Korean RCs in terms of their syntactic and semantic properties (Hong, 2005; Hong, 2011; Hwang, 2011; Ko, 2011, 2014; Oh, 2010; Shim & den Dikken, 2007).

Although there have been many contrastive analyses on the RCs in English and Korean, more of the literature has concentrated on syntactic accounts of RCs in the two languages. With regard to semantic properties, only sporadic remarks have been made on semantic restrictions on Korean RCs. The present study

proposes that the Korean resultative phrase, *AP-key* phrase, can denote atelic meaning, contra its English counterpart.

Importantly, telicity is uncontroversially a semantic property of the English RC, and it is a trait that distinguishes the RC from other constructions such as simple transitive and ditransitive constructions (Beavers, 2011; Boas, 2003; Goldberg, 1995; Hovav & Levin, 2001; Tenny, 1994; Vanden Wyngaerd, 2001; Wechsler, 1997). Semantic properties affect L2 learning both due to L1 transfer and because they are reported to be harder to learn than syntactic properties (Hagoort, 2003; Yin & Kaiser, 2011). Little research, however, has investigated the acquisition of English RCs by seeking experimental evidence of the syntactic and semantic structures of L2 learners' interlanguage.

The present study has two main goals. First, it aims to provide a concise account for the RCs in the two languages and explore an interface between syntactic and semantic properties of resultatives in terms of telicity. Second, the study aims to investigate L1 influence on Korean students' learning of English RCs through two experimental studies. Study I (Comprehension Test) consists of an acceptability judgment task (AJT) and an elicited choice task (ECT) to explore learners' comprehension of English RCs. Study II (Production Test) addresses learners' production of English RCs by means of an elicited writing task (ECT).

In sum, the present dissertation investigates (i) how resultative constructions in English and Korean are different in terms of their syntactic and semantic properties, and (ii) how Korean students' interlanguage is influenced by their L1 in the comprehension and production of English resultative constructions.

1.2. The Scope of the Investigation

Various syntactic categories appear in the resultative position, including AP, PP, and NP (Carrier and Randall, 1992; Hoekstra, 1988; Napoli, 1992). This study, however, focuses on Korean AP-*key* phrases¹ which long have been assumed to be equivalents to English AP-resultatives (Kim & Maling, 1997; Kim, 1999; Ko, 2011, 2014, 2015b ; Shim & den Dikken, 2007; Son & Svenonius, 2008; Wechsler & Noh, 2001). It is generally acknowledged that *-key* and *-tolok* can be used interchangeably with some restrictions in Korean resultative constructions (Ko, 2011; Lee & Lee, 2003; Son, 2008; Yeo, 2006). This study assumes that when *-key* is marked in a Korean RC, it may be able to alternate with *-tolok* depending on contexts.

1.3. Research Questions and Hypothesis

To investigate the syntactic and semantic properties of English and Korean RCs and the L1 influence on Korean students' learning of English RCs, this study

¹ Ko (2015b) categorizes Korean resultatives into *-lo* resultative and *-key* resultative in terms of complementation, and argues that the former type is a complement while the latter is an adjunct. The *-lo* resultatives refer to constructions of the type, *-lo ppahta* (pound/make sth. into~). The *-lo* type resultative in Korean will be discussed more in section 5.2.

addresses the following research questions:

1. Is there a resultative construction in Korean that is equivalent to the English RC?
 - What are the syntactic properties of English and Korean resultative constructions?
 - What are the semantic properties of English and Korean resultative constructions?
2. How do the properties of the Korean resultative constructions affect Korean students' learning of the English resultative constructions?
 - How is their comprehension of English resultative constructions affected by their L1?
 - How is their production of English resultative constructions affected by their L1?

Given the syntactic and semantic differences between English and Korean RCs, the hypothesis of the present study is that Korean L2 learners' learning of English RCs will be affected by their L1 in syntactic and semantic structures, as formulated in the three specific hypotheses in (3):

- (3) The Experimental Hypotheses for Korean Learners' L2 Learning of English RCs:

1. Korean learners will fail both to reject syntactically and semantically unacceptable RCs and to accept grammatical RCs in the AJT: Since Korean *AP-key* resultatives are adjuncts and can denote [-telic] (atelic) meaning, Korean learners will have difficulty discriminating unacceptable RCs.
2. Korean learners will show a preference for adjunct expressions instead of the target forms, English RCs in the ECT: Since Korean resultatives are adjuncts, Korean learners will choose adjunct expressions among competing forms.
3. Korean learners will not be able to produce English RCs in the EWT: Since Korean RCs are adjuncts and can denote atelic meaning, Korean learners will produce “adjunct – type” errors.

These experimental hypotheses predict a strong L1-transfer influence on the L2 learning of English RCs. The L1 influence on the comprehension (Hypotheses 1 & 2) and the production (Hypothesis 3) of English RCs will be investigated by analyzing Korean learners’ interlanguage data.

1.4. Organization of the Thesis

This dissertation consists of six chapters. Chapter 1 has explained the necessity of the present study and provides the research questions. Chapter 2 first presents the theoretical background of the cross-linguistic discussion on the resultative constructions. It then discusses previous acquisition studies. Chapter 3 describes the research method, including the participants, tasks and procedures of the experiments and the coding and analysis of the data. Chapter 4 reports the results of the two experimental studies. Chapter 5 discusses the research findings in more detail, focusing on how they address the research questions. Chapter 6 concludes the study with a summary of the major findings, along with pedagogical implications, limitations and suggestions for future research.

CHAPTER 2.

THEORETICAL BACKGROUND

This chapter presents the theoretical background of the dissertation. This dissertation focuses on Korean learners' acquisition of English resultative constructions from the perspectives of typology (Han, 2000a; Kim 2013; Talmy, 2000; Teresa & Peter, 2009; Wu, 2011)² and language transfer (Gass & Selinker, 1983; Kim, 2015; Schwartz & Sprouse, 1996; Slabakova, 2002)³. Therefore, the chapter's first section (2.1) presents crosslinguistic analyses of resultative constructions in language other than Korean and English, including major East-Asian languages, German, and Romance languages.

Section 2.2 provides an overview of syntactic debates over English and Korean resultative constructions. In light of the first research question, the discussion will focus on whether resultative phrases in the two languages are complements. Section 2.3 discusses the semantics of English and Korean resultatives, and presents reasons for considering Korean resultatives to have the property [-telic]. Finally, section 2.4 introduces previous acquisition studies that deal with English resultative constructions.

² Teresa and Peter (2009) reports a cross-linguistic study which examines L2 (English) acquisition of motion constructions by Danish (typological similar to English) and Japanese (typological different) learners. They presented the results that typological similarity between the L1 (Danish) and L2 (English) played a role in target-like use of motion constructions compared to their use by Japanese L1 speakers.

³ This labeling is also called 'cross-linguistic influence' as a version of weak/predictive contrastive analysis according to James (2013, p. 5).

2.1. Resultative Constructions and Language Variation

Whether an individual language has resultative constructions equivalent to English or not differs across languages. Researches on East-Asian languages provide examples (Huang, 1992; Huang, Li & Li, 2009; Jun, 2009; Nakazawa, 2008; Takamine, 2007; Washio, 1997).

According to Jun (2009), Chinese has two types of resultative construction: V-V resultative verb compounds and the *V-de* VP resultative phrases (p. 133). Huang, Li and Li (2009) argued that Chinese resultatives have a parallel structure to English resultatives. In example (1), the phrase, *ku-shi*, ‘cry-wet’ functions as a complex lexical predicate, which means that Chinese resultative phrases behave like complements do in English as the translation suggests.

(1) Ta ku-shi-le shou-pa

She cry-wet-PERF handkerchief

‘She cried and as a result the handkerchief got wet.’

(Huang, Li & Li, 2009, p. 140)

A proposal that Japanese resultatives exhibit behaviors similar to adjuncts rather than complements was put forward by Nakazawa (2008): They are optional and iteration of them is possible, as shown in (2)

(2) Taro-ga kabe-o siro-ku kirei-ni nutta.

Taro-NOM wall-ACC white-KU beautiful-NI paint-PAST

‘Taro painted a wall white and beautiful.’

(Nakazawa, 2008, p. 33)

Adjectival nouns are suffixed by *-ni*, and adjectives are suffixed by *-ku* in resultative phrases. These suffixes, however, can mark not only resultatives but also coordinate and subordinate clauses, and adverbials. Japanese does not have a morphological form specifically for resultatives, and therefore ambiguity between resultative readings and adverbial readings can occur.

Washio’s (1997) typology of resultatives distinguished “weak resultatives” and “strong resultatives” crosslinguistically. He argued that Japanese has only “weak resultatives” (e.g., *John painted the wall red*) while English allows “strong resultatives” as well. “Weak resultatives” are those in which the verb entails the change of state as a result of the action denoted by the verb. In contrast, in strong resultatives, the verb itself does not imply the change of state as a result of an action (e.g., *John hammered the metal flat*).

German data suggest a competing analysis as well (Eckardt, 2003; Müller, 2006). Eckardt (2003) argued that a resultative phrase in German is “a result-oriented adverb” specifying the result of a certain event, distinguished from manner adverbs: Both are shown in (3).

(3) a. Hans den Wagen *schwer* belud.

Hans the carriage heavily loaded

b. Beate baute den Drachen *solide*

Beate built the kite solidly

(Eckardt, 2003, p. 265)

It is notable here that *schwer*, 'heavy' is an adjective in German. Eckardt (2003), however, analyzed the adjective as an adverb based on its function, hence the translation 'heavily' in (3a). On the contrary, Müller (2006) proposed a complex predicate analysis for *Ihn den Teich leer fischen sah* (him the pond **empty** fish **saw**). It seems that the complex predicate analysis holds true in the particular case of a verb of perception construction.

With regard to Romance languages (e.g., French, Italian, Catalan), it has been widely acknowledged that resultative constructions are very restricted and presumably only pseudo (fake)-resultatives are allowed (Acedo-Matellán, 2012; Legendre, 1997; Mateu, 2000, 2011; Napoli, 1992; Washio, 1997) Napoli (1992) argued that Italian has only PP resultatives (p. 57) and does not allow AP resultatives as in **Ho stirato la camicia [piatta]* (I ironed the shirt [flat]) (p. 74).

Mateu (2000, 2011) stated that there are only pseudo resultatives and no real transitive resultative constructions in Catalan. Mateu drew on Talmy's (2000) typological observation to explain that Italian and Japanese lack the co-event conflation pattern that can be found in languages like English or Chinese: Both Romance languages and Japanese, which are verb-framed languages, lack cases

involving conflation of a root with a null light verb.

Acedo-Matellán's (2012) provided a morphological account of crosslinguistic variation in AP resultatives based on the work of Talmy (2000) and Mateu (2000) as in table 2.1

Table 2.1. Acedo-Matellán's (2012) Typology of Resultatives

			Availability of Resultative Secondary Predicates		Agreement Morphology on the Predicative Adjective
			Particles	AP	
Morphological Properties of PATH	-Conflating (S-Framed Languages)	-Affixal (English)	+	+	-
		Unspecified (Icelandic)		+	+/-
		+Affixal (Latin, Slavic)		(+)?	-
	+Conflating (V-Framed Languages)		-		+/-

(adapted from Acedo-Matellán, 2012, p. 20)

According to this typology, Korean and Japanese which are V-Framed Languages in Talmy's (2000) terminology do not allow AP-resultative predicates: the "key-suffixed AP construction in Korean behaves as an adjunct to VP, and therefore, does not qualify as a true secondary predicate of the resultative type sitting inside the vP" (p. 21).

Washio (1997) also noted that Italian and French do not permit "weak" resultatives to the same extent as English (p. 29). He also asserted that only "spurious" (i.e., pseudo/fake) resultatives are allowed in French, as in *J'ai noué les lacets de mes chaussures bien serré* (I tied the laces of my shoes very tight).

In French, resultative predicates are extremely limited and, categorically, they are overwhelmingly restricted to PPs, as in (4).

(4) Pierre a peint les murs en blanc.

Peter has painted the walls in white.

Peter painted the walls white.

(Legendre, 1997, p. 47)

Legendre claimed that French resultative secondary predicates form a constituent with a PRO subject which is an SC whose head is Gender (GenderP).

Resultative constructions are different in their forms and meanings crosslinguistically. Therefore, we cannot ignore the possibility that these crosslinguistic differences may affect the L2 learning of English resultative constructions.

2.2. Syntactic Discussion: Complement versus Adjunct

2.2.1. English Resultatives as Complements

Although there are competing syntactic accounts of English resultatives, most of them agree on the complementhood of English resultatives (Baker, 2003; Bowers 1993, 2002; Carrier and Randall, 1992; Embick, 2004; Larson ,1988, 1990; Radford, 1997; Simpson, 1983;). Many have argued that the resultatives are arguments of V and sisters to the verb.

Previously, major controversies have turned on whether resultatives form small clauses (SC) or not. For instance, a non-SC analysis of an English resultative is given in (5) and the SC analysis is given in (6).

(5) I [_{VP} cut [_{NP} her hair [_{AP} short]]].

(6) I [_{VP} cut [_{SC} her hair [_{AP} short]]].

(Napoli, 1992, p. 55)

The matrix verb in (6), which usually takes an NP complement, takes a propositional SC as its complement. In this SC analysis, the SC is the only complement of the main verb (Hoekstra,1988; Kayne, 1985). The postverbal NP and the resultative XP are in a predicational relation. This account, however, cannot explain how the postverbal NP in (6) is directly theta-marked by the matrix

verb.

Ternary Branching analysis of Carrier and Randall (1992) allows the postverbal NP in (6) to be directly theta marked by the matrix verb. They argued that both the postverbal NP and the result phrase/XP are internal arguments of the verb. Because argumenthood requires sisterhood, the verb, the postverbal NP, and the result-XP are all represented as sisters under the ternary branching node VP. Carrier and Randall pointed out that only a particular form of AP is allowed in the result XP position (p.184).

Many of recent studies that attempt a syntactic analysis of English resultatives, however, seem to converge on a complex predicate analysis (Baker, 2003; Bowers, 1993, 2002; Dowty, 1979; Embick, 2004; Larson, 1988, 1990; Lee, 1996; Radford, 1997, 2009). For instance, Dowty (1979) analyzed resultative constructions as a sort of complex lexical predicate (e.g., *hammer-flat*). The complex VP analysis of Larson (1988) and Radford (1997, 2009) observed that the verbs and oblique/AP complements originate in the head V position of VP and merge as a constituent as shown in (7).

(7) [_{VP} The acid will [_{V'} turn_i+ \emptyset [_{VP} the litmus-paper [_{V'} t_i red]]]]

(Radford, 2009, p. 354)

The verb, *turn*, then raises and adjoins to a causative light verb \emptyset heading vP. Bowers's (1993, 2002) PrP Approach assumes that objects should be raised to [Spec, VP] position from its base position [Spec, PrP], as shown in (8).

(8) [IP [PrP John_i [Pr' ate_j [VP himself_i [V' e_j [PrP t_i [Pr' e_j sick]]]]]]]]

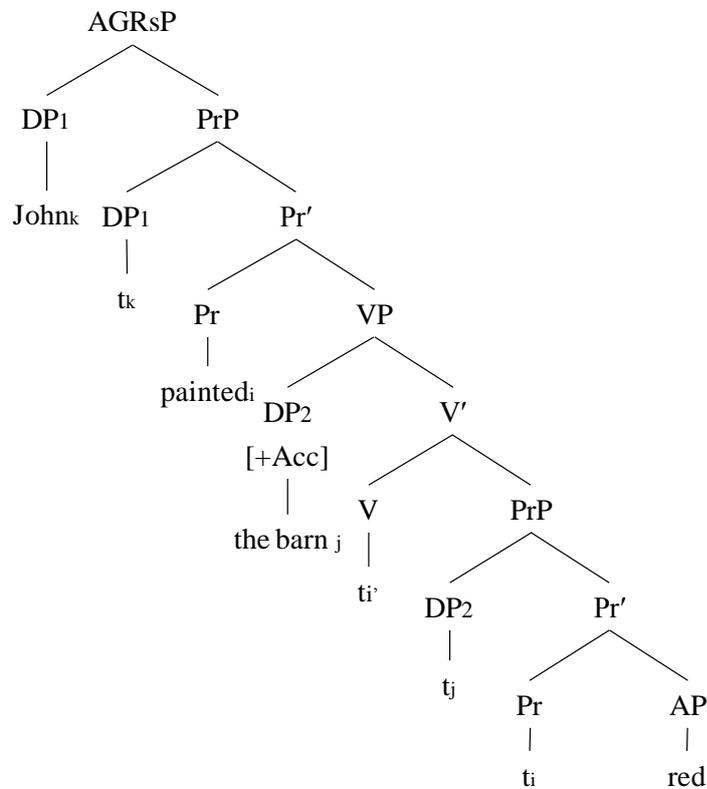
(Bowers, 1993, p. 622)

The analysis in (8) also assumes that the verb, *ate* and the result-XP, *sick* merge as a constituent, which supports the observation that English resultatives are complements.

Adopting Bowers' (1993) PrP approach, Lee (1996) suggested that resultative constructions are an instance of Core Predication as in (9).

(9) a. John painted the barn red. (Lee, 1996, p. 82)

b.

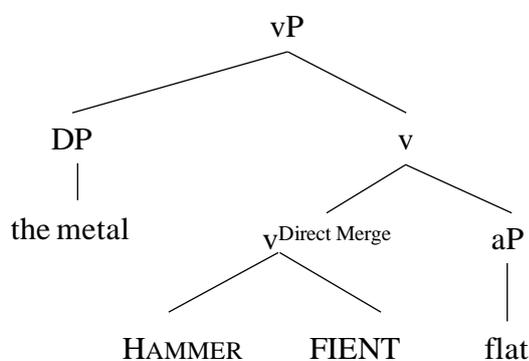


As (9b) illustrates, a result phrase XP is an argument. The postverbal NP *the barn* and the result phrase AP *red* form a Core Predicational relation⁴. In the lower PrP, the verb *painted* mediates the predicational relation between the *barn* and the *red*. The verb undergoes head-movement to V to check its subcategorization feature, and the NP undergoes DP-movement to get its Case feature of [+Acc]. In sum, the postverbal NP and the result XP are arguments of the verb.

Embick (2004) developed an extension of the analysis of resultative secondary predicates and suggested the structure illustrated in (10) for the lower VP of resultatives (p. 376).

(10) a. [_{VP} the metal [_v hammer flat]]

b.



⁴ Lee (1996) argued that there are two kinds of predication, Core and Peripheral Predication. Core Predication is a predicational relation between the subject NP in the Spec position of PrP and the predicate XP in the complement position by medication of Pro (= predicator). In the contrary, Peripheral Predication (for example, depictives) means a relation between the DP in the Spec of any maximal projection and the adjunct predicate XP adjoined to the intermediate projection. Lee claimed that both the transitive and intransitive resultative constructions are instances of Core Predication (pp. 80-103).

The result state, an aP, always appears as the complement of a complex head verb [HAMMER-v [FIENT]]⁵. Embick (2004) called this aP a “phrasal complement” (p. 370). This means that resultative second predicates like *flat* are complements of little v. The FIENT is a type of BECOME-operator, which denotes a transition of an event that moves toward a state, and is often defined in terms of telic events.

All of the above syntactic discussions converge on the view that English result phrases are complements. This argumenthood leads to severe selectional restrictions on the choice of result XP as seen in (11).

(11)

- a. He drove her crazy/*happy. (Carrier and Randall, 1992, p. 184)
- b. John kicked the door open/*opened. (Embick, 2004, p. 359)
- c. The maid scrubbed the pot shiny/*shined/*shining. (Hong, 2005, p. 137)
- d. Mary dyed her hair red/*pretty/*wet. (Wechsler and Noh, 2001, p. 412)

As (11) illustrates, the resultative phrases exhibit a close relation with the verb, which means that resultatives are selected by the matrix verb (Hong 2005; Simpson, 1983).

⁵ Embick (2004) called the operation in which the root verb HAMMER is attached as part of a complex head with v[FIENT] “Direct Merge”: It creates a complex head producing semantic consequences. Direct Merge specifies the means by which the result state is achieved. Moreover, HAMMER merged with v[FIENT] retains argument-taking properties, so the DP in the specifier is interpreted as the logical object of this Root.

2.2.2. Korean Resultatives as Adjuncts

Discussions on the syntactic status of Korean resultative constructions over the last two decades have led to three competing views: a complement analysis, a hybrid analysis, and an adjunct analysis. This study revives the debate and argues for a new analysis of the Korean result phrase, *AP-key*. The claim made here supports the view that this Korean secondary predication is an adjunct.

Earlier research on Korean result phrases preferred the complement analysis (Kim, 1999; Lee & Lee, 2003; Wechsler & Noh 2001). Kim (1999) proposed that a Korean lexical rule takes a non-resultative verb as input and yields an alternative resultative verb with one additional predicative complement. He acknowledged, however, that there are differences between English and Korean resultatives: Resultative phrases in Korean can be predicated of either an agent or a theme argument (or even a locative element) other than the direct object.

Lee and Lee (2003) divided Korean resultatives into two types such as nonsubject (unaccusative and transitive) and subject resultatives (unergative main verb). They argued that resultative phrases are complements that are selected by main verbs. They did not provide empirical evidence for their analysis.

Wechsler and Noh (2001, p. 405) assumed that the suffixed particle *-key* morpheme is a “COMPLEMENTIZER” and argued for the general similarity between English and Korean resultatives. At the same time, however, they stated that the particle *-key* “functions broadly in Korean to mark various secondary predicates,

subordinate clauses, and adverbs” (p. 405). They also concluded that some *key*-marked items, as in (12), are “clearly adverbial (even when a resultative sort of meaning seems to be entailed” (p. 411).

(12) Kang-i tantanha-key el-ess-ta.
 river-NOM solid-ADV freeze-PAST-DEC
 ‘The river froze solid.’

(Wechsler & Noh, 2001, p. 409)

Likewise, their study marked the *-key* morpheme as COMP (complementizer) and ADV (adverb), which led to the hybrid analysis.

The hybrid analysis resulted from a line of research that slightly modified the complement analysis (Son, 2008; Son & Svenonius, 2008; Yeo, 2006). Yeo (2006) claimed that clausal resultatives in Korean are adverbial phrases because the Direct Object Restriction (DOR) does not hold in this type, and *-key/-tolok* alternations are possible, as shown in (13).

(13) John-i [mok-i swi-key/tolok] oyichi-ess-ta.
 John-NOM throat-NOM hoarse-KEY/TOLOK shout-PAST-DC
 ‘John shouted his throat hoarse.’

(Yeo, 2006, p. 703)

Yeo (2006) noted that *-tolok* denotes the degree of an event or the purpose

of an event. Consequently, the “result” denoted by the bracketed constituent is cancellable in clausal resultatives (p. 702). This cancellability issue will be mentioned again in section 2.3.

Son (2008) argued for two types of Korean resultatives as well: a 'stative' where a subject of secondary predicates is accusative-marked and an 'eventive' where a nominative-marked subject appears in secondary predicates. According to Son's analysis, the second type is merged outside VP as a modifier and denotes result, degree, or purposive meanings as in (14).

- (14) Chelswu-nun Yenghi-ka nemeci-key himkkess mil-ess-ta.
Chelswu-Top Yenghi-NOM fall-KEY with *force* push-PAST-DC
'Chelswu pushed Yenghi with force so that she would fall down.'

(Son, 2008, p. 97)

Son (2008) stated that *key*-phrases can have all three meanings, with some readings preferred in some contexts. With the degree and purposive interpretations as in (14), there is no resultant entailment: The *key*-phrase denotes the degree or intention of the action. This entailment issue will be covered again in section 2.2.

Recent research on the syntactic properties of the AP-*key* resultative, seems to agree on the adjunct analysis (Acedo-Matellán, 2012; Hong, 2005; Hong, 2011; Hwang, 2011; Kim and Maling, 1997; Ko, 2011, 2014; Oh, 2010; Shim & den Dikken, 2007;). Kim and Maling (1997) initiated the adjunct analysis,

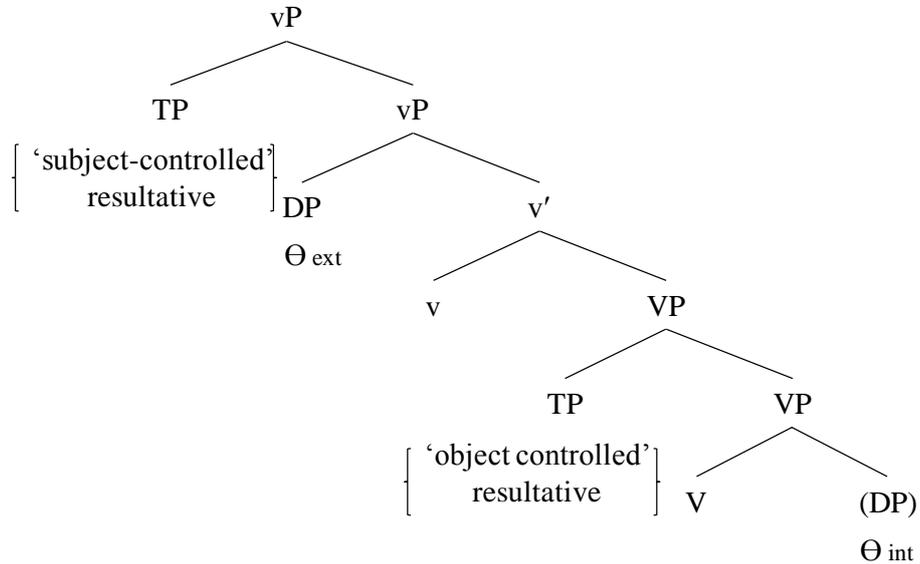
proposing that resultative constructions in English involve a lexical rule restructuring the argument structure of the main verb into a complex predicate, the “Resultative Formation”. According to them, Korean has no such lexical restructuring rule. Hence, the Korean resultative phrase is never promoted to argument status, but remains as an adjunct phrase.

Shim and den Dikken’s (2007) argumentation on Korean resultatives sheds light on the evidence of *pro* in Korean result phrases. Their discussion starts from the observation that Korean has two counterparts to English resultative sentences, For example, for a sentence like *Jim painted the floor white*, the Korean version can mark *patak*, the floor, as either accusative or nominative. Korean resultative secondary predicates project clausal, TP-level constituents and they are adjoined to vP or VP. The subject of the adjoined TP, *patak*, may be overt, in which case it is marked with nominative case. Or the subject may be a null *pro*, in which case the null subject is controlled by the object NP of the main verb, *patak*. Their structural proposal is presented in (15).

(15)

- | | | | | |
|----|---------|-------------------|-----------|---------------|
| a. | Jim-i | patak- <u>ul</u> | hayah-key | chilha-ess-ta |
| | Jim-NOM | floor- <u>ACC</u> | white-KEY | paint-PAST-DC |
| a' | Jim-i | patak- <u>i</u> | hayah-key | chilha-ess-ta |
| | Jim-NOM | floor- <u>NOM</u> | white-KEY | paint-PAST-DC |
- ‘Jim painted the floor white.’

b.



(Shim & den Dikken, 2007, pp. 5-7)

Ko (2011; 2014; 2015b) developed previous adjunct analyses and presented two types of secondary predication in Korean depending on the Case with which the subject of resultative predicates (RS) is marked, as exemplified in (16).

(16) a. Nominative RS

[vP S [VP [RP DP-Nom_i predicate-key][V' (*pro*_i) V]]]:

patak-i hayah-key chilha-yess-ta

b. Accusative RS

[vP S [VP [RP *pro*_i predicate-key][V' DP-Acc_i V]]]:

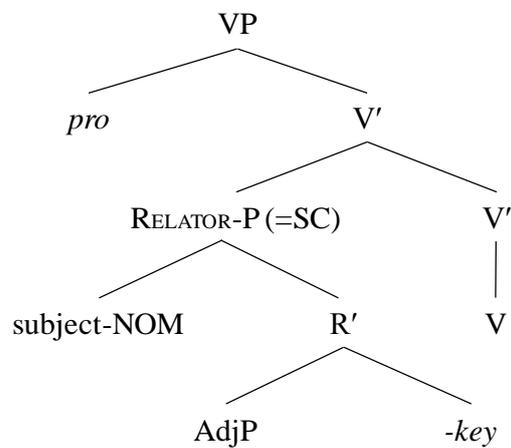
hayah-key patak-ul chilha-yess-ta

(Ko, 2011, p. 747)

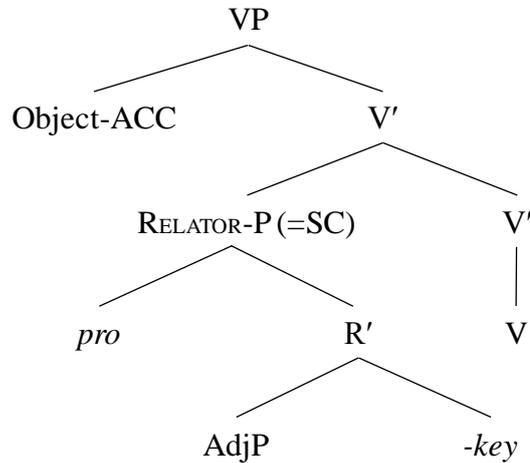
According to Ko (2011), a transitive verb allows nominative and accusative RSs while an intransitive verb allows only nominative RSs. Semantically, the accusative marked RS must be the affected theme of the main verb (16b) whereas the sentence in (16a) means that the floor accidentally gets covered with white paint as a result of Jim’s clumsy painting (p. 746). The morpheme *-key* is assumed here to be a morphological Spell-out of the RELATOR head.

Ko’s (2015b) structural proposal for *-key* resultatives in Korean is presented in (17)

(17) a. Structure of NOM-type (e.g., (16a))



b. Structure of ACC-*type* (e.g., (16b))



(Ko, 2015b, p. 369)

Ko's (2011; 2015b) structural proposal highlights the difference between English and Korean resultatives in that a Korean resultative predicate (AdjP above) can either be the predicate of either an external argument (main subject) or an internal argument (object) as in (18).

- (18) Susana-ka Jim-ul aphu-key/tolok ttayli-ess-ta
 Susana-NOM Jim-ACC in pain-R_{ES} hit-PAST-DEC
 'Susana_i hit Jim_j so that she_i/he_j was in pain.'

(Ko, 2011, p. 745)

In contrast, in English, a resultative (resultative predicate) can only be predicable of an internal argument (object) of the verb. This generalization is

(Shim & den Dikken, 2007, pp. 8-10)

Ko (2011) mentioned the issues above in comparison with English depictives and resultatives, and stated that “these facts can be taken together as evidence for the claim that resultatives are inside the complement domain of V while depictive phrases are adjuncts outside the domain of V” (p. 744).

Another observation can be added here. Lee (1996), Legendre (1997), and Ko (2011) showed that the word order of resultative-depictive is fixed and cannot be scrambled in English as shown in (20b).

(20) a. Peter painted the walls white naked.

b. *Peter painted the walls naked white. (Legendre, 1997, p. 83)

In contrary to English, Korean allows free order of resultative-depictive phrases, as exemplified in (21a) and (21b).

(21) a. Peter-ka pyek-ul hayass-key palkabess-ko chilha-yess-ta

Peter-NOM wall-ACC white-KEY naked-DEPI paint-PAST-DEC

‘Peter painted the wall white naked’

b. Peter-ka pyek-ul palkabess-ko hayass-key chilha-yess-ta

Peter-NOM wall-ACC naked-DEPI white-KEY paint-PAST-DEC

*‘Peter painted the wall naked white.’

The Korean sentences in (21a) and (20b) provide evidence that Korean AP-*key* phrases behave in a similar way to English depictive phrases. Accordingly, this new observation of the present study supports the argument that AP-*key* phrases are adjuncts, not complements.

2.3. Semantic Discussion: Telicity

2.3.1. Semantic Restrictions on English Resultatives and Korean AP-key Constructions

The syntactic analyses of English resultatives discussed above argue for complementhood: A Resultative is tightly related with a verb, as a sister of V in syntactic structure. This argumenthood leads to severe selectional restrictions on the choice of a resultative phrase as seen in (11) in section 2.2.1.

These semantic restrictions on English resultative constructions have been widely discussed and named by various terms in the previous literature (Goldberg, 1995; Goldberg & Jackendoff, 2004; Napoli, 1992; Hovav & Levin, 2001; Tenny, 1994; Vanden Wyngaerd, 2001; Wechsler, 1997). The semantic restrictions fit into four main categories, which are presented in (22).

(22)

a. Tenny's (1994, p. 11) Measuring-Out Constraint:

Resultative constructions require a MEASURE role to be licensed because they introduce a temporal endpoint and measuring-out to the event. Only a direct internal argument can measure out the event a verb refers to.

b. Goldberg's (1995, p. 195) End-of-Scale Constraint:

The type of adjective that can occur as a resultative is fairly limited, and they are 'non-gradable' adjectives having a clearly delimited lower bound.

The non-gradable adjectives cannot appear with quantifying phrases.

(e.g., ? *a little flat/dead/awake*)

c. Wechsler's (1997, p. 311) Canonical Result Restriction:

A control resultative must represent a 'canonical' or 'normal' result state of an action denoted by the verb

(e.g., *John hammered the metal flat/?shiny/*beautiful*)

d. Vanden Wyngaerd's (2001, p. 64) Boundedness Restrictions on Resultatives:

Resultative predicates denote a bounded scale. Therefore, unbounded modifier (*very*) cannot go along with resultative predicates while bounded scale modifiers (*half/almost/completely*) can.

(e.g., *Max shouted himself *very/half/completely/almost hoarse*).

Goldberg (1995) also pointed out that deverbal adjectives (present or past participle forms) cannot be result-XP (e.g. *she kicked the door open/*opened/*opening*). Goldberg and Jackendoff (2004) also stated that resultative constructions semantically designate STATES that are contingent on the action described by the main verb.

The semantic properties of resultative constructions were also investigated by Boas (2003) who argued for semantic constraints encoded at the level of lexicon. Boas presented co-occurrence patterns of resultatives based on British National Corpus data. He insisted that the distribution of resultatives cannot be “accounted for in purely syntactic terms, but their appearance is constrained by a number of semantic factors” such as a verb form containing event structure, this event structure denoting an endpoint of the activity (telicity), and the patient undergoing a change of state or location (p. 1).

Importantly, telicity is an essential property of English RCs as reviewed above: Telicity, however, is not an inherent semantic property of other constructions, such as simple transitive or ditransitive constructions (Beaver, 2011; Hay, Kennedy & Levin, 1999; Tenny, 1994). The telicity of the other constructions depends on how clear the incremental theme is, which is affected, for instance, by the presence of a definite/specific DP or a bounded path expression. Moreover, the prototypical result state (cased-HAVE state) for some ditransitives is usually cancellable as in *John sent/threw Mary the ball, but the heavy rain stopped her from getting it* (Beavers, 2011, p. 8).

Interestingly, it has been reported that these semantic constraints on English RCs do not hold for the equivalent Korean form, AP-key phrases (Hong, 2005; Hong 2011; Oh, 2010). The grammaticality contrast between Korean and English is presented in (23).

(23) Chelsu-ka Meli-lul ccalp-/yeyppu-/mesiss-key cal-ass-ta.

Chelsu-NOM hair-ACC short-/pretty-/stylish-KEY cut-PAST-DECL

Chelsu cut hair short/*pretty.

(Hong, 2011, p. 1156 & Hwang, 2011, p. 539)

As Wechsler (1997) argued, only some adjectives that denote the canonical result state of the action can appear in English. Unlike English, Korean allows a wider range of adjectives in *AP-key* phrases, which derives from the properties of *AP-key* phrases in Korean. They can function not only as a result-oriented adverb but also as a manner adverb (Hwang, 2011; Yim, 2007). Accordingly, it appears that fewer semantic restrictions are put on Korean RCs compared to English RCs.

2.3.2. Atelicity of Korean *AP-key* Phrase

The issue of telicity has been dealt with by many researchers as an element in the semantic constraints on English RCs (Goldberg, 1995; Kearns, 2007; Lee, 2004; Lee, 2014; Lee & Lee, 2003; Napoli, 1992; Hovav & Levin, 2001; Son, 2008; Wechsler, 2001). Telicity is relevant in Measuring Out constraint and Boundedness that imposes the bounds on the properties of an affected patient, in Tenny's (1994) terminology. A telic predicate describes a bounded eventuality, and the boundedness means the presence of a culmination point.

Telicity has been considered as the most distinctive semantic property of

English RCs in previous studies (Kim, 2005; Lee & Lee, 2003; Rothstein, 2003; Wechsler, 2001). According to Wechsler, “If there is any aspect of resultatives that is completely uncontroversial, it is that they are ‘*telic*’: they describe events with a definite endpoint” (p. 4). Lee and Lee (2003, pp. 182-183) presented the semantic properties of Korean RCs using the marking, [TELIC +/-] in the framework of HPSG (Head-Driven Phrase Structure Grammar). Rothstein (2008) also argued that in resultative predication, there is a singular event that is the sum of “the culmination of the event” introduced by the matrix verb and the event of the adjectival predicate.

Since telicity is mainly defined with regard to a culmination point, a standard test for telicity is the allowance of a time adverbial like *in ten minutes* (Baker, 1995; Fleischhauer, 2013). The example sentences in (24), which are from Son (2008, p.103), show the atelicity of Korean AP-*key* resultatives.

(24)

a. John ran the shoes threadbare in/*for 5 minutes.

[English intransitive = telic]

b. John-i o-pwun-?maney/tongan sinpal-i talh-key
ttwi-ess-ta.

John-NOM five-minute-in/for shoes-NOM threadbare-KEY
run-PAST-DEC

[Korean intransitive = atelic]

c. John pounded the metal flat in/*for 5 minutes.

[English transitive = telic]

d. Inho-ka o-pwun-maney/tongan chelphan-ul napcakha-key
twutulki-ess-ta.

Inho-NOM five-minute-in/for iron.plate-ACC flat-KEY

pound-PAST-DEC

[Korean transitive = telic/atelic]

While the English intransitive and transitive resultative constructions disallow *for*-phrases and behave like telic predicates, the Korean equivalent constructions behave like atelic predicates. It is noteworthy that both the *in*- and *for*-phrases are allowed in (24d), which shows that Korean AP-*key* phrases are adjunct phrases expressing result (telicity), manner, or degree (atelicity) at the same time. Accordingly, unlike in English, Korean AP-*key* phrases, as illustrated in (23), do not always mean culmination point (Hwang, 2011, p. 539) and can denote atelic readings.

The other standard test for telicity is a negation test (Fleischhauer, 2013, p. 132). Because the resultative adjective phrase in English expresses the end-state of the theme and the end-state bounds an event (Kearns, 2007, p.47), English resultative constructions do not allow negation of the end state (Park, 2011, p. 13). Korean AP-*key* resultatives, however, do allow negation, as shown in (25).

(25) a. ?? He hammered the metal flat, but the metal is not flat.

b. Keu-ka chelphan-ul pyengpyengha-key/chi-tolok twutulki-ess-euna,
He-NOM metal-ACC flat-KEY/BECOME-TOLOK pound-PAST-
BUT

chelpan-eun pyeongpyonghay-chi-chi ahn-ass-ta.⁶

The metal-NOM/TOP flat-BECOME NEG-PAST-DECL

Oh (2010) called this negation test a cancellability test, and explained that Korean resultative phrases are adjuncts whose telicity is not secured. In other words, Korean resultative AP-*key* phrases can be atelic, in which case they indicate the purpose or degree of the action, not only the result of the action.

The third diagnostic for telicity is the allowance of degree modifiers. One line of studies has dealt with the distributions of degree modifiers in terms of compatibility with certain types of adjectives (Kennedy & McNally, 2005; Rotstein and Winter, 2004; Yoon, 1996).

Another line of researches has probed this issue in terms of licensing resultative constructions. Vanden Wyngaerd (2001)⁷ argued that modification by bounded-scale modifiers (*complete/almost/half*)⁸ is possible while modification by

⁶ Oh's (2010) original example sentence had *pyengpyeongha-chi*. I modified it to *pyeongpyeonghay-chi-chi* which sounds more natural.

⁷ A causative construction of *make* allows the appearance of *very* in result-AP in Dutch and English. Vanden Wyngaerd (2001, p. 74) inferred from this fact that the causative construction cannot correspond directly to a resultative construction. I think this fact reflects that *make* is an extremely high-frequency verb, which has led to allowing co-occurrence with *very* (See Kim (2015) for the use of *make* and Korean causative forms).

⁸ According to Hay, Kennedy and Levin (1999, p. 134), degree modifiers like *completely* “make

very is infelicitous in both Dutch and English resultatives. *Very* is a modifier that qualifies unbounded scales: Therefore, it cannot appear in resultatives as (26a) demonstrates.

(26) a. Max shouted himself completely/almost/half/*very hoarse.

b. Max is completely/almost/half/very hoarse.

(Vanden Wyngaerd, 2001, pp. 64-65)

It is notable that *very* cannot occur with the resultative predicates in (26a) while *very* can modify *hoarse* in (26b). The adjectives can be modified by *very* when they do not co-occur with resultative predicates. Kearns (2007) modified Vanden Wyngaerd's (2001) argument, pointing out that *almost* and *half* are sometimes infelicitous in English resultatives because an unmodified result phrase by itself can simply express a standard end-state of accomplishment.

2.3.3. Modifier Survey

Based on the previous diagnostics for telicity, a modifier survey was conducted, with a view to highlighting the contrast between English and Korean resultative constructions in terms of telicity and boundedness.

explicit reference to an endpoint.” Therefore, allowance of these modifiers satisfies telicity.

Four degree adverbial modifiers, *slightly*, *more*, *very*, and *completely* were chosen on the basis of previous works (Hay, Kennedy & Levin., 1999; Kennedy & McNally, 2005; Kearns, 2007; Rotstein and Winter, 2004). Then English native speakers and 10 Korean native speakers were asked to take part in the survey. The results are presented in (27).

(27) [English]

a. I painted the wall ?slightly/*more/*very/completely red.

[Korean]

b. Na-neun pyek-eul cokeum/teo/acwu/wancenhui

I-NOM wall-Acc slightly/more/very/completely

ppalkass-key chilha-ess-ta.

Red-KEY paint-PAST-DEC

According to the 10 native speakers of English informants, these modifiers differ in their compatibility with result-APs. The adverbial *slightly* was arguably acceptable in modifying result-APs in English: Half of the English speakers accepted it and half rejected it. *Very* and the comparative forms were totally rejected: 10 out of 10 of the English speakers rejected these modifiers. However, *completely* was accepted by every informant.

In contrast, all of the native Korean-speaking informants freely accepted APs with all of the degree modifiers. This result confirms that Korean APs can identify

the midway-point, not necessarily the end-point of the action or event described. This modifier survey serves as evidence that Korean AP-*key* constructions allow atelic interpretations, unlike English RCs.

Based on the observations above, I propose here that Korean AP-*key* phrases, which have been equated with English resultative phrases, are not always resultative phrases. They can denote an atelic meaning, which allows various interpretations. The felicity of *teo/acwu*, ‘very’ in (27) serves as evidence that Korean AP-*key* constructions denote degree of achievement and do not necessarily entail a change of state (Fleischhauer, 2013, p. 135).

2.3.4. Syntax-Semantics Interface

Telicity is known to be linked to transitivity/affectedness (Hovav & Levin, 2001; Kratzer, 2002; Wagner, 2006; Winkler, 1997). Kratzer (2002) proposed a connection between telicity and accusative case in German and English, following Chomsky’s (1995) Minimalism: The object DP has the uninterpretable feature, [acc], and it is forced to enter an agreement relation with the verbal inflectional feature, [acc] (= [telic]) (p. 16). Winkler (1997) assumed that the postverbal NP has to be an “affected theme” which serves to measure out the event. Hovav and Levin (2001) also noted that affectedness and telicity are required in resultatives.

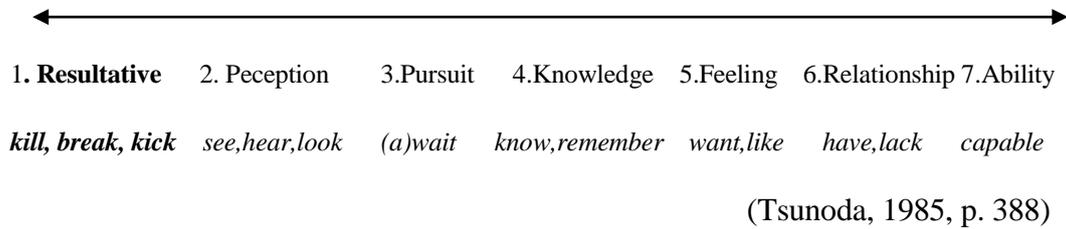
The direct link between telicity and transitivity was proved by Wagner (2006)⁹, who presented evidence that children use transitivity as a structural cue to telicity.

The interface between syntax and semantics is found at this point: The low transitivity (adjuncthood) of Korean RCs is linked to the atelicity of them. In other words, the reason why Korean resultative constructions allow [-telic] (atelic) readings is that they are not complements but adjuncts: Korean *-key* resultatives can be predicable of both the external argument and the internal argument (affected theme, object) depending on context, as seen in (18). Korean AP-*key* constructions are free from telicity restrictions on resultatives because they do not always predicate affected themes or NP objects.

In contrast to Korean, the English resultative construction is at the highest level of “affectedness” on the scale in Tsunoda’s (1985, p. 386) remarks on transitivity. Tsunoda refined Hopper and Thompson’s (1980) scale for transitivity and presented a hierarchy of two-place predicates showing the degree of “affectedness”. Tsunoda’s scale is shown in (28).

⁹ Wagner (2006) showed that 2-year-old children produced more goal-based answers (depicting direction or an object denoting “telicity”) when they were asked a question or presented with video scene descriptions in transitive form (pp. 69-70). This result indicates that there is a bias toward linking transitive structures to telic meanings. Wagner (2006) stated that “cross-linguistically, telicity has a variety of syntactic reflexes, including case marking, verbal morphology, adverb selection, auxiliary selection, argument structure variations, and word order” (p 51). Her description of the interface between telicity and syntax is perfectly in harmony with the linguistic view of this dissertation.

(28) **Affectedness Scale of Two-Place Transitive Predicates**



According to Hopper and Thompson's (1980) and Tsunoda's (1985) scales, English resultatives are at the highest level of transitivity and affectedness, which is linked to telicity as well¹⁰. In sum, English resultatives are complements denoting a high degree of transitivity and telic meanings. On the contrary, Korean AP-*key* resultatives are adjuncts that can denote atelic meanings.

¹⁰ Hopper and Thompson (1980) defined the strength of transitivity in terms of number of participants, kinesis (action/non-action), aspect (telic/atelic), punctuality, etc. According to them, a resultative sentence like Jerry knocked Sam down is an example of cardinal transitivity because of the sentences properties of kinesis (action), aspect (telic), and punctuality (punctual), etc (pp. 251-253).

2.4. Previous Acquisition Studies

Recent studies have recurrently reported Korean EFL learners' difficulties with English resultative constructions (Choi, 2015; Lee & Kim, 2011; Rah, 2014; Shin, 2010; Sung, 2012; Sung & Yang, 2016). These studies observe that Korean learners show significantly poor performance on the target construction.

Lee and Kim's (2011) study is a good example showing Korean learners' poor comprehension of English RCs. They investigated whether there is a particular developmental sequence of English constructions for Korean learners via a translation task. The participants were 65 Korean learners divided into three proficiency groups: 50 secondary school students and 15 university students were recruited. This study required the participants to translate 40 English sentences with eight different constructions within 30 minutes.

Lee and Kim's (2011) results suggest that the resultative construction is very late in the developmental sequence: The learners could not understand English resultative constructions and could not translate the target constructions into Korean. The learners had particular difficulty with ditransitive, caused-motion, and resultative constructions.

Korean learners' poor understanding of English RCs was reported by Shin (2010) as well. He conducted a Bencini and Goldberg's (2000) sorting task with 11 university students. The participants were given the same 16 sentence stimuli used in Bencini and Goldberg's (2000) study. They were asked to translate the sentences into Korean and then sort the sentences into four groups.

The results showed that the participants tended to mistake caused-motion and resultative constructions for transitive constructions. Specifically for the resultative construction, only 27% of the participants exhibited correct recognition of the target construction, while 100% of them showed correct recognition of the transitive construction.

Several instructional studies (Rah, 2014; Sung, 2012; Sung & Yang, 2016) have presented the positive effects of construction-grammar-based (CG, hereafter) instructions for Korean EFL learners in comparison with traditional form-focused instructions.

For example, Sung and Yang (2016) conducted a CG instruction of English transitive resultative constructions with 93 Korean secondary school students. The participants' performance was tested via Korean-to-English translation and English-to-Korean translation tasks in a pretest and a posttest. The results provide evidence that CG is more effective than form-focused learning.

Sung's (2012) CG study makes an interesting point. He observed that many students failed to comprehend some of the test items with basic verbs, such as *He took the tower down* (p. 70). Although the study showed that CG was significantly effective in learners' acquisition of resultative constructions in general, it also pointed out that some Korean learners have only a vague understanding of English RCs.

The effectiveness of CG and the hierarchical networks among constructions on sentence production ability was proved by Rah (2014), who tested sentence production ability. He conducted eight 50-minute sessions over eight weeks with

51 Korean EFL learners and tested the effect of CG through a translation task, a picture description task, a guided writing task, and a grammaticality judgment task (GJT). As predicted, the CG groups outperformed the control group.

Rah (2014, pp. 141-142) also reported qualitative findings showing Korean learners' difficulty with resultative constructions in terms of accuracy. He found several error types, including "misordering errors" (e.g., *She is painted blue the wall, James kicked open the door*), and "complement omission errors" (e.g., *She wiped the mirror, She painted the roof with yellow*). Rah pointed out that complement omission, which was the most frequent error type with the resultative construction in the pretest, would be due to structural complexity.

An important sketch of the use of English RCs by Korean learners is found in the report by Choi's (2015) report. She looked into Korean middle school students' use of communicative functions and CG-framed argument structure constructions via oral production. She reported that Korean learners could not convey communicative contents using various types of argument structure. Instead, they relied heavily on simple transitive sentences (NP + V + NP) when they exchanged information in English.

A notable observation by Choi (2015) was the extremely low frequency with which Korean learners uttered English RCs. Only 0.4 % of the learners' utterances were AP resultative sentences while 49.3% of them were simple transitive sentences. This means that Korean students cannot produce resultative sentences to convey their intended meaning.

Korean learners' poor performance on English RCs is considered to be due

mainly to linguistic differences between English and Korean. The English RC has different characteristics from the Korean RC, *AP-key* construction in terms of syntactic and semantic properties as presented in sections 2.1 and 2.2 (Acedo-Matellán, 2012; Hong, 2005; Hong, 2011; Hwang, 2011; Ko, 2011, 2014; Oh, 2010; Shim & den Dikken, 2007).

Language acquisition studies conducted with various first and target languages, including Spanish, Chinese, Korean, and Japanese, have dealt with L1 transfer issue. (Slabakova, 2002; Whong-Barr, 2005; Yotsuya et al, 2014). Some of them have reported L1-transfer effects in the comprehension of RCs, while others have focused on evidence for the existence of constructions in the linguistic systems of foreign language learners (Gries & Wulff, 2005; Liang, 2002; Manzanares & López, 2008; Shin, 2010).

For instance, Liang (2002), Gries & Wulff (2005), Manzanares & López (2008), and Shin (2010) replicated Bencini and Goldberg's (2002) sentence-sorting task with Chinese, German, Spanish, and Korean learners of English respectively. The experimental procedure in these four studies was basically the same as the experimental design employed by Bencini and Goldberg. The participants were given 16 sentence stimuli with four different verbs and four different types of argument structure constructions (ASCs): transitive, ditransitive, caused-motion, and resultative.

The four replication studies all arrived at similar results, reporting that the construction, not the verb, was the main contributor to the sorting of sentence meaning by foreign language learners. The average number of changes necessary

for classification by the verb only (Vdev for *verb deviation*) was significantly higher than the average number of changes required for classification by the construction only (Cdev for *construction deviation*). The results reveal that L2 learners of English “rely on constructional information when they have to decide on the overall similarity of a group of different sentences” (Manzanares & López , 2008, p. 222).

Manzanares and López (2008) also highlighted that they investigated a language (Spanish) in which three of the four ASCs do not exist: Spanish has a transitive construction, but lacks ditransitive, caused-motion and, resultative constructions that correspond exactly to the English constructions. Therefore, the evidence that Spanish learners could utilize construction knowledge in overall perception of types of English sentences might be a counter-example of L1 influence on construction knowledge.

Another line of studies have provided evidence for L1 influence on the learning of English resultative constructions by L2 learners. Slabakova (2002) reported an experimental study on the L2 acquisition of Spanish resultatives by L1 English and L1 French speakers. She tried to contrast the L1 effect between English and French in L2 acquisition. French and Spanish do not allow resultatives equivalent to English resultatives, as shown by the Spanish sentences with their English translations in (29). (Romance language resultatives were discussed in section 2.1 as well.)

(29) a. *Ben lavó las ventanas limpias

Ben wiped the windows clean

b. Ben lavó las ventanas hasta que quedaron limpias

Ben wiped the windows until they were clean.

(Slabakova, 2002, p. 514)

As in (29b), a resultative meaning in Spanish (and French) is expressed via an adverbial clause. Slabakova (2002), therefore, hypothesized that English speakers would wrongly accept ungrammatical Spanish sentences like (29a) and French speakers would not, because of L1 transfer.

Slabakova recruited 25 French speakers of low Spanish proficiency, 33 English speakers of low Spanish proficiency, 27 English speakers of intermediate proficiency and 26 English speakers of advanced proficiency in total. All of them were adults. The test instrument was a grammaticality judgment task (GJT) including seven grammatical pseudo/periphrastic Spanish resultatives and seven ungrammatical Spanish resultatives, as in (29b) and (29a), respectively. All of the translation sentences were possible in English.

The results strongly supported the hypothesis of L1 transfer. The French speakers correctly rejected the illicit Spanish resultatives at the rate of 80% while the English speakers incorrectly accepted them at the rate of 69%. Slabakova pointed out that even the advanced learner group was poor at the comprehension of L2 resultatives. Although the imbalance of the different language groups' Spanish proficiency levels is a methodological issue, it is nevertheless clear that

Slabakova's (2002) results provide evidence of L1 transfer in the acquisition of L2 Spanish resultatives.

Whong-Barr's (2005) dissertation focused on morphosyntactic crosslinguistic effects in the acquisition of L2 English resultatives. Whong-Barr points out that, unlike English, Korean is a morphologically rich, agglutinative and head final language. Moreover, the semantic restrictions on English resultatives do not apply to Korean, as (30) demonstrates. She, finally, emphasizes that "the other crucial difference between English and Korean is the existence of the obligatory *-key* morpheme in the Korean resultative" (p. 95).

(30) Mia-nun kuneyuy meli-lul yeppu-key soncilhay-ss-ta
Mia-TOP her hair-ACC pretty-KEY fix-PST-DEC
*Mia fixed/cut her hair pretty.

(Whong-Barr, 200, p. 93)

Whong-Barr compared the acquisition of English RCs by Korean and Mandarin learners of English, noting that Korean is the only one of the three to employ a functional morpheme (*-key*) for resultative formation. Her study investigated what effect the L1 transfer of *-key* might have in the acquisition of L2 English RCs.

A grammaticality judgment task was conducted with 19 native speakers of English, 14 Korean native speakers and 32 Chinese native speakers. All of them were adults. The participants were grouped into three English proficiency groups:

L1 Korean High ($n = 2$), Mid ($n = 6$), Low ($n = 6$), and L1 Chinese High ($n = 6$), Mid ($n = 11$), and Low ($n = 15$). As the participant number for each group was small, Whong-Barr (2005) did not conduct statistical analysis.

The total number of 24 resultative sentences were devised and presented to participants, being paired with 12 depictives and 12 other sentence types. The 24 resultative sentences were grouped into four grammaticality types (GGG, UUU, GUU, UGG).¹¹ These grammaticality types, however, are problematic because she chose the sentences relying only on her judgment with reference to previous literature (p. 186). In fact, she found disagreement on the grammaticality of some test items between herself and her native speaker informants later, so she discarded six test sentences and reanalyzed her data (pp. 207- 236).¹² As a result, 18 test items remained for analysis.

For each item, the participants were asked to determine the naturalness of the two sentences (a target sentence and another sentence type) respectively using a 6-point Likert scale (-3 to 3) after reading a short story describing the contexts. She reported individual acceptance rates for each type as percentages.

¹¹ In these abbreviations for types, the first G or U refers to (un)grammaticality in English: the second for (un)grammaticality in Korean, and the third for Chinese (Whong-Barr, 2005, p. 185).

¹² The six discarded problematic sentences were as follows: the types in the parentheses were her initial assumption (p. 207):

- a. Mary smashed the black pepper fine. (GGG)
- b. Mary ran her feet sore. (GGG)
- c. Mary danced her shoes worn. (GGG)
- d. The rooster crowed Mary awake (GGG)
- e. Mary watered the flowers flat. (GUU)
- f. The hot coals burned Carl's feet blistered (GUU)

The results support Whong-Barr's (2005) hypothesis that for native Korean speakers, the language-specific morphology (*-key*) affects the acquisition of English RCs: Four out of the 14 Korean participants showed a tendency to reject grammatical English resultative sentences while only one out of 32 Chinese participants rejected them. As Whong-Barr concluded:

“When a Korean speaker is faced with an English resultative, by full transfer, s/he uses the grammar of Korean...the insertion of an overt resultative morpheme. This is where the mismatch occurs...So Korean learners are expected to find all English resultatives ungrammatical at least initially” (pp. 258-259).

Yotsuya et al.'s (2014) experimental study investigated L2 acquisition of English resultatives based on Washio's (1997) weak and strong resultatives (see the following section 2.4). One of their research questions was whether or not L2 learners know that strong and weak resultatives are allowed in English. Three English proficiency groups of 81 Japanese learners of English and 10 English native speakers participated in their study.

Their test instrument was also an acceptability judgment task (AJT). With regard to resultatives, five items for each type (strong/weak) were provided as stimuli. The participants were presented with a pair of sentences, one that provided context and one that was a test sentence. The participants rated the test items on a 4-point Likert scale (1 to 4). Unnatural items were designed to be grammatically

correct, but semantically odd in the given context. For example, ‘The window was broken and...*John wiped the window clean*’ is an unnatural sentence because the resultative phrase mismatches with the preceding context.

Yotsuya et al.’s (2014) prediction that Japanese learners would accept weak resultatives but not strong resultatives, however, was not supported. The Japanese learners all accepted strong resultatives, which do not occur in Japanese. A consistency test was administered to reanalyze these results, and it showed that Japanese learners’ rate of consistently right answers (more than 4 out of 5 correct answers) was much lower than NSs: 43.2% of the Japanese learners were consistently accurate in their judgments while 70% of the NSs showed consistency.

Regarding the unexpectedly low consistency rate of the NSs, the authors acknowledged that it might “indicate some problems with the design of the task. ...We were only able to tap their preference but not their linguistic knowledge” (p. 98). This statement implies an important methodological point. The design itself, in which unnaturalness indicates the mismatch between the test sentence and the context, seems awkward. “Unnaturalness” or “unacceptability” should be determined in terms of the appropriateness of a test sentence itself, not in terms of mismatch with context. In addition, participants’ linguistic knowledge could be better tapped with interviews about their explicit knowledge and judgments.

The present study referred to Park and Lakshmanan’s (2007)¹³ format for a

¹³ Park and Lakshmanan’s (2007) GJT results showed that Korean L2 learners of English can make the unaccusative-unergative distinction in English resultatives. Both the Korean learners and the NSs in their study correctly accepted the resultative sentences with transitive verbs (e.g., He painted his car yellow) and alternating unaccusative verbs (e.g., Her hair grew long). An

GJT, which includes preceding context for each test sentence. Park and Lakshmanan also suggested that they should have inquired into the role of the morpheme, *-key*, in order to confirm their conjecture that their Korean participants might have treated the adjective in the resultative predicate as adverbial.

The present study has discovered that the test instruments of the previous studies on the acquisition of English RCs were GJTs (Park & Lakshmanan, 2007; Slabakova, 2002; Whong-Barr, 2005; Yotsuya et al., 2014) and that the studies have made no serious attempt to elicit learners' production of the target construction. Keeping these methodological gaps in mind, the present study has developed more refined test instruments, which will be described in chapter 3.

advanced L2 group and the NS group correctly rejected the incorrect resultative sentences with unergative verbs (e.g., *She sang hoarse). The intermediate L2 group, however, failed to reject this type.

CHAPTER 3.

METHODS

This chapter presents a pilot study and the methodology used in the two main experimental studies. Section 3.1 provides an overview of the findings of the pilot study. Section 3.2 presents the methodology employed in the first main study, Study I: participants, task and procedure, and data coding and analysis. Section 3.3 presents the methodology used in the second main study, Study II.

3.1. A Pilot Study

Few existing studies have examined how L2 English learners whose first language's typology is different from that of English produce English resultative constructions. Moreover, most of the previous studies have employed acceptability judgment tasks rather than looking into production data. The present pilot study aimed to take a look at the overall patterns of production of English resultative constructions by Korean EFL learners.

3.1.1. Participants

A total of 22 Korean high school students participated in the pilot study. The

Korean speaking participants were from Cheongdam high school in Seoul: All of them were female in their second year. The participants were all enrolled in advanced classes in their school and highly motivated to learn English. Since they were assigned to the advanced class according to their school test scores, their proficiency level was considered to be high level. None of them dropped out during the pilot study and all of them completed the given task within the time limit.

3.1.2. Instrument and Procedures

The pilot study employed an elicited writing task (EWT). The task included nine stimuli, in which the verbs, *pull*, *hammer*, *comb*, *paint*, *roll*, *mop*, *kick*, *make*, and *paint* were given with contextual information. The information was provided via pictures and Korean sentences which depicted simple events with an agent, an object being affected, and a result state. The key words needed to complete the sentences were presented with pictures as well: The verb, an object noun, and an adjective were given in the parentheses. The participants were asked to complete the task within 30 minutes.

This EWT required the learners to produce resultative sentences that included resultative phrases denoting endpoint states.¹⁴ Every sentence produced by the

¹⁴ The target structure of this pilot study was defined following Goldberg and Jackendoff's (2004) description: "An identifying characteristic of a resultative sentence is an AP or PP that occupies the normal position of a verbal argument. Resultatives must be distinguished from depictives in that they are clear adjuncts, not argument phrases, and semantically in that they do

learners was examined only for the use of the target structure. Grammatical errors irrelevant to the use of the resultative construction were put aside throughout analysis. A sample item from the EWT is provided in figure 3.1.

1. 

그녀가 문을 당겨 열었다.
She _____ (pull, door, open)

Figure 3.1. Sample Item of Pilot Study (EWT)

3.1.3. Results

The participants seemed to have difficulty in the production of resultative sentences. Only 32.8 % of their answers were resultative sentences. ($N = 22$, $Mean = 2.95$, $SD = 1.94$). Most of them completed the given sentences using

not designate states that are contingent on the action described by the main verb.” (p. 536)

adverbial phrases or two verbs. Table 3.1 summarizes the learners' production of English resultative constructions.

Table 3.1 Results of the Pilot Study

Target Forms	Students' Answers	Error Types
pull the door open	<i>pull and open the door</i>	two verbs/gerund
	<i>open the door with pulling</i>	(serial verb)
hammer the metal flat	<i>hit the metal by hammering</i>	two verbs/gerund
	<i>hammers metal to flat</i>	use of preposition
comb her hair smooth	<i>comb her hair to make it smooth</i>	adjunct phrases
	<i>comb her hair smoothly</i>	
paint the wall red	<i>paint the wall into/in/by/with red</i>	use of preposition
roll the paste thin	<i>roll the paste to make it thin</i>	adjunct phrases
mop the floor clean	<i>cleans the floor by mop</i>	adjunct phrases
	<i>mop the floor to clean the room</i>	
kick the door open	<i>kick the door</i>	missing result phrase
make me happy	<i>make me happy</i>	almost none
paint the wall blue	<i>paint the wall in blue</i>	use of preposition

As expected, many of the learners asked the researcher whether they could use more than two verbs or two sentences to complete the given sentences. They showed unfamiliarity with the target construction after their first glance of the test items. They could not produce the target construction, “V+NP+AP (resultative phrase)”. Instead, they answered using adjunct phrases, prepositions, or serial verbs.¹⁵ Some examples of a participant’s answers are given below.

[Learner ID no. 21]

- i) Use of serial verbs (e.g., “*pulled and opened the door*”)
- ii) Use of adjunct phrases (e.g., “*comb her hair smoothly*”; “*is painting the wall with red color*”; “*mopping the floor to clean the room*”)
- iii) Missing result phrase (e.g., “*kicks the door*”)

The learners showed great unfamiliarity with the production of resultative constructions even though they were advanced learners. They were not able to put an agent, a verb, an affected NP, and a resultative AP in one sentence. They preferred to use adjunct phrases or two lexical verbs to describe the given contexts.

Although this pilot study provides an overview of learner language, it has several limitations. The number of participants was small, and there was no control

¹⁵ In the analysis of the present study, “serial verb” means “serial verb construction” which includes “two lexical verbs in one clause” sharing one argument. They are also called complex predicates and compound verbs. In-depth discussion on Korean SVCs (serial verb constructions) is beyond the scope of the present study, but the reader is referred to the work of Ko and Sohn (2015) and Choi (2003).

group. The learners were not divided by proficiency level, and the test items were not based on authentic language, for example, corpus data. Most of all, the test items did not involve the semantic properties of Korean and English RCs.

Keeping these methodological limitations in mind, this dissertation's two main studies were designed to include large numbers of participants paired with a control group and divided into two proficiency levels. Test items were selected from Boas' (2003) BNC corpus data and were designed to reflect semantic properties as well.

Study I (Comprehension Test) explored Korean learners' knowledge of English RCs via an acceptability judgment task and an elicited choice task. It is described in section 3.2. Study II (Production Test) examined learners' production of RCs in an elicited writing task, and is described in section 3.3.

3.2. Study I (Comprehension Test)

The purpose of Study I was to investigate Korean learners' judgment of acceptability and their preference among competing forms in comparison with native speakers of English. The study investigated whether syntactic and semantic differences between the two languages play a role in learners' comprehension of English resultative constructions.

3.2.1. Participants

A total of 116 volunteer participants were recruited for the study, 17 of whom were educated native English speakers and 99 of whom were Korean-speaking L2 English learners. The 17 native English speakers (NSs) were mostly exchange undergraduates at Ehwa Womans University and Seoul National University, while some of them were graduate students. The native controls ranged in age from 20 to 30, with an average of 24.8.

Initially, 28 self-reported native speakers volunteered, but 11 of them were excluded because their first language was considered to be Korean. They acquired English after their childhood although they were educated in English-speaking countries after their immigration. The present study tried to exclude these Korean American volunteers for native controls, but includes Korean

Americans only who acquired English from their birth and grew up abroad at least until their secondary school education. Details of the native controls' information are given in table 3.2.

Table 3.2 Study I: The Native English Speaker Participants

Gender	Age	Nationality	Period of residence in Korea (years)
Male	25	Korean-American	6
Male	23	British	3
Male	24	Australian	1
Female	25	American	2.5
Female	26	American	5
Male	26	American	2.5
Female	36	Korean-American	10
Male	33	British	2
Male	25	British	0.3
Female	27	American	0.6
Male	21	American	0.3
Male	21	American	5
Female	20	Irish	0.5
Female	21	Korean-American	0.9

Female	21	Korean-American	0.4
Male	27	Korean-American	0.5
Male	21	American	0.3

Although all of the native English speaker participants used English as their first language, some of them spoke Korean to some degree. One participant was a fluent bilingual in English and Korean, but had grown up in the United States until puberty.

The remaining 99 Korean learner participants were enrolled in Incheon High School and Gyeongin National University of Education in Seoul. Initially, 108 Korean learners volunteered, but nine of them were excluded from the analysis because they failed to complete the tasks. The ages ranged from 17 to 24, with an average age of 19.9.

The Korean participants were divided into two proficiency levels based on the Michigan test of L2-English proficiency, adopted from Ko, Ionin, and Wexler (2009). The learners who answered more than 23 right answers out of 30 questions correctly were assigned to the high proficiency group (H group; $n = 48$). The learners scoring under 22 right answers were assigned to the low proficiency group (L group; $n = 51$).

Most of the Korean participants were introduced to English in primary school in Korea, thus having a learning experience of about 10 years duration. All of them were receiving instructions at school at the time of the study, but many of

them also reported that they attended English cram schools. Table 3.3¹⁶ summarizes the participants' ages at the time of the experiment, ages of acquisition of English (AoA), and proficiency test scores.

Table 3.3 Study I: Participants' Mean Age, AoA, and Proficiency

Group	Age	AoA	Proficiency score
L (n = 51)			
Mean	18.8	9.8	12.5
SD	2.2	3.0	4.8
Range	17-23	3~17	3~20
H (n = 48)			
Mean	21.1	9.2	24.7
SD	1.1	2.2	1.8
Range	17-24	5~14	23~29
NS (n = 17)			
Mean	24.8		
SD	4.4		
Range	20-36		

A one way-ANOVA comparing the two learner groups (L and H groups) found age to be significant ($p < .01$), as most of the high school students were

¹⁶ The format for reporting participants' information is adapted from Montrul and Santos (2011)

assigned to the L group while most of the university students were assigned to the H group . Interestingly, the two Korean learner groups did not differ significantly in their AoA of English ($p = .22$). Thus, the two experimental groups were comparable in general.

3.2.2 Instruments and Procedures

This section describes the two instruments employed in Study I: an acceptability judgment task (AJT) and an elicited choice task (ECT). The two tasks were administered on the same day, and were followed by a proficiency test and background surveys. Each task took approximately 15 minutes, and the whole experimental process took about 50 minutes.

The tasks were administered in the sequence of ECT, the proficiency test, AJT, and surveys. This sequence was intended to minimize interference effects between the AJT and the ECT: The ECT was administered first because the AJT could provide cues for participants' choices on the ECT.

3.2.2.1. Background Surveys

After they completed the two main tasks of Study I, the AJT and the ECT, the Korean participants were asked to answer short background surveys (see Appendix G). The surveys were designed to gather information about construction recognition and their English learning experiences, such as awareness of

resultative constructions, age of acquisition (AoA), and experience of living in an English-speaking country.

3.2.2.2. Acceptability Judgment Task (AJT)

The AJT required the participants to judge sentences with regard to their acceptability. This task was conducted to explore how Korean EFL learners' comprehension of English RCs is influenced by their L1. The test design was mainly based on Park and Lakshmanan's (2007) GJT.

Three types of AP resultative sentences were presented in the AJT: grammatical resultatives, syntactically unacceptable resultatives, and semantically unacceptable resultatives. Examples are given in table 3.4.

Table 3.4 Sentence Types Used in the Acceptability Judgment Task

Type	Sentence	# of items
1. Grammatical Resultatives	<i>Mary shook him awake.</i>	4
2. Syntactically Unacceptable (Possible in Korean)	<i>You can make the meat <u>tenderly</u>.</i>	4
3. Semantically Unacceptable (Possible in Korean)	<i>She will drive you mad <u>for a few minutes</u></i>	4

This task was designed to inquire into the question of how syntactic and semantic properties of the L1 affect L2 acquisition of RCs. For this reason, the task included sentence types that were odd in terms of syntax or semantics. This is in sharp contrast with the previous crosslinguistic acquisition studies on the RCs, which have employed stimuli designed only to address semantic acceptability (Whong-Barr, 2005; Yotsuya et al., 2014).

A total of 20 sentences were presented: 12 experimental sentences and eight distracters were presented. The purpose of fillers is to distract participants' attention from the test items to avoid skewing their behavior. All the experimental items and distracters are listed in Table 3.5.

Table 3.5. Sentences Used in the Acceptability Judgment Task

Type	Sentence	Source/Type
1	<i>Mary shook him awake.</i>	Boas (2003), Wechsler (2000)
	<i>I cut her hair short</i>	Napoli (1992)
	<i>The fan beat him unconscious</i>	Boas (2003)
	<i>Let's scrub the pot shiny</i>	Hong (2005)
2	<i>You can make the meat <u>tenderly</u>.</i>	Boas (2003)
	<i>She sang horse</i>	Boas(2003), Yoe (2006)
	<i>The river froze <u>solidly</u></i>	Hong (2005), Wechsler & Noh (2001)

	<i>She is rolling the dough <u>thin</u></i>	Hong (2011), Rothstein(1985)
	<i><u>large</u></i>	
3	<i>She will drive you mad <u>for a few</u></i>	Boas (2003), Son (2008)
	<i><u>minutes</u></i>	
	<i>He wrung the shirt <u>damp</u></i>	Napoli (1992)
	<i>He dyed his hair red but it did</i>	Kearns (2007), Oh (2010)
	<i>not become red</i>	
	<i>He is wiping the table <u>very clean</u></i>	Vanden Wyngaerd (2001)
Distracter	<i>I put strawberry jam the bread</i>	Caused Motion
	<i>She always calls me a genius</i>	SC complement
	<i>My sister put it</i>	Caused Motion
	<i>It makes me to get a sunburn</i>	Causative <i>make</i>
	<i>He sneezed the tissue off the table</i>	Caused Motion
	<i>Would you mind bringing me the</i>	Ditransitive
	<i>book?</i>	
	<i>She always speaks kindly to</i>	Intransitive (Adverb)
	<i>everyone</i>	
	<i>I don't think him stupidly</i>	SC complement (Adverb)

The total number of test stimuli is not large, because all the awkward or low-frequency RCs were excluded. Two native speakers and Boas' (2003) corpus data were consulted in the selection of test items, and unnatural sentences were put aside even if they were listed in previous literature (e.g., *The gardener watered the*

tulips flat from Carrier & Randall (1992)) . To compensate for the relatively small number of test items, as many participants as possible were included.

Information on preceding contexts was provided. The participants were asked to read the contexts and then rate the acceptability of the target sentences on a five-point Likert scale. Following Park and Lakshmanan's (2007) recommendation that translation tasks be included in research on L1 influence, the participants were also asked to translate the target sentences. The goal of the translation task was to further investigate the hypothesis that L1 Korean English learners might treat the adjectives in resultatives as adverbials denoting result, manner or degree.

The NS control group was asked to correct all the sentences they judged as unacceptable. Although this technique has a potential downside in that it might cause learners to lean toward over-acceptance (Ionin & Zyzik, 2014, p. 40), this problem did not emerge with the NSs, to whom the unacceptability of these test items was clear. The task of correcting the sentences was intended to draw on NSs' explicit knowledge of RCs, in addition to their implicit knowledge.

The goal of the AJT was to assess participants' implicit knowledge. Learners tend to use explicit knowledge if they have too much time to consider test items, which makes it hard to learn about their implicit knowledge. Several researchers have demonstrated that implicit knowledge can be measured by timed tasks such as "timed" AJTs (Bowles, 2011; Ellis, 2005; Hahn, 2009). Therefore, this task was designed to be completed within 15 minutes.

The L1-Korean participants were expected to incorrectly accept both the syntactically and semantically unacceptable sentences because the equivalents are

possible in their L1. They were also expected to incorrectly reject grammatical resultative constructions. The results were expected to confirm that native Korean-speaking learners of English have difficulty understanding English resultatives, and that this difficulty derives from the interference of their L1.

3.2.2.3. Elicited Choice Task (ECT)

The ECT required the participants to choose one of the three options provided: a resultative construction, an awkward expression, and an L1-influenced adjunct expression. This ECT was conducted to examine the L1-Korean learners' preferences among competing forms and to make a comparison with the preferences of native speakers of English.

There was a total of 15 items: 10 experimental items and five distracters. The task was designed to include high-frequency natural resultative constructions. Two native speakers and Boas' (2003) corpus data were consulted, along with previous literature, in the selection of the experimental items for the ECT. Table 3.6 lists the sources of the test items.

Table 3.6 Source of Test Items of the Elicited Choice Task (ECT)

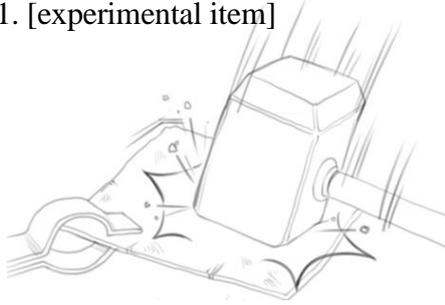
Item	Target structure	Verb	Source
Experimental	<i>hammered it flat</i>	<i>hammer</i>	Boas (2003)
	<i>danced herself dizzy</i>	<i>dance</i>	Lee (2014)

	<i>ran his shoes threadbare</i>	<i>run</i>	Lee&Lee(2003)
	<i>slice the potato thin</i>	<i>slice</i>	Boas (2003)
	<i>shot the tiger dead</i>	<i>shoot</i>	Boas (2003)
	<i>knock a man unconscious</i>	<i>knock</i>	Boas (2003)
	<i>kicked the door open</i>	<i>kick</i>	Boas (2003)
	<i>paint the room blue</i>	<i>paint</i>	Son (2008)
	<i>nailed the window shut</i>	<i>nail</i>	Boas (2003)
	<i>get her hands dirty</i>	<i>get</i>	Boas (2003)
Distracter	<i>cut the bread hot</i>	<i>cut</i>	Depictive
	<i>sounds great</i>	<i>sound</i>	Intransitive
	<i>sent him an email</i>	<i>send</i>	Ditransitive
	<i>think him honest</i>	<i>think</i>	SC complement
	<i>pull the boy out of the water</i>	<i>pull</i>	Caused Motion

The order of test items was random. While previous studies did not include fillers (Park and Lakshmanan, 2007; Whong-Barr, 2005; Yotsuya et al., 2014), the present study included them to distract the participants from the target forms. Examples of the test items and distracters are given in figure 3.2.

The terms for this task and the format of the choices in which the three options are provided in the parentheses, were borrowed and adapted from a written elicitation task designed by Ko, et al. (2009). Among the options, the awkward expressions and the L1-influenced adjunct expressions, were designed based on participants' answers in the pilot study (see section 3.1.3).

1. [experimental item]



He heated the metal until it was red, and

(hammered it flat / flattened it by hammering/ hammered it flatly).

[target construction awkward expression adjunct expression]

2. [Distracter]



I'm listening to the radio preparing for a mid-term exam. I like the music.

The music (sounds greatly/ sounds like great/ sounds great).

[adjunct expression awkward expression target expression]

Figure 3.2 Sample Items of the Elicited Choice Task (ECT)

Because the purpose of this task was to investigate how syntactic differences between the two languages affect learners' preferences for competing forms in comparison with the NSs, the L1-influenced expressions were provided in the form of adjunct expressions such as adverbs or adverbial phrases expressing

manner, degree, or result.

For each item, preceding context was given with a picture illustrating an action denoting a resultant state. The participants were allowed to ask questions freely during the experiment.

This study is the first to use this kind of choice task in an acquisition study of resultative constructions. Although Whong-Barr (2005) conducted a kind of forced choice task by providing two sentence options, she asked participants to give numerical scores to each option on a 6-point Likert scale, from -3 to +3 (with an “I don’t know” option). Her study, therefore, can be categorized as an acceptability judgment task (AJT) rather than a forced choice task or a preference task.

The type of ECT used in the present study is referred to as a *preference task*, a *preference judgment task*, a *sentence selection task*, and a *forced-choice task*. The preference task is a useful methodology because it can present competing forms side-by-side rather than in separate sentences. This task is also a valuable instrument for reflecting learners’ choice of particular linguistic forms (Ionin & Zyzik, 2014).

The ECT as implemented here was also observed to be appropriate for eliciting answers from the low level learners. While some of the low level participants in Study II complained of the difficulty of the elicited writing task (EWT), few of the participants in the ECT complained of difficulty choosing preferred expressions. Hence, this type of choice task is a useful instrument to measure the knowledge of a broad range of learners.

3.2.3 Coding and Analysis

For the acceptability judgment task (AJT), the participants chose a score from a 5-point Likert scale ranging from -2 (completely impossible) to +2 (completely possible), with 0 indicating “unable to decide.” The scale was designed to draw a clear contrast between rejection (negative scores) and acceptance (positive scores), adapting the GJT of Park and Lakshmanan (2007).

The use of zero on this scale is, however, potentially problematic because “such use of a zero midpoint conflates a scale of acceptability with a scale of certainty” (Ionin & Zyzik, 2014, p. 40). To solve this problem, all the zero responses were removed from the analysis, and the remaining responses were converted to four positive scores (1 = completely impossible, 2 = probably impossible, 3 = probably possible, and 4 = completely possible). Consequently, the coding of the AJT was based on a 4-point positive scale.

A repeated-measures ANOVA was conducted to analyze the results of the AJT following previous acquisition studies (Hwang, 2014; Ko, Ionin, & Wexler, 2009; Yotsuya et al., 2014) The repeated measures ANOVA was used to verify the differences in learners’ comprehension among the three groups (Low, High, and NSs control). The interaction between the three groups and the three types of stimuli (grammatical resultative, syntactically unacceptable, and semantically unacceptable) was tested as well.

In addition to the analysis of group results, the individual results for each group were also analyzed. The individual results were investigated to test whether

participants' judgments of the resultative sentences were consistent depending on sentence types in terms of accuracy. Adapting Park and Lakshmanan's (2007) and Yotsuya et al.'s (2014) method, consistent accuracy was considered to be indicated by three or more accurate responses out of four responses for each sentence type. Likewise, following Park and Lakshmanan, responses of 0 (unable to decide) were analyzed as inaccurate responses.

With regard to the elicited choice task (ECT), the participants' choices among the three options for each item (a resultative construction, an awkward expression, and an L1-influenced adjunct expression) were coded as *resultative*, *awkward*, and *adjunct* respectively.

To investigate group influence on the preferences among the competing forms, the total frequency of experimental items was analyzed by group (L, H, and NSs). A nonparametric statistical test was employed for the following two reasons: The sample sizes were unequal, as the NS group ($n = 17$) was much smaller than the two learner groups L ($n = 51$) and H ($n = 48$), and the frequency for each cell was itself important for the analysis of this ECT. Accordingly, a chi-squared test is was conducted (see Agresti & Finlay, 1999).

3.3. Study II (Production Test)

The purpose of the second study was to investigate L1-Korean English learners' production of English resultative constructions in order to examine some of the L1 transfer effects found in Study I in more detail through sentence completion task. Conducting an elicited writing task (EWT) helped to confirm the expected L1 transfer effects and to find other, unexpected learner errors in producing English RCs.

3.3.1. Participants

A total of 97 volunteer participants completed the EWT. None of them had participated in Study I. New volunteers were recruited because Study II was conducted one semester after Study I, so the same participants from Study I were no longer available at the time of implementing Study II¹⁷. However, the participant populations were similar in the two studies.

Originally 103 participants were recruited but six were excluded from analysis, because three had lived for more than three years in English-speaking

¹⁷ Montrul and Santos (2011) also reported a follow-up study with different participants from their first study to confirm Spanish-induced transfer effects. As in the current study, their participants from the first study were no longer available, but the student populations were similar (p. 42).

countries, and three did not complete the experiment.

The participants were recruited from Cheongdam High School, Hanyang University, and Gyeongin National University of Education located in Seoul. They ranged in age from 18 to 25.

The Korean participants were divided into two proficiency levels based on the Michigan test of L2-English proficiency as in Study I. The learners who got more than 23 right answers out of 30 were assigned to a high group (H group; $n = 48$). The learners scoring under 22 were assigned to a low group (L group; $n = 49$).

Table 3.7 summarizes the participants' ages at the time of the experiment, ages of acquisition of English (AoA), and proficiency test scores.

Table 3.7 Study II: Participants' Mean Age, AoA, and Proficiency

Group	Age	AoA	Proficiency score
L ($n = 49$)			
Mean	20.0	9.5	17.4
SD	2.0	2.7	4.5
Range	18-25	5~19	7~22
H ($n = 48$)			
Mean	21.2	9.4	26.0
SD	2.1	2.2	1.8
Range	18-26	4~14	23~30

A one way-ANOVA comparing the two learner groups showed that age was significant ($p = < .01$), as many of the high school students were assigned to the L group while many of the university students were allotted to the H group. However, the two learner groups did not differ from each other in their AoA of English ($p = .93$). Thus, the two experimental groups were comparable in general.

3.3.2. Instruments and Procedures

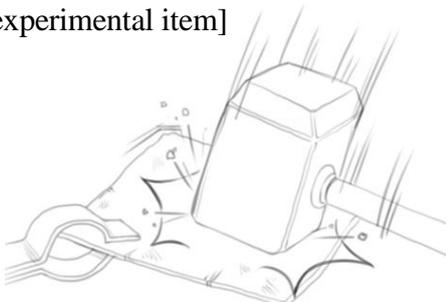
This section describes the instrument employed in Study II. The participants of Study II were first asked to complete the elicited writing task (EWT). Then, they were asked to take the same proficiency test and the background surveys used in Study I. All the procedure was administered on the same day, and the whole experimental process took about 50 minutes.

The main experimental task was a written sentence completion task. All the test items were the same as those in the ECT of Study I. There were a total of 15 items: 10 experimental items and five distracters. The test items were the same but the format for presenting items was revised from the ECT of Study I.

In this task, the learners were provided with a preceding context in Korean, a picture, and cue words to complete given sentences. This stimuli design was adopted following the opinion of Ionin and Zizyk (2014) that “presenting the contexts in participants’ L1 is a good option when working with lower-proficiency learners to ensure that the context is unambiguously understood” (p. 47).

Therefore, the preceding context for each item was presented in participants' L1, unlike in Study I. An example of the test items of the EWT is given in figure 3.3.

[experimental item]



1. 대장장이가 금속을 빨강게 되도록 달구어서,
금속(metal)을 평평하게 두드려 폈다.

He _____ (flat, hammer)

Figure 3.3 Sample Item of the Elicited Writing Task (EWT)

The cue words were given inside the parentheses: a verb and an adjective which are essential for resultative constructions. The use of cue words in this type of picture-cued written task is motivated by the need to elicit the use of the target construction (Wu, 2011). The verb and adjective were presented in random order throughout the task to avoid having the sequence (e.g., verb-adjective) function as a cue for learners' sentence completion.

3.3.3 Coding and Analysis

Each sentence produced by the participants was coded in terms of (1) whether it had a correct target RC, and (2) which error types it represented. Responses using the target structure (RCs) received 1 point, and responses using other forms given 0 point, following previous studies (Hwang, 2014; Montrul & Santos, 2011; Rah, 2014).

After the learners' responses were examined, the percentage of use of the target structure, the RC (correctness) was calculated and compared between the two proficiency learner groups. In addition, a verb-specific analysis of correctness was conducted, in which the percentage of the use of the target structure was calculated per each 10 verbs.

CHAPTER 4.

RESULTS

This chapter reports the results of the two main studies and discusses the research findings. Section 4.1 presents the findings from Study I and section 4.2 reports the findings from Study II.

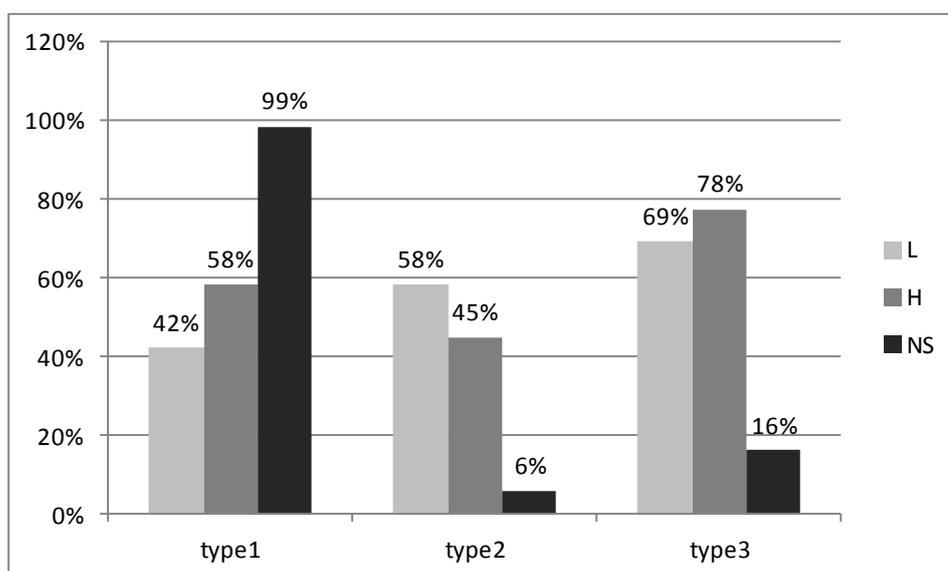
4.1. Study I (Comprehension Test)

This section presents the findings of Study I. First, the results of the Acceptability Judgment Task (AJT) are reported: acceptance rates, statistical analysis, and consistency rates across groups are introduced. Second, the results of the Elicited Choice Task (ECT) are reported: group influence on the preference among the competing forms for English resultative constructions and the result of the statistical test is provided.

4.1.1. Comprehension of the English Resultative Construction across Groups

First, the acceptance rates on the AJT were compared across groups. As

shown in figure 4.1, the Korean learners incorrectly accepted both the syntactically and semantically unacceptable English resultative constructions. They also failed to accept grammatical resultative constructions.



L= Low Proficiency Group, H= High Proficiency Group, NS= Native Speaker Group (Control)/ Type 1= Grammatical Resultative, Type2= Syntactically Unacceptable, Type3= Semantically Unacceptable

Figure 4.1. AJT: Acceptance Rates by Groups

Recalling that the Korean language allows two types of resultative constructions that are not acceptable in English (i.e., Type 2: Syntactically Unacceptable, and Type 3: Semantically Unacceptable), these results were as

expected. As shown in figure 4.1, the English native speaker group also performed as expected, accepting the grammatical RCs (Type 1) at a high rate (99%) and strongly rejecting the unacceptable RCs (Type 2: 94%; Type 3: 84%).

The two Korean learner proficiency groups, in contrast to the NS group, failed to accept the grammatical RCs (Type 1): Only 42% of the L group and 58% of the H group accepted Type 1 RCs. With regard to Type 2 (Syntactically Unacceptable), 58% of the L group and 45% of the H group failed to reject these unacceptable items. For Type 3 (Semantically Unacceptable), 69% of the L group and 78% of the H group failed to reject these unacceptable items.

These differences between the control NS and Korean learner groups are consistent with the hypothesis of this study: Korean learners will have difficulty comprehending English RCs, which are complements with telic meaning, because Korean *-key* resultatives are adjuncts and can carry atelic meanings. Since Korean resultatives can denote various adverbial meanings, the native Korean-speaking English learners failed to reject Types 2 and 3 RCs, which are not allowed in English.

A repeated measures ANOVA was conducted to analyze the results of the AJT. The results are shown in tables 4.1 and 4.2.

Table 4.1 AJT: Descriptive Statistics

Type	Group	<i>n</i>	Mean	SD
1	L	51	2.52	.48
Grammatical	H	48	2.72	.52
Resultatives	NS	17	3.90	.20
2	L	51	2.74	.55
Syntactically	H	48	2.35	.53
Unacceptable	NS	17	1.60	.42
3	L	51	2.92	.41
Semantically	H	48	2.99	.49
Unacceptable	NS	17	1.81	.37

Table 4.2 AJT: Repeated Measures ANOVA Results

Source	SS	df	MS	F	Sig.
Between Subjects	34.805	115			
Group	3.298	2	1.649	5.914	.004
Error	31.507	113	.279		
Within Subjects	134.407	232			
Type	30.137	1.863	16.180	72.861	.000
Type * Group	57.531	3.725	15.444	69.546	.000
Error	46.739	226	.222		
Total	269.212	347			

As table 4.2 indicates, the differences between the acceptability ratings of the three groups (L, H, and NS) were statistically significant ($p < .01$). Within each group, the differences in the acceptability ratings for the three types of stimuli (Grammatical Resultative, Syntactically Unacceptable, and Semantically Unacceptable) were also statistically significant ($p < .01$). The interaction between group and stimuli type was found to be statistically significant ($p < .01$) as well.

Figures 4.2, 4.3, and 4.4 present the mean acceptability ratings for the three types of stimuli (Type 1= Grammatical Resultative, Type 2= Syntactically Unacceptable, Type 3= Semantically Unacceptable) by group (L, H, and NS).

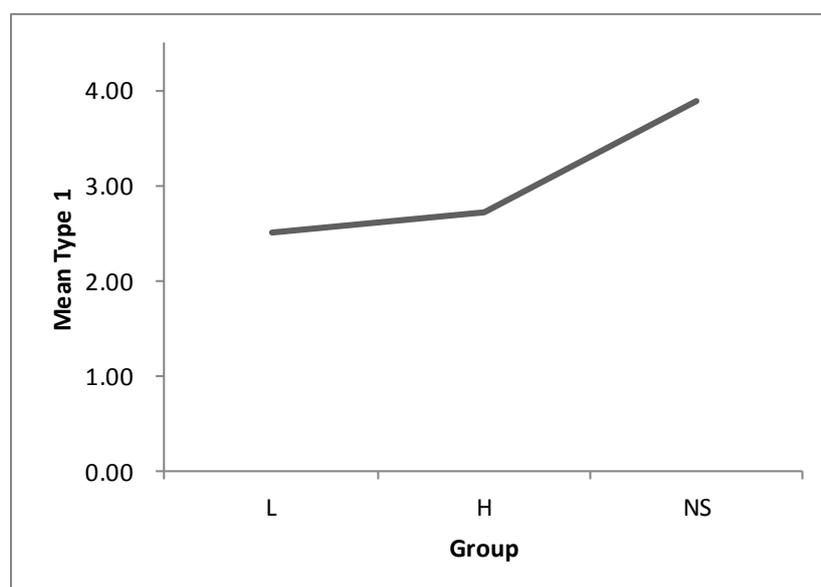


Figure 4.2. AJT: Mean Acceptability Ratings for Grammatical Resultatives

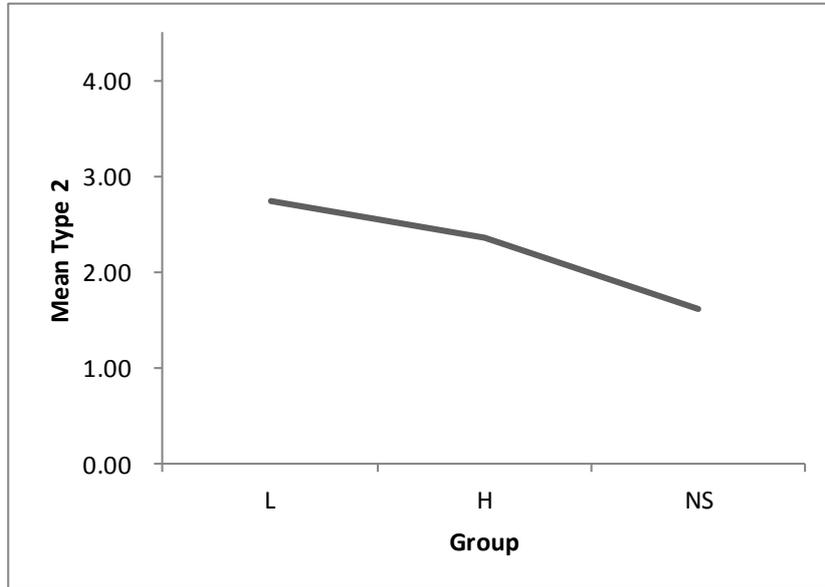


Figure 4.3. AJT: Mean Acceptability Ratings for Syntactically Unacceptable

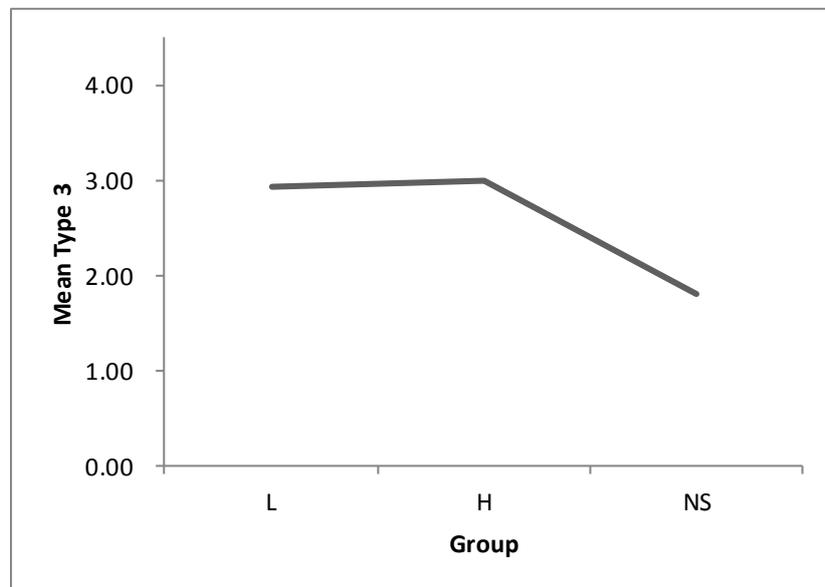


Figure 4.4. AJT: Mean Acceptability Ratings for Semantically Unacceptable

A Tamhane post-hoc multiple comparison test was conducted to make a pairwise comparison between groups as shown in Table 4.3.

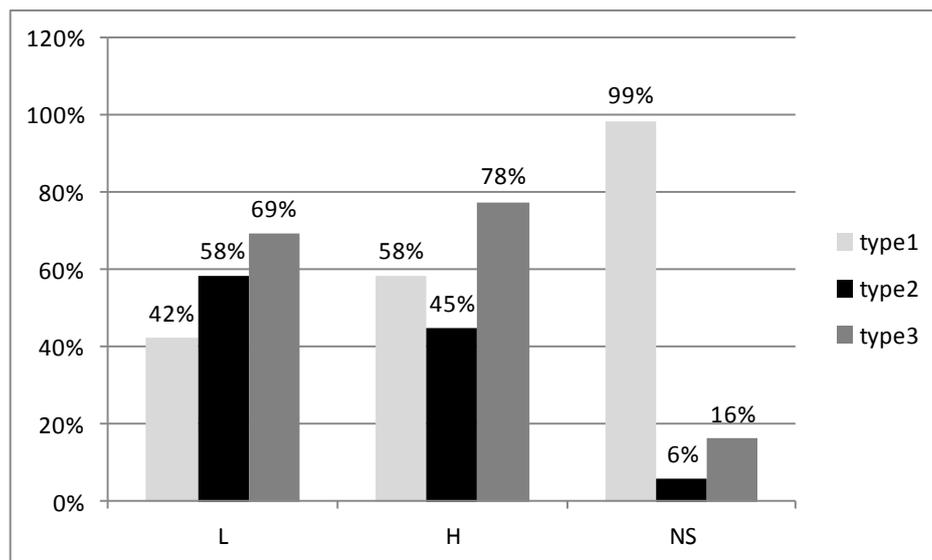
Table 4.3 AJT: Multiple Comparisons of L, H, and NS Groups

Tamhane						
(I) Group	(J) Group	Mean Difference (I-J)	Std. error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
L	H	.0364	.0637	.920	-.1185	.1912
	NS	.2888*	.0692	.001	.1159	.4616
H	L	.0364	.0637	.920	-.1912	.1185
	NS	.2524*	.0718	.003	.0738	.4310
NS	L	-.2888*	.0692	.001	-.4616	-.1159
	H	-.2524*	.0718	.003	-.4310	-.0738

It showed that the difference in acceptability ratings between each of the two Korean learner groups and the NS control group was statistically significant ($p < .01$). However, no significant difference was found between the L group and the H group. This finding means that the Korean learners' proficiency did not influence the rating of the English RC's acceptability: even the High level learners have difficulty in understanding of the target structure.

The different acceptance rates for the three types within each group are

shown in the figure 4.5.



L= Low Proficiency Learner Group, H= High Proficiency Learner Group, NS= Native Speaker Group (Control)/ Type 1= Grammatical Resultative, Type2= Syntactically Unacceptable, Type3= Semantically Unacceptable

Figure 4.5. Acceptance Rates within Groups

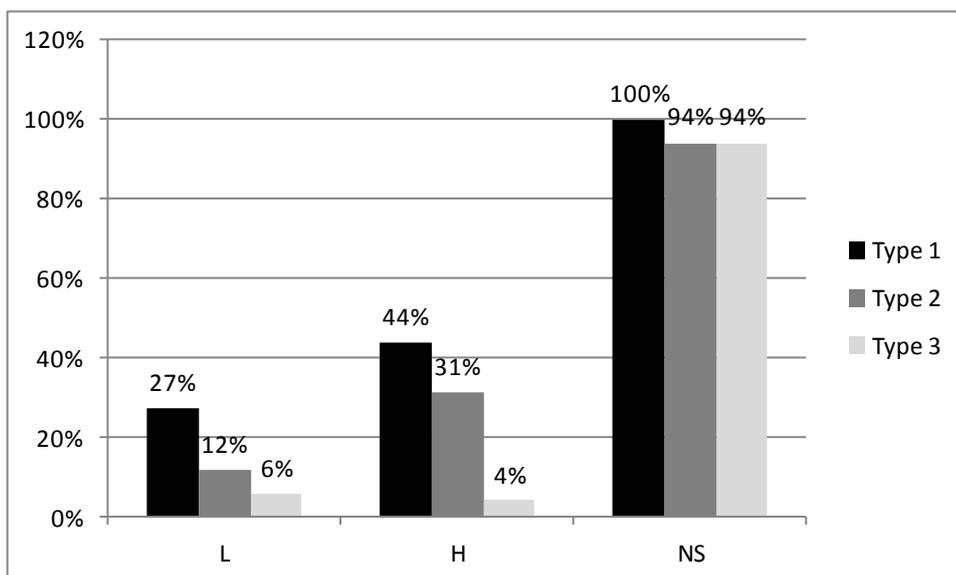
Figure 4.5 reveals an asymmetry in the H group's acceptability ratings of Type 2 and 3. The group rejected the syntactically unacceptable sentences (Type 2) at the rate of 55%, and the semantically unacceptable sentences (Type 3) at the rate of 22%. This asymmetry between syntactic and semantic awareness of English RCs by the H group implies that the more advanced learners recognized the target forms of the RCs but most of the H group learners had not acquired the

target telic meanings of the English RCs.

In sum, the H group showed evidence that they had developed syntactic awareness while still unable to discriminate between the different semantic features, –, that is, the [+/- telic] readings of RCs –, allowed in English on the one hand and Korean on the other. The learnability of telicity features as a challenge in L2 learning has been reported by Yin and Kaiser (2011), who observed considerable L1 (Chinese) influence on the acquisition of telicity of verb phrases in L2 English¹⁸.

In addition to analysis of group results, the individual results for each group were also analyzed. The individual results were investigated to test whether participants' judgments of English RCs was consistent depending on sentence types in terms of accuracy. Adapting Park and Lakshmanan (2007) and Yotsuya, et al. (2014), 3 or more accurate responses out of 4 responses for each sentence type was regarded as consistent in accuracy. The results of this consistency test are summarized in figure 4.6.

¹⁸ Yin and Kaiser (2011) investigated L1 Chinese speakers' acquisition of telicity interpretations of Accomplishment situations in English by means of an AJT. In contrast to English, in Chinese, Accomplishment VPs with definite NP objects can denote both the telic and atelic events. The majority of the Chinese learners were unable to acquire the termination, [+telic], interpretation. However, advanced learners exhibited target-like performance to some extent, leading the authors to suggest that a restructuring of grammar was possible.



L= Low Proficiency Learner Group, H= High Proficiency Learner Group, NS= Native Speaker Group (Control)/ Type 1= Grammatical Resultative, Type2= Syntactically Unacceptable, Type3= Semantically Unacceptable

Figure 4.6. AJT: Consistency Rates by Groups: Proportion of the Subjects' Consistently Accurate Responses

As shown in figure 4.6, the native speaker (NS) control group demonstrated the highest level of consistency in their acceptability judgments of the test sentences of the three stimuli types. (Type 1, Grammatical Resultative: 100%; Type 2, Syntactically Unacceptable and Type 3, Semantically Unacceptable: 94%).

Both of the two Korean learner groups, L and H displayed much lower consistency rates than the NS control group. For the L group, only 27% of them answered consistently correctly with Type 1 and 12% of them answered consistently correctly with Type 2. They showed 6% of consistency rate for Type

3. The H group, the 44 % of them showed consistency with Type 1 and the 31% of them revealed consistency with Type 2. As for type 3, the H showed the lowest consistency at the rate of 4%.

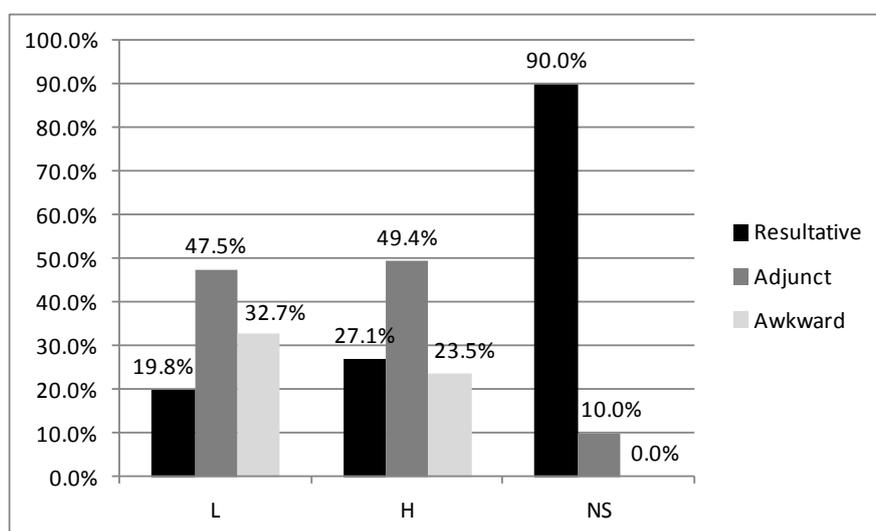
The H group's higher consistency rates for Types 1 and 2 suggest the possibility of acquisition of the target construction by L2 learners, as proposed by Yin and Kaiser (2011). The results mean that the H group recognized grammatical English RCs (Type 1) better than the L group, and that the H group distinguished syntactically unacceptable sentences (Type 2) better than the L group. These higher consistency rates in syntactic awareness of the higher level learners suggest the possibility that Korean learners can acquire constructional knowledge of English RCs if they are provided with proper help through input and instruction.

Importantly, however, the analysis found asymmetry between the syntactic and semantic awareness of the two Korean learner groups. The much lower consistency rates for Type 3 (Semantically Unacceptable) than for Type 2 (Syntactically Unacceptable) by both learner groups may be due to the difficulty of unlearning of the atelic readings of their L1. The H group, interestingly, showed a sharper contrast between syntactic and semantic awareness. This asymmetry links to the Interface Hypothesis (Sorace & Filliaci, 2006) and will be discussed again in section, 5.3.2.

4.1.2. Preference for English Resultative Constructions across Groups

The Elicited Choice Task (ECT) asked the participants to choose one of the three options provided: an RC, an awkward expression, and an L1-influenced adjunct expression (see figure 3.2). The participants' choices were expected to show Korean learners' preference among the competing forms for comparison with the NS control groups. There were a total of 15 items, 10 of which were experimental items and the five were distracters.

Figure 4.7 provides preference rates among the competing forms by group, showing the frequency of the participants' choices across the three groups.



L= Low Proficiency Learner Group, H= High Proficiency Learner Group, NS= Native Speaker Group (Control)

Figure 4.7. ECT: Distribution of Choices by Group

As the figure makes clear, the NSs showed a much higher preference for English RCs than the two Korean learner groups (L and H): 90 % of the NSs chose RCs in the given contexts, while only 19.8% of the low proficiency (L) group and 27.1% of the high proficiency (H) group chose RCs in the same contexts.

This expected difference between the NS and the Korean learner groups' performances supports the suggestion that the learners' L1 plays a certain role in their learner language. Recalling this study's understanding that the Korean resultative AP-*key* phrase is an adjunct., we can explain Korean learners' strong preference for the adjunct option in the ECT as a result of the L1 influence.

This syntactic difference between resultatives in English and Korean is reflected in the ECT's data: Almost half of the participants in both of the Korean learner groups (L: 47.5%; H: 49.4%) chose adjunct expressions for the given contexts, while 90% of the NSs chose resultative constructions. For instance, while the NSs completed the first test item, *...and hammered it flat*, the Korean learners often completed the same item with *...hammered it flatly*.

To investigate the group influence on preference among RCs and competing forms, a non-parametric statistical test, a chi-squared test was conducted. The chi-squared test was chosen because the frequency itself, for each cell, was important for the analysis of this ECT. Table 4.4 summarizes the results of the chi-squared test.

Table 4.4 ECT: Frequency of Choices by Group

	Resultative	Adjunct	Awkward	Total
L	101 (19.8%)	242 (47.5%)	167 (32.7%)	510 (100%)
H	130 (27.1%)	237 (49.4%)	113 (23.5%)	480 (100%)
NS (control)	153 (90.0%)	17 (10.0%)	0 (0.0%)	170 (100%)
Total	384 (33.1%)	496 (42.7%)	280 (24.1%)	1160 (100%)

$$\chi^2 = 55.76 (df = 4, p < .01)$$

As table 4.4 indicates, the performances of each of the three groups in the ECT were significantly different from each other ($p < .01$) at the .05 level of significance. This result supports the suggestion that the Korean learners tended to make L1-influenced choices (i.e., adjunct forms).

A Bonferroni correction post-hoc test was conducted to make a pair-wise comparison between groups at the p -value of .017 ($= .05/3$). The performance of the NSs was significantly better than that of both the L group ($\chi^2 = 270.81$) and the H group ($\chi^2 = 203.96$; $p < .01$). The H group also performed significantly better than the L group ($\chi^2 = 13.21$; $p < .01$). These results mean that the high proficiency learners chose more of RCs than the low proficiency learners in the ECT.

4.2. Study II (Production Test)

This section presents the findings of Study II, which aimed to investigate Korean learners' production of English resultative constructions and to examine some of the L1 transfer effects found in Study I in more detail through sentence completion task. This section reports group correctness by percentage, types of error made by the two proficiency learner groups (L and H), and the result of a verb-specific analysis of correctness.

4.2.1 Korean Learners' Use of the Target Structure

This EWT was a sentence completion task. All the test items were the same as in the ECT of Study I (15 items: 10 experimental items and 5 distracters). Two proficiency groups of Korean learners, low (L) and high (H), were provided with cue words, preceding contexts and picture cues, and were asked to complete given sentences. If they used the target structure, the resultative construction, the answer received 1 point; answers in other forms received 0 points. Tables 4.5 and 4.6 present the results.

Table 4.5 EWT: Descriptive Analysis

Group	<i>n</i>	Mean	SD
L	49	3.20	1.20
H	48	3.48	1.99

Table 4.6 EWT: Independent Samples *t*-Test Results

	Levene's test for Equality of Variances		t-test for Equality of Means							
								95% Confidence Interval of the Difference		
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std.Error Difference	Lower	Upper	
Correct- ness	L	.066	.798	-.679	95.00	.499	-.275	.405	-1.079	.529
	H			-.679	94.98	.499	-.275	.405	-1.079	.529

As table 4.6 shows, the mean difference between the two Korean learner groups, L and H, was not statistically significant ($p = .798$). Only 32.0% of the L group and 34.8% of the H group's answers were the correct target form, RCs. This finding means that the Korean learners could not produce RCs with the given cue words and contexts, regardless of their proficiency level.

4.2.2 Korean Learners' Error Types

The EWT results raise the question of what types of errors Korean learners make when they fail to use English RCs. To answer this question, this study roughly grouped the most frequent error patterns of the participants into six categories: the use of an adjunct, coordination¹⁹, serial verbs, missing direct object, missing resultative phrase, and other. Table 4.7 and figures 4.8 – 4.10 show the frequencies of these error types in the EWT by the two Korean learner groups.

Table 4.7 EWT: Error Type Frequency by Proficiency Groups

Error Type	L	H	Total
Adjunct	33.6%	49.7%	41.4%
	(112/333)	(156/314)	(268/647)
Coordination	8.1%	11.5%	9.7%
	(27/333)	(36/314)	(63/647)
Serial Verb	10.2%	7.6%	9.0%
	(34/333)	(24/314)	(58/647)
Missing Direct Object	7.8%	2.2%	5.1%
	(26/333)	(7/314)	(33/647)

¹⁹

The term, “coordination”, refers to the use of coordinating conjunctions such as and, so, and but. According to Cowan (2008, p. 595), coordination is the joining of constituents of the same type – for example, clauses, NPs, VPs, or PPs – by coordinating conjunctions, or coordinators.

Missing Resultative Phrase	2.1%	1.3%	1.7%
	(7/333)	(4/314)	(11/647)
Other	35.4%	25.8%	30.8%
	(118/333)	(81/314)	(199/647)
NA (no answer)	2.7%	1.9%	2.3%
	(9/333)	(6/314)	(15/647)
Total	100.0%	100.0%	100.0%
	(333/333)	(314/314)	(647/647)

The following figures show the percentages of the error types for each group and for both groups together.

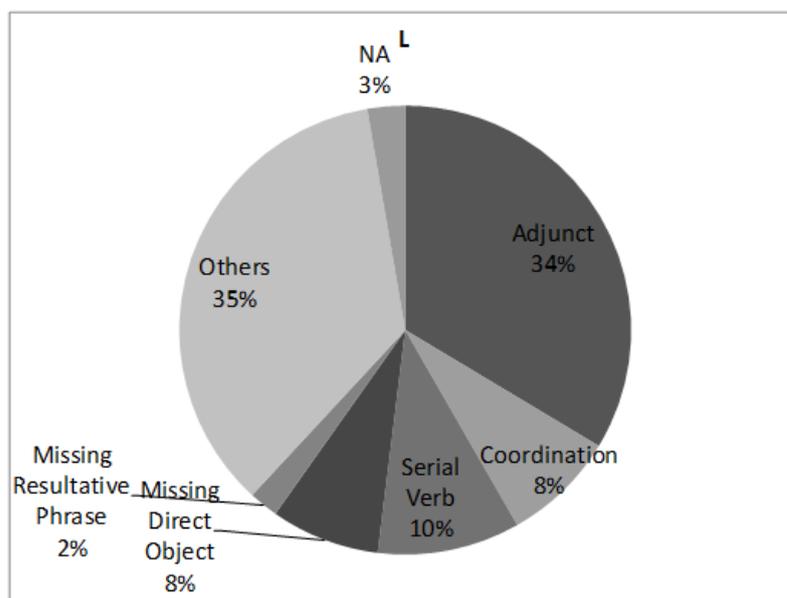


Figure 4.8. EWT: Error Type Distribution for the L group

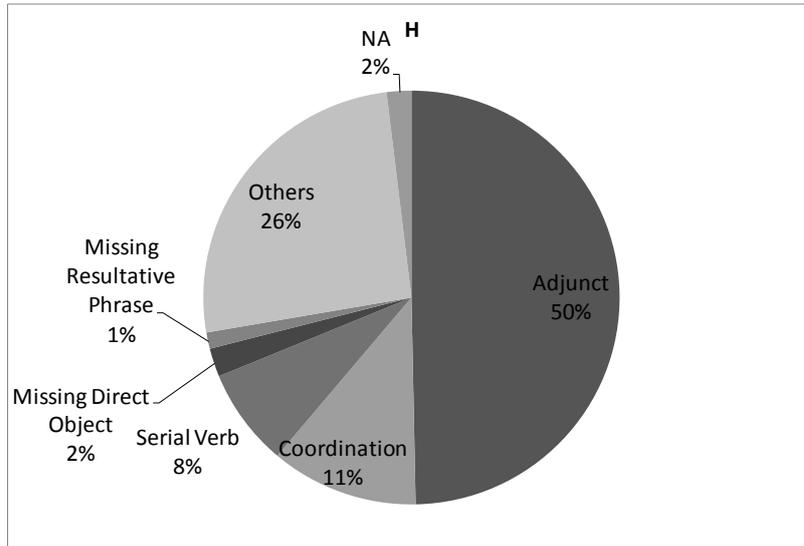


Figure 4.9. EWT: Error Type Distribution for the H group

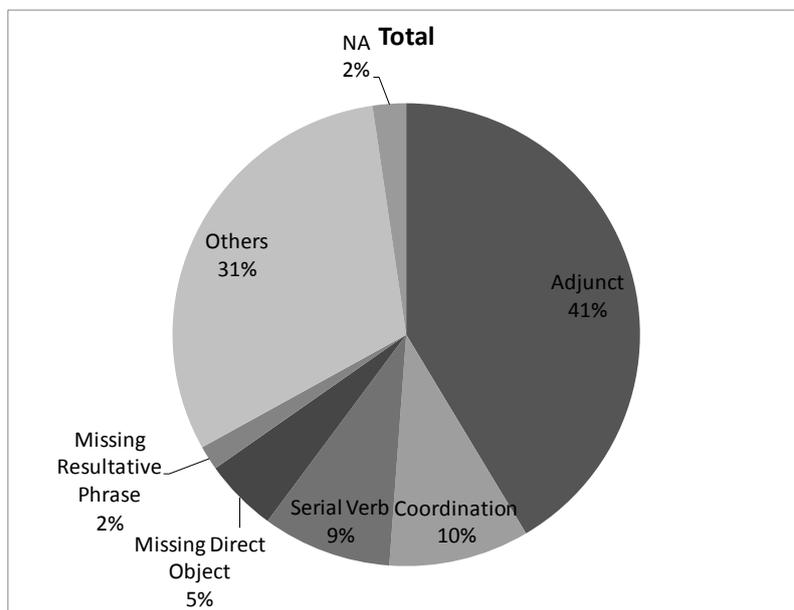


Figure 4.10. EWT: Error Type Distribution for Both Groups

Both groups produced the “adjunct” and “other” types of errors more frequently than the four other error types. The Korean learners’ production of these errors highlights the fact that Korean resultatives are atelic adjuncts, and that their atelicity affects Korean learners’ production of English RCs.

The sentences in (1) through (8) are examples of learner errors observed in this study.

[Adjunct Phrases]

(1) [LI028] She *danced until she felt dizzy*.

(Target Structure: “danced herself dizzy”)

(2) [LI011] He *knocked him down to be unconscious*

(Target Structure: “knocked him unconscious”)

[Coordination]

(3) [LI015] A police officer *shot the tiger and tiger was dead*.

(Target Structure: “shot the tiger dead”)

[Serial Verb]

(4) [A016] He *nailed and shut the window*.

(Target Structure: “nailed the window shut”)

[Missing Direct Object]

(5) [A028] She *dances dizzy*.

(Target Structure: “danced herself dizzy”)

[Missing Resultative Phrase]

(6) [A021] I *sliced potato*.

(Target Structure: “sliced potato thinly”)

[Other]

(7) [A023] A police officer *made the tiger dead with shooting*.

(Target Structure: “shot the tiger dead”)

[*make* overuse; see Kim (2015)]

(8) [I025] He *knocked the person who became unconscious*.

[use of relative pronoun]

More detailed discussion on these error types will be presented in section 5.2.

4.2.3 Verb-Specific Analysis

The initial purpose of the EWT was to look into how many of the Korean participants would produce the target RCs. On the whole, they were not able to produce RCs, as predicted, and they instead produced several types of errors, - including some unexpected ones, which were categorized as “other” in the previous section.

The final exploration of the EWT results examines with focuses on which verbs the learners performed well and with which verbs they failed to produce target constructions. Figures 4.11 to 4.13 display the verb-specific analysis.

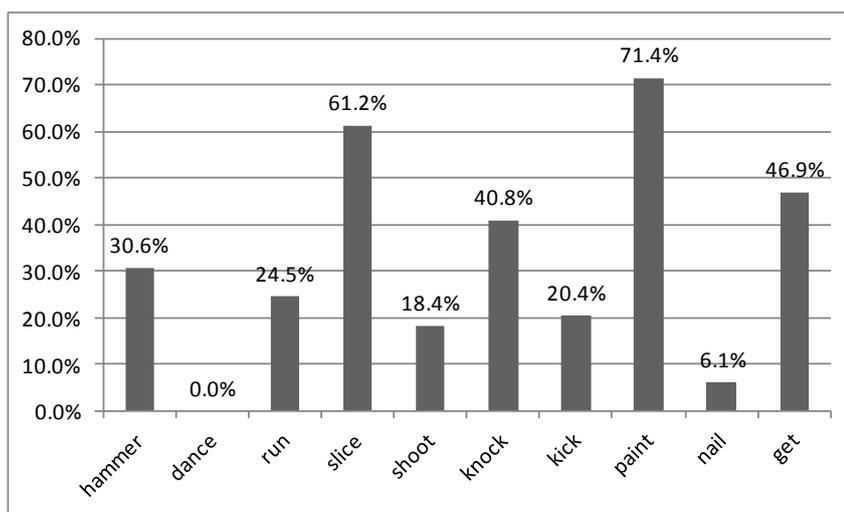


Figure 4.11. EWT: Verb-Specific Frequency of RC Use by the L group

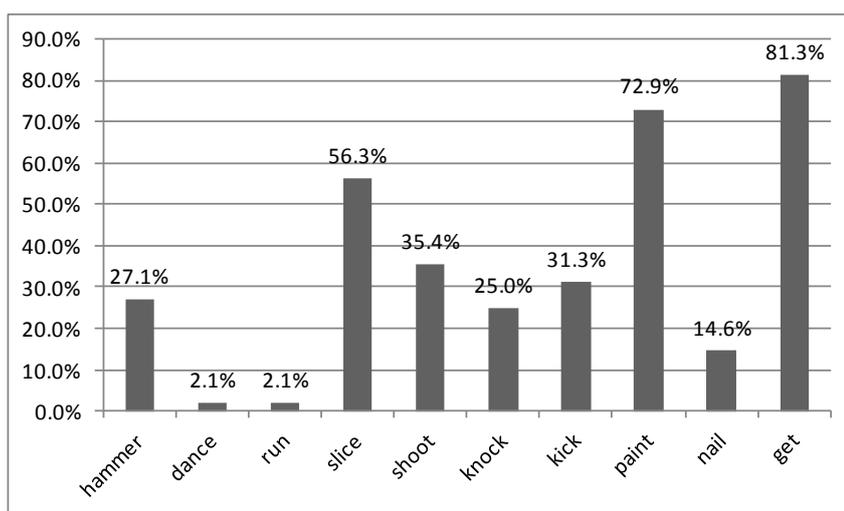


Figure 4.12. EWT: Verb-Specific Frequency of RC Use by the H Group

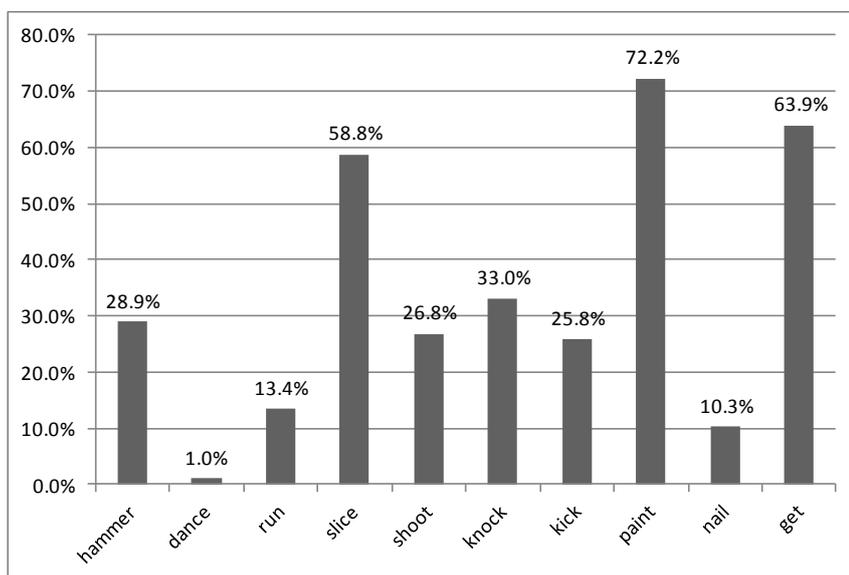


Figure 4.13. EWT: Verb-Specific Frequency of RC Use by Both Groups

The learners seemed to have problems producing RCs when they were asked to use the intransitive verbs, *dance* and *run*: Only 1% and 13.4% of the learners, respectively, completed the sentences with these two verbs correctly. This result is highly expected: The Korean learners were hindered by L1 influence from inserting reflexive pronouns in the object slot because the Direct Object Restriction (DOR) that holds in English does not hold in Korean.

From the viewpoint of constructional grammar (Goldberg, 1995; Goldberg & Jackendoff, 2004; Sung & Yang, 2016), it is natural that the learners were more challenged by constructional resultatives²⁰ requiring heavy/dynamic verbs

²⁰ Goldberg and Jackendoff (2004) categorized resultatives into three pairs of subtypes: intransitive and transitive, verbal and constructional, spatial and property. According to them, a verbal resultative contains “intrinsically resultative” verbs that have the meaning “X causes Y to become Z” (e.g., make, get, turn, render) while a constructional resultative contains two

such as *kick*, *hammer*, and *nail*. Since these verbs involve the association of two separable sub-events, the constructional sub-event (i.e., *X causes Y to become Z*) and the verbal sub-event (i.e., *means by which the constructional event takes place*), the learners are burdened with greater cognitive load when producing the target construction. More inquiry into the relation between lexical items and the production of RCs will be presented in section 5.2.4.

separable subevents, as below:

Syntax: Willy watered the plants flat

Semantics: Willy CAUSE [PLANTS BECOME FLAT] → constructional subevent

MEANS: WILLY WATER PLANTS → verbal subevent

(Goldberg & Jackendoff, 2004, pp. 538-539)

CHAPTER 5.

DISCUSSION

This chapter discusses the experimental research findings and addresses the original issues raised by the research questions. The first research question of this dissertation was whether the Korean language has an RC that corresponds exactly to the English RC. The syntactic and semantic discussion on this issue in sections 2.2 and 2.3 concluded that Korean RCs are different from English RCs: English resultatives are complements denoting a high degree of transitivity and telic meanings, while Korean AP-*key* resultatives are adjuncts denoting atelic meanings.

The second research question asked how the properties of Korean RCs affect Korean students' learning of English RCs, focusing on two sub-questions: "How is learners' comprehension affected by their L1?", and "How is their production affected by their L1?" To answer these questions, this section discusses the results of Study I (Comprehension Test) and Study II (Production Test) in more detail.

Section 5.1 discusses the overall L1 influence on Korean learners' comprehension of English RCs. Section 5.2 deals with Korean learners' production of English RCs from the perspective of L1 influence. Section 5.3 introduces data from the filler items of the ECT and data from the heritage learner participants. Lastly, section 5.4 presents pedagogical issues raised by the results of the background surveys (Appendix G).

5.1 L1 Influence on Korean Learners' Comprehension of English Resultative Constructions

5.1.1 L1 Linguistic Properties and Learners' Interpretation of English RCs

The results from Study I (Comprehension Test) suggest that Korean learners' ability to understand English RC is affected by syntactic and semantic properties of their L1. Their proficiency level had some effect on their comprehension: The H group showed higher consistency rates on the AJT and a stronger preference for English RCs in the ECT than did the L group.

With regard to the AJT, both high and low proficiency Korean learner groups were significantly less accurate than the NS control group at accepting grammatical RCs (Type 1) and rejecting unacceptable RCs (Types 2 and 3). The Korean learners' tendency to accept incorrect RCs suggests that they were influenced by their L1's syntactic and semantic properties, as described in table 5.1.

The Korean learner groups accepted result-XPs that utilized adverbial forms (**tenderly*, **solidly*), missing direct object construction (**sang hoarse*), and recursion of result-XPs (**thin large*), which are all possible in their L1, as discussed in section 2.1, whereas the NS controls rejected such sentences.

Table 5.1 AJT: L1 Linguistic Properties

Type	L1 Linguistic Property	Test Sentence
2	adverbial result phrase	make the meat <u>tenderly</u>
Syntactically	no Direct Object	sang (no fake object) hoarse
Unacceptable	Restriction (DOR)	
	adverbial resultative phrase	froze <u>solidly</u>
	multiple resultative phrases	roll the dough <u>thin large</u>
3	allowance of a <i>for</i> -phrase	drive you mad for a few minutes
Semantically	less semantic restriction	wrung the shirt <u>damp</u>
Unacceptable	cancellability	dyed his hair red but it did not become red
	allowance of a modifier, <i>very</i>	wipe the table <u>very clean</u>

For instance, the Korean learners did not recognize that **she sang hoarse* is unacceptable in English because a fake reflexive object is not required in Korean as it is in English which has a DOR (Hong, 2005, p. 133). However, the NSs, who were asked to correct the sentences which were judged to be ungrammatical, generally corrected this sentence into a grammatical RC, by inserting the fake object *herself* to produce *She sang herself hoarse*.

The Korean learner groups also accepted semantically unacceptable English sentences whose counterparts would be allowed in their L1 Korean, which allows *for*-phrases, cancellation, and modification by *very*, and has fewer semantic

restrictions due to the [-telic] feature of Korean *-key* resultatives (see section 2.3). On the contrary, the NS controls rejected these sentences and pointed out their semantic awkwardness. For instance, the NS participants corrected **for a few minutes* into *after/in a few minutes*, and removed the modifier, *very* in **very clean*.

Regarding cancellability, when one NS control was asked for an explicit reason for rejecting the sentence, *He dyed his hair red but it did not become red*, the participant answered, “I don’t know exactly but it’s a little bit weird to say ‘it did not become red’, it is supposed to be turned red.” S/he marked the sentence as “grammatically correct but awkward” (ID 110). The AJT’s results show L1 transfer at the semantic level, supporting Hahn’s assertion that “Korean EFL learners have difficulty ruling out erroneous form-meaning pairings based on their L1” (Hahn, 2013, p. 105).

In order to look into L1 influence, the AJT of Study I also required the Korean learners to translate the given sentences. This translation task was designed to confirm the hypothesis that Korean learners might treat the adjectives in resultatives as adverbials denoting result, manner, or degree. Some examples of learners’ translations are provided in (1) through (6).

[Translation of AP-Result Phrases as Adverbs]

(1) [L038] ‘Let’s scrub the pot shiny.’

kwangi na-tolok (degree adverb)

shiny to be

(2) [L048/A061] ‘Let’s scrub the pot shiny.’

kkaykkushay-cilttaykkaci

clean until it becomes (degree adverb)

(3) [L050/A057/A062] ‘The fan beat him unconscious.’

muuysikcek-ulo

being unconscious (manner adverb)

(4) [A054/A065] ‘The fan beat him unconscious.’

uisiki epsul ttaykkaci (degree adverb)

unconscious until he becomes

(5) [A055] ‘She sang hoarse.’

kechil-key

roughly (manner adverb)

[Other Translations]

(6) [L038] ‘He wrung the shirt damp.’

Ku-nun chukchuk-han syechu-lul nel-ess-ta

he-NOM damp shirt hung

The Korean learners’ translation examples from (1) to (5) show instances of treating English AP-resultatives as adverbs. The - *tolok* translation in (1) implies that the learner interpreted an AP-resultative as a degree adverb. The morpheme - *tolok* does not denote the state of the main predicate event, but the degree of the event (Yeo, 2006, pp. 701-702).

The translation examples (2) and (4) represent typical interpretations of English resultative phrases by Korean learners. The *-ttaykkaci* phrases in Korean are similar to *until*-adverbial phrases in English. The readings of the English resultatives as *until*-adverbials by Korean learners are in line with the expectation of Park and Lakshmanan (2007, p. 337) that Korean learners will treat the adjectives in resultatives as adverbials. This type of readings by Korean learners corresponds to the “result-oriented adverb” of Eckardt (2003). (see Section 2.4)

The translations in (3) and (5) provide the evidence of manner adverbial readings of the English resultative phrases, which is affected by the adverbial functions of Korean AP-*key* phrases. Kim and Maling (1997) considered the *-key* morpheme as an adverbial modifier marker. Yim (2007) also argued that the “adjective-*key*” adverbials can represent manners of events or resultative interpretations. As a result, *-key* phrases in Korean serve dual functions and carry semantic ambiguity, which has been recognized by other researchers as well (Son, 2008; Wechsler & Noh, 2001; Yeo, 2006).

As seen in this section, English AP-resultatives were interpreted as adverbs denoting degree, result, or manner by the Korean learners. This finding supports the claim that Korean “result adverbials”²¹ have syntactically and semantically

²¹ Oh (2010) tried to avoid using the term “resultative” or “resultative secondary predication” for Korean *-key* resultatives. He claimed that Korean resultatives are not actually “resultatives” as widely called in the previous literature but “result adverbials” (p. 596). His argument that “result adverbials” in Korean carry dual functions/readings is explained well in the following sentence:

(1) Yenghuy-nun teyibul-ul kkaykkusha-key takkoiss-ta
 Yenghuy-NOM table-ACC clean-KEY wipe-ing-DEC
 ‘Yenghuy is wiping the table clean’

different properties from English resultatives: Korean “result adverbials” have two readings as result-oriented and manner adverbs (Oh, 2010; Yim, 2007).

5.1.2 Rethinking the Test Items: Pseudo-Resultatives

In the ECT, the NS controls showed a much higher preference for resultative constructions than the Korean learner groups, at the rate of 90%, than did the Korean learner groups. Meanwhile, the learners chose adjunct expressions instead of RCs at high rates: 47.5 % for the low proficiency group and 49.4% for the high proficiency group.

Korean *-key* resultatives are not complements but adjuncts, as discussed in section 2.2, and the Korean learners showed a strong preference for adjunct expressions to describe resultative events presented in pictures. This results suggest that the learners’ L1 had a strong influence on their choices between the competing forms in the ECT.

As far as the 10% of the NSs’ choices for adjunct expressions in the ECT are concerned, it is clear that two test items (*run-threadbare/slice-thin*) affected their preference for adverbial expressions. The first item (*run-threadbare*) was a low-frequency item which was not found in the corpus data of Boas (2003). The second item (*slice-thin*) was a so-called pseudo-resultative in the literature

The phrase, *kkaykussha-key* (clean-key) here can mean the manner of the action/event or the result state, depending on context (p. 610).

although Boas categorized it as an RC in his corpus study.

Five out of the 17 NSs completed the test sentence, *The reporters said he ran...*, with *until his shoes became threadbare* instead of *his shoes threadbare*. After the experimental session, the NS participants who chose *until*-phrases were asked why s/he chose those phrases. One NS participant (ID104) answered that s/he would use an RC to express an “intended result state” but an *until*-phrase to express a “natural result state”. Another NS participant (ID 102) claimed that the adjective *threadbare* sounded somewhat old-fashioned and British, and that therefore, *run his shoes threadbare* would sound unfamiliar to those who use American English.

The most problematic item that affected the NSs’ preference for adverbial expressions was *slice-thin*. Twelve out of 17 NSs chose *slice the potato thinly* instead of *slice the potato thin*. One NS participant (ID 100) explained that s/he was taught in school to use *thinly* as a manner adverb but s/he acknowledged that more and more teachers are advising students to use *thin* instead of *thinly* to mean “until it becomes thin”.

The sequence, *slice-thin*, has been called a pseudo-resultative in previous literature (Lee, 2008a ; Legendre, 1997; Mateu, 2000; Washio, 1997). The italicized lexical items in (7) are so-called pseudo-resultative predicates, which often function as adverbs.

(7) Mary braided her hair *tight*. (= firmly/ in a tight manner)

Mary sliced the bread *thin*. (= thinly/ in a thin manner)

(Lee, 2008a, p. 293)

As shown in (7), *tight* and *thin*, are commonly interpreted as adverbs. It seems apparent that these lexical items can easily alternate with adverbs as Washio (1997) and Lee (2008a) pointed out. They look like adjectives in form, but function as adverbs.

The ambiguity of pseudo-resultatives seemed to be a confusing factor in the NS controls' choices in the ECT. Although the *slice-thin* item was included in the test set based on the findings from the corpus data and the two native-speaker consultants, it created some disagreement in the NSs' choices. The inclusion of this pseudo-resultative test item thus slightly lessened the contrast between the Korean learners' and the NSs' performance in the ECT.

To conclude, the Korean learners performed much more poorly than the NSs in accepting grammatical RCs and rejecting unacceptable RCs in the AJT and in choosing RCs in the ECT. It seems clear that the different syntactic and semantic properties of Korean from English RCs affected Korean learners' performances. These L1-influenced results in the comprehension of English RCs are in line with claims made in previous crosslinguistic acquisition studies on English RCs (Slabakova, 2002; Whong-Barr, 2005).

5.2 L1 Influence on Korean Learners' Production of English Resultative Constructions

5.2.1 L1 Influence on the Use of Adjuncts

The statistical analysis of the results from Study II demonstrated that the Korean learners' production of English resultatives was not native-like, irrespective of their English proficiency levels. Only 32.0% of the low proficiency group and 34.8% of the high proficiency group produced the correct resultative constructions in the EWT.

The Korean learners produced several types of errors instead of the target RCs in the EWT. The most frequent error patterns were categorized into six categories: the use of adjuncts, coordination, serial verbs, missing direct object, missing result phrase, and other. (See section 4.2.2.)

Among these various error patterns, the majority involved the use of adjunct expressions: 33.6% of the L group and 49.7% of the H group's errors were attributable to the use of adjuncts. These results confirmed the prediction that the Korean learners would produce adjunct expressions to describe the provided resultative contexts, supporting the hypothesis that they tend to allow adverbial interpretations since the resultatives in their L1 are adjuncts. More examples of the use of adjuncts are presented in Table 5.2.

Table 5.2. EWT: The Erroneous Use of Adjuncts

Functions/Types	Participants' Answers
Manner Adverb	[L021/H019] danced <u>dizzily</u> [L025] hitted metal <u>flatly by hammer</u> [L035/H033] knocked him <u>unconsciously</u> [L049] hammer metal <u>flatly</u> [L026/H034] painted the room <u>with blue color</u> [H011] knocked him down <u>being unconscious</u>
Infinitival Adverb (Degree/Purpose)	[H044] hammered metal <u>to be flat</u> danced <u>to be dizzy</u> [H017] run <u>to have his shoes threadbare</u> [H048] sliced the potatoes <u>to be thin</u> [H022] sliced the potato <u>to make it thin</u> [H046] painted the room <u>to be blue</u> [L032] kick the door <u>to open it</u> [L011/H019] kicked the door <u>to be opened</u> [L026] knocked the person <u>to be unconscious</u> [H024] shoot the tiger <u>to make it dead</u> [L021] nail the window <u>to shut</u> [L020] got her hand <u>to be dirty</u>
Clausal Adverb (Degree/Purpose/Manner)	[L001] ran <u>until his shoes threadbare</u> [L049] run <u>when his shoes threadbare</u>

	[H028] knocked him <u>as he unconscious</u>
	[H013] runs <u>as if shoes were threadbare</u>
	[L040] slice the potato <u>as thin</u>
	[L049/H034] Danced <u>until dizzy</u>
Extent/Degree Adverb	[H038] danced <u>to the extent of</u> feeling dizzy
	ran <u>to the extent that</u> his shoes became threadbare

The Korean learners produced not only manner adverbs like *dizzily*, and *flatly* but also infinitival and clausal adverbs functioning as degree, purpose, or manner adverbs. It is notable that the Korean learners used infinitival adverbs like *hammered metal to be flat* for all of the 10 test items. These infinitival adverbs seem to serve purpose or degree adverbial functions.

From a different perspective, the *to be* in a *to be* +AP sequence might be the learners' attempt to introduce a morphological marking equivalent to *-key/tolok* in the Korean resultative construction. Korean's overt morphological marking (i.e., *-key/tolok*) is not found in English (Whong-Barr, 2005), but might be negatively transferred to the production of L2 English RCs.

This section's additional investigation into error types confirms that the L1 influence from Korean is evident in production as well as in comprehension, as discussed in section 5.1. Taking the results of the two studies together, we see that the Korean learners interpreted the English AP-resultatives as adverbs denoting degree, result, or manner both in comprehension and in production.

5.2.2 L1 Influence on the Use of Other Constructions

Section 5.2.1 discussed the most frequent error type in the EWT: the use of adjuncts rather than the RCs. This section discusses the other types of errors produced by the learners in the EWT, most of which are also related to their L1 Korean.

First, the missing direct object (e.g., [H028] **She dances dizzy*) reflects the fact that Korean RCs do not obey DOR (Direct Object Restriction), and, therefore, do not require the insertion of a fake reflexive object (i.e., *herself*). The missing resultative error type (e.g., [H021] **I sliced potato*) can also be predicted, given the argument that Korean resultatives are adjuncts, and, thus, can be omitted.

The use of coordination and the use of serial verbs were the second and third most frequent error types respectively (excluding the mixed category of “other”). Relevant to these types of errors is the Korean serial verb construction (SVC; Choi, 2003; Ko & Sohn, 2015). A Korean serial verb construction is exemplified in (8).

(8) a. Chelswu-ka sakwa-lul kkaka mek-ess-ta.

Chelswu-NOM apple-ACC peel eat-PAST-DC

‘Chelswu peeled the apple and ate it.’

(Choi, 2003, p. 6)

b. *John-i kaymi-lul palp-a cwuk-i-ess-ta.*
 John-NOM ant-ACC trample-LK die-CAUS-PAST-DC
 ‘John trampled an ant to death.’

(Ko & Sohn, 2015, p. 82)

The serial V-V in (8) consists of two transitive verbs that interlink two separate events.

An example of a Korean participant’s translation of the target structure into an SVC is given in (9).

(9) [L001] Her mom kicked open the door.
 ‘cha-(se) yel-ess-ta’
 Kick-LK-SE open-PST-DC

Some of the errors on the EWT that were categorized as “other” also reflect transfer of Korean SVCs, as shown in (10).

(10) [L017/L013] opened the door by kick
 [L015/H010] opened the door by kicking

The underlined *by*-phrases appear to be translations of *cha-(se)* (“kick-LK-

SE”), which denotes is the means of the event of *the door being opened*. Ko and Sohn (2015, p. 6) proposed that in (8b), the causative marker *-i* has scopes over V2 ‘*die*’, but not over V1 ‘*trample*’: (8b) does not mean “John caused an ant to trample (something) and die”. Instead, it means that ‘John trampled an ant, and (he) caused the ant to die’. The agent of the preceding verb *palp* ‘trample’ is ‘John’, who is the causer of the event of an ant’s dying. Ko and Sohn’s proposal also explains the compound sentence error types in the EWT, such as the examples in (11).

(11) [L021] The police shot the tiger so tiger was dead
He knock him and make him unconscious

These examples support the claim of L1 transfer: The Korean learners used compound sentences instead of resultative sentences because they were influenced by the corresponding meaning of the L1’s serial verb constructions.

Meanwhile, it could also be argued that the learners were not acquainted with the RC. Therefore, they depended on the use of monotransitive constructions, as illustrated in (12).

(12) [L030] paint blue in their room
[L019] was getting dirty at her hands.
[L013] shoot the tiger which become dead
knocked him who became unconscious

According to Lee and Kim (2011, p. 594), when a construction has more complements, learners may experience more difficulty due to the greater processing load. Thus, processing load might have contributed to learners' high production of monotransitive constructions.

Clifton et al.'s (1991) research suggests that adjuncthood can also increase processing time or processing load for speakers. In their study, adult native speakers of English read sentences with argument prepositional phrases significantly faster than sentences with adjunct prepositional phrases. Adjuncts are not selected by the verb, and are not processed rapidly even in L1. It is presumable that adjuncts in learners' L1, such as Korean resultatives, would be processed slowly in their L2.

Furthermore, EFL learners' tendency to rely on basic verbs repeatedly (Altenberg & Granger, 2001; Kim, 2015) was found in the present study as well. The following error examples in (13) show this tendency.

(13) [L028] made the metal flat

[L035] made tiger dead as shoot the gun

[L043] makes the metal to flat by using hammer

[H023] made her hand get dirty

This study's observation of learners' reliance on the causative verb, *make*, supports Kim's (2015, p. 161) argument that "learners easily employ the familiar uses of *make*, and avoid the use of unfamiliar lexical verbs." In other words, the

examples in (13) show that the learners depended on familiar causative constructions instead of using the less familiar English RCs.

Other errors reflect a complementation type of Korean resultative construction²², which uses a *-lo* resultative (Ko, 2015b). Examples are given in (14).

- (14) [L024] *paint the room to blue*
 [L046] *slice the potato into thin*

The learners’ productions in (14) again imply that their production of English RCs was affected by their L1, in this case, the Korean “*-lo ppahta*” type of SC, as described by Ko (2015b). According to Ko (2015b), *-lo* resultatives are “embedded under a ‘change of state’ verb such as *ppahta* (pound), *caluta* (cut), and *mwultulita* (dye)” (p 350).

The EWT results demonstrate not only syntactic L1 transfer but also

²² According to Ko (2015b), there are four types of resultative small clauses in Korean:

	Null SC-subject	Overt-SC-subject
Complement	khong-ul kalwu-lo ppahassta bean-Acc powder-Res pounded ‘pounded beans into powder’	mwul-ul photocwu-lo mantulessta water-Acc wine-Res made ‘turned water into wine’
Adjunct	patak-ul hayah-key chilhayessta floor-Acc white-Res painted ‘painted the floor white’	patak-i haya-key chilhayessta floor-Nom white-Res painted ‘painted the floor white’

(Ko, 2015b, p. 349)

semantic transfer from the learners' L1. The semantic influence of Korean is illustrated in (15).

(15) [H004] *slice the potato very thin*

[H041] *sliced the potato very thin*

The learners modified the adjective *thin* with *very*, which is not allowed in English but is possible in Korean, as discussed in section 2.2: The resultative -*key* phrase in Korean can have [-telic] property, and thus allows modification with *very*, as well as cancellation and various AP types, in contrast to the English RC.

5.2.3 The Scope of the Korean Resultative Construction

The variety of error types observed in the EWT presented in the preceding sections suggests that previous discussions about Korean RCs have been insufficient to account for the broader scope of the Korean RC compared to the English RC. As Oh (2010) and Hwang (2011) pointed out, previous studies have tried to equate the English RC with a Korean RC. This one-to-one correspondence between the two languages, however, does not hold. Korean has three types of translation equivalents to English RCs as illustrated in figure 5.1.



Figure 5.1. English RCs and Korean Equivalents

The Korean learners produced these types of translation equivalents for English RCs, as shown in (16).

(16) a. <-key phrase denoting manner or degree>

[L026/H034] *painted the room with blue color*

[H046] *painted the room to be blue*

b. <-lo phrase denoting resultant state>

[L024] *paint the room to blue*

c. <Serial Verb Construction (SVC)>

[L001] *kicked open the door*

As translation equivalents of English RCs, the Korean *-lo* resultatives (equivalents to (16b)) and SVCs (equivalents to (16c)) seem to have been

neglected in literature so far. Therefore, future studies of the acquisition of the English RC by Korean learners need to take these two constructions into consideration.

5.2.4 Alternative Views on the Verb-Specific Analysis

Section 4.2.3 presented a verb-specific analysis of the EWT results. That interpretation of the results was based on constructional grammar's distinction between verbal and constructional resultatives (Goldberg & Jackendoff, 2004). In general, the Korean learners were challenged by constructional resultatives requiring heavy/dynamic verbs such as *kick*, *hammer*, and *nail*. In other words, lexical factors and prototypicality affected the difficulty of the constructions (Lee & Kim, 2011, p. 595).

Wechsler's (2001) discussion of the effect of verbal aspect and Levin's (1993) treatment of the role of verb class suggest other views of the learners' better performance on specific verbs. Wechsler (2001) suggested possible pairings of verbs and adjectives²³ that would yield a telic sense for a resultative construction. The verbs are classed by aspect: durative and punctual. The 10

²³Wechsler (2001, p.9) described three possible situations that permit a telic sense.

Type I. The verb is durative (expresses an event that is extended in time); the resultative predicate is a gradable, maximal endpoint closed-scale adjective.

Type II. The verb is punctual; the resultative predicate is a non-gradable adjective.

Type III. The resultative predicate is a path PP (to or into) whose object NP specifies the bound (The verb is normally durative, unless the path is very short.)

Boas (2003, p. 201) also claimed that the “primary” verbs such as *paint* and *hammer* cannot be replaced by other verbs, and that they form a collocational pattern with resultative phrases. This argument would also explain why the durative verb *hammer* elicited fairly high rates of the use of RCs (total: 28.9%).

The other factor underlying the aspectual classification of verbs is telicity which means “having a culmination, telos, or endpoint” (Hay, Kennedy, & Levin, 1999; Olson, 1994). According to Hay, Kennedy, and Levin (1999, p. 139), “the best known examples in the literature on telicity are those based on verbs of consumption, creation, and motion (e.g., *eat*)”. Olson (1994) defined [+telic] verbs are those that denote transition to an end, such as *cut out*, *finish*, and *knock off*, among others.

Telicity of verbs can explain the patterns of verb-specific analysis above. The telic verbs in the sense of Hay, Kennedy, and Levin (1999) and Olson (1994) elicited higher rates of the use of RCs by the Korean learner participants than the other verbs: *get* (63.9%), *slice* (58.8%), *knock* (33.0%), *shoot* (26.8%), and *paint* (72.2%).

If we borrow the exemplar-based learning approach (Boyd & Goldberg, 2009; Bybee, 2006; Ellis & Ferreira-Junior, 2009; Kidd et al., 2010; McDonough & Kim, 2009; Tomasello, 1992), the verb-specific analysis has implications for the instruction of RCs. These studies reported the effectiveness of providing high-frequency exemplars and the increased easiness of recalling high-frequency items: The learning of a construction is optimized when learners are provided with a high-frequency exemplar that is prototypical in meaning. Accordingly,

providing learners with items based on frequency of use data might facilitate the learning of RCs.

To conclude, learners seem to face obstacles “in cases where they negatively transfer their linguistic knowledge of the L1 to L2 context” (Sadeghi, 2009, p. 100).” This study’s results suggest that strong transfer effects blocked the learners from showing native-like performance in the production of English RCs. The variety of error types observed in the EWT also implied that Korean has three types of translation equivalents to English RCs. In other words, it is a false premise that the Korean RC is an equivalent to the English RC.

5.3 The L1 Influence Revisited: Data from Filler Items and Heritage Speakers

This section discusses observations based on two types of data produced by this study but not considered as part of the main analyses: Data from filler items and data from the participants who are heritage speakers of Korean are introduced.

5.3.1 Data from Filler Items: Learning Potential

If we can show that the Korean learners performed better when processing items that have the same syntactic structure in their L1 and L2, we can argue more strongly for the L1 influence on their learning of L2 English RCs, which have a different syntactic structure from the Korean equivalents.

As has been repeatedly mentioned above, the Korean *-key* resultative is an adjunct, while the English counterpart is a complement. Thus, the critical test items in the experiments were syntactically distinct. However, one filler item in the ECT/EWT utilized a transitive verb that takes a small clause (SC) complement in both Korean and English: the epistemic verb *yekita* ‘consider’, which occurs in the structure [VP [sc NP AP]]²⁴. Table 5.3 lists all five filler items: the other four filler items are analyzed together. Figure 5.3 represents the rates at which the

²⁴ The Korean equivalent to consider’s SC complement is marked by *-lo* ‘as’ or *-ko* ‘that-clause’ (Aarts, 1992; Adger & Ramchand, 2003; Basilico, 2003; Lee, 2008b) is marked by *-lo* ‘as’, or *-ko* (‘that-clause’). The so-called *-lo/-ko* SC complement carries a propositional meaning and is selected by the matrix verb, *yekita* (Kim, 2003; Ko, 2015a; Yoon, 2013).

learner groups (L and H) produced the target constructions for each filler item in the EWT.

Table 5.3 ECT/EWT: Filler Items

Construction	Filler Sentence
Depictive	<i>Don't cut the bread hot</i>
Intransitive (Complement)	<i>The music sounds great</i>
Ditransitive (Double Objects)	<i>I sent him an email</i>
Transitive (Complement)	<i>Do you still consider him honest?</i>
Caused-Motion Construction (CMC)	<i>She pulled the boy out of the water.</i>

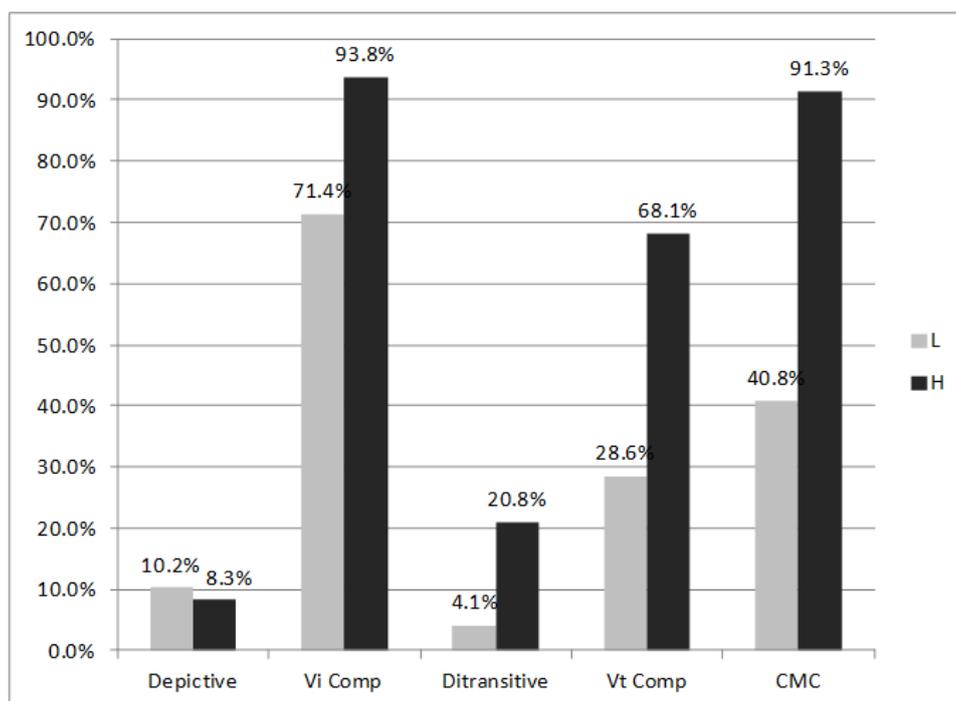


Figure 5.3. Distributions of Filler Item Uses

First of all, the results show a sharp contrast between the L and H group's rates of correct use of the transitive complement item, *consider him honest* (Vt, Comp). The H group used the target complement construction at the rate of 68.1% while the L group used the construction at the rate of 28.6%. Such a difference between the proficiency groups did not show up with the critical test items in the EWT, which utilized RCs, with their distinct syntactic structures in the participants' L1 (adjunct) and L2 (complement). The H group used the target construction at the rate of 34.8% and the L group used it at the rate of 32.0% (see section 4.2.1).

The better performance by the advanced learners on one item that employed an L2 complement with an equivalent L1 complement (*yekita* 'consider' NP AP) supports once more the position that L1 and L2 differences affect the learning of the L2 target construction. Differences at both syntactic and semantic level (form-meaning level) appear to cause considerable L1 influence on the learning of English RCs, regardless of the learners' proficiency.

Second, in general, the higher proficiency (H) learner group also showed better performance than the lower proficiency (L) group in the production of the four other filler items: an Intransitive Complement (Vi, Comp), a Ditransitive, a Transitive (Vt, Comp), and a CMC. Unlike the results for the RC items, the results for these filler items confirm Yin and Kaiser's (2011) observation: "As learners' proficiency increased, so did the likelihood of successful convergence on the English grammar" (p. 196). The results imply that there is still scope for improvement in Korean learners' learning of RCs as well. If we can provide

systematic form-meaning mapping based on L1-L2 differences, the learners will be able to unlearn their L1-based processing and acquire target-like comprehension and production.

On the other hand, the Korean learners did show low rates of producing depictive and ditransitive constructions. Regarding the depictive, especially, the H group demonstrated no improvement over the L group. It is assumed that the Korean learners had no knowledge of the depictive construction. Most of their answers instead used adjunct phrases such as *cut the bread when it's hot* instead of using the depictive *cut the bread hot*.

Regarding the ditransitive construction, most of the participants used the prepositional dative instead of the ditransitive construction, so the frequencies of ditransitives were very low. Park (2008) has also reported that Korean learners of English prefer prepositional datives to ditransitives, irrespective of the priming stimulus type. It also has been reported that L1 Spanish, Polish, and German learners of L2 English show intricate patterns in their processing of ditransitives and prepositional datives (Manzanares & López, 2008). The apparent low-preference for ditransitive constructions shown by Korean learners seems to need further consideration and empirical support in future studies.

5.3.2 Data from Heritage Speakers: Problems at the Syntax-Semantics Interface

Turning to the discarded heritage speakers' data mentioned in Section 3.2.1.1, 11 of the volunteers were Korean Americans. One participant was excluded because s/he did not complete the given tasks, and data from 10 of them were analyzed. Five were males and five were females, and their mean length of residence in Korea was 10.7 years.

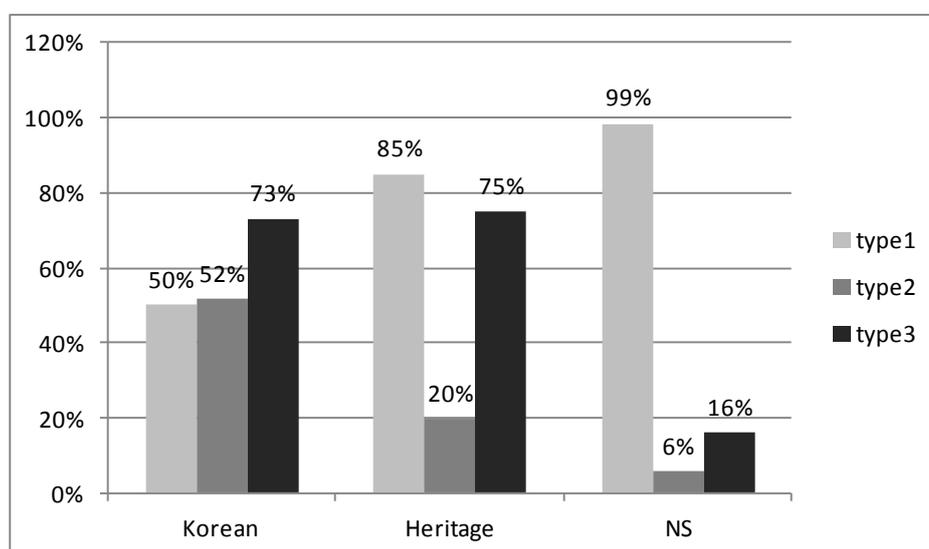
The current study follows Montrul's (2010) definition of heritage speakers as

“child and adult members of a linguistic minority who grew up exposed to their home language and the majority language. ...Heritage speakers share a common characteristic: they have achieved partial command of the family language...not all heritage language children have access to education in their heritage language. Consequently, the vast majority of adult heritage speakers typically have very strong command of the majority language.” (pp. 4-5)

The 10 heritage speaker participants of the present study, however, had all been living in Korea for more than 10 years on average and had access to education in their heritage language (Korean) in their childhood. Therefore, they are assumed to have achieved a good command of Korean, unlike many other heritage speakers discussed in the literature who live in countries with a different

majority language. Accordingly, the current participants were expected to show Korean influence on their use of English RCs to some extent.

First, the acceptance rates for the three types of stimuli in the AJT (Type 1 = Grammatical Resultative, Type 2 = Syntactically Unacceptable, Type 3 = Semantically Unacceptable) were compared across groups: L1 Korean (both the L and H), Heritage, and NSs. Figure 5.4 presents the results.



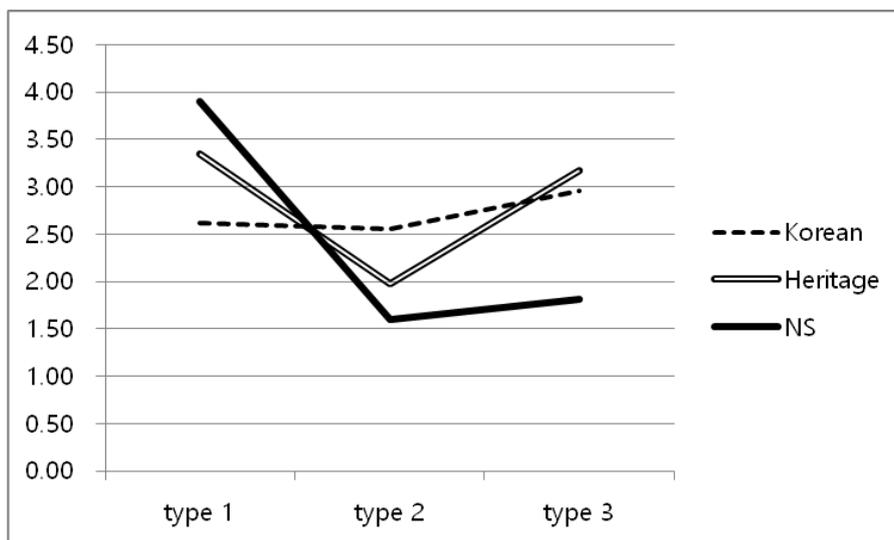
Type 1= Grammatical Resultative, Type2= Syntactically Unacceptable, Type3= Semantically Unacceptable

Figure 5.4. AJT: Acceptance Rates by Group (Korean, Heritage, NS)

The heritage speakers accepted Type 1 at the rate of 85% and rejected Type 2 at the rate of 80%. They rejected Type 3, however, at the rate of 25%. This means that the heritage speakers, like the L1 Korean participants, could not discriminate

semantically unacceptable RCs.

Second, the asymmetry between heritage speakers and NSs was verified by means of statistical analysis. A repeated measures ANOVA revealed a significant main effect for group ($p < .01$), stimuli type ($p < .01$), and a type by group interaction ($p < .01$). Next, t -tests were conducted to make separate pair-wise comparisons between the Heritage group and the other two groups (i.e., Korean vs. Heritage and NSs vs. Heritage)²⁵. Figure 5.5 illustrates the results.



Type 1= Grammatical Resultative, Type2= Syntactically Unacceptable, Type3= Semantically Unacceptable

Figure 5.5. AJT: Mean Acceptability Ratings by Group (Korean, Heritage, NS)

²⁵ The reporting format and statistical analysis were adopted from the bilingual competence study of Montrul (2006).

As for Type 1 (Grammatical Resultatives), the heritage speakers' comprehension was significantly different from that of both the Korean learners, $t(107) = -4.378, p < .01$ and the NSs, $t(25) = 4.210, p < .01$. Regarding Type 2 (Syntactically Unacceptable), the heritage learners showed a statistically significant difference from the Korean learners, $t(107) = 2.936, p < .01$, and from the NSs, $t(25) = -1.799, p < .01$. These results indicate that the heritage speakers' understanding of English RCs in terms of syntactic awareness is right between that of the Korean learners and that of the native speakers of English²⁶.

In contrast, the heritage speakers performed very similar to the Korean learners statistically when they faced type 3 (Semantically Unacceptable), $t(107) = -1.455, p = .149$. Their performance here was statistically different from that of the NSs, $t(25) = -.8366, p = <.01$. This result shows that the heritage speakers did not reach native-like semantic awareness about English RCs but still remains at the level of Korean learners' semantic awareness.

The asymmetry between syntactic and semantic awareness shown by the heritage speakers was also found in the AJT results of the H group, as reported in section 4.1.1: The H group recognized the syntactically unacceptable sentences (Type 2) better than the semantically unacceptable sentences (Type 3). These asymmetries between syntactic and semantic awareness of English RCs suggest

²⁶ For example, many of the heritage speakers did not reject Type 2 items, *She sang hoarse and *The river froze solidly: Even if they correctly rejected these items, they often did not insert the fake object, herself in their corrections. Instead, they changed hoarse into hoarsely or adverbial phrases. The implication is that they were affected by Korean -key resultatives, which are adjuncts.

that more advanced learners including heritage speakers have a tendency to be able to detect syntactic ungrammaticality better than semantic awkwardness.

The results support the Interface Hypothesis (Benmamoun, Montrul, & Polinsky, 2013; Montrul, 2009; Sorace & Filliaici, 2006; White, 2011) to some extent. The premise of the Interface Hypothesis is that near-native speakers' problems are likely to be associated with external interfaces (syntax-discourse, syntax-pragmatics) or internal interfaces (syntax-semantics, syntax-morphology). The Korean and Heritage groups of the present study showed that these speakers did not successfully map the syntax of the English RCs onto their semantics²⁷. Hagoort (2003) also reported a similar asymmetry between syntax and semantics during an on-line acceptability judgment task showing that it took subjects significantly longer to detect semantic anomalies than syntactic ones²⁸.

Finally, the production data of the heritage speakers from the ECT were analyzed. The results are presented in figure 5.6.

²⁷ White (2011, p. 584) is introducing the Bottleneck Hypothesis proposed by Slabakova (2009): "When syntax and semantics do not interface smoothly, the reason is a bottleneck caused by failure to fully master associated functional morphology". The Bottleneck Hypothesis seems applicable to the present study in that the morpheme *-key* in Korean resultatives (Korean AP-key resultatives are adjuncts but English counterparts are complements) could trigger semantic confusion for L2 learners and Korean heritage speakers. We leave this morphological account for future research.

²⁸ Twenty-four adult Dutch speakers participated and their reaction time (RT) was checked for syntactic anomalies (gender and number mismatch in article + noun combination) and semantic anomalies (unacceptable combinations of an adjective and its following noun: e.g., *honest umbrella* in Dutch).

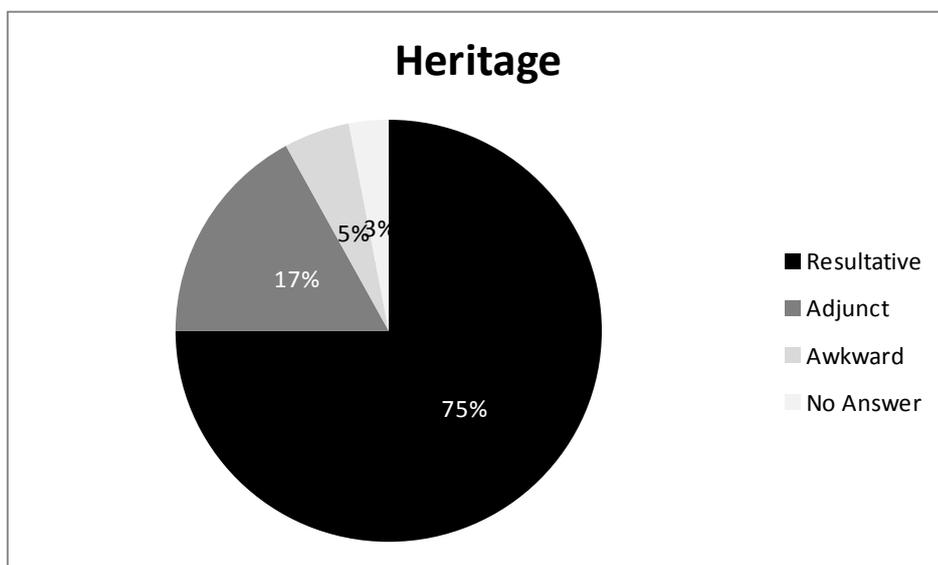


Figure 5.6. ECT: Distribution of Heritage Speakers' Choices

The heritage speakers chose RCs among the three options (RC/ adjunct / awkward expression) at the rate of 75%, which is a lower rate than that of the NSs (90%). They chose adjunct expressions, which are assumed to reflect the L1 Korean influence at the rate of 17%. The distribution of the heritage speakers' choices is between that of the L1 Korean learners and that of the NSs.

In sum, the further analysis of filler items revealed that the high proficiency learners' comprehension was better than the low proficiency learners' comprehension when they processed items that share the same syntactic status between their L1 and L2. The heritage speakers' data showed that they are influenced by their heritage language, Korean, to some extent. Both of these further analyses again support the L1 influence on the learning of the English RC.

5.4. Pedagogical Considerations

5.4.1 Korean Students' Experience of Learning English Resultative Constructions and Implications

The findings of the present study raise a question about learners' opportunity to learn English resultative constructions. Although the learners' poor performance in the comprehension and production of the target construction is highly expected, the pedagogical reasons are worthy of investigation.

To explore this issue, a "construction recognition survey" (adopted from Year & Gordon, 2009) was administered in Study I. Figure 5.7 presents the results.

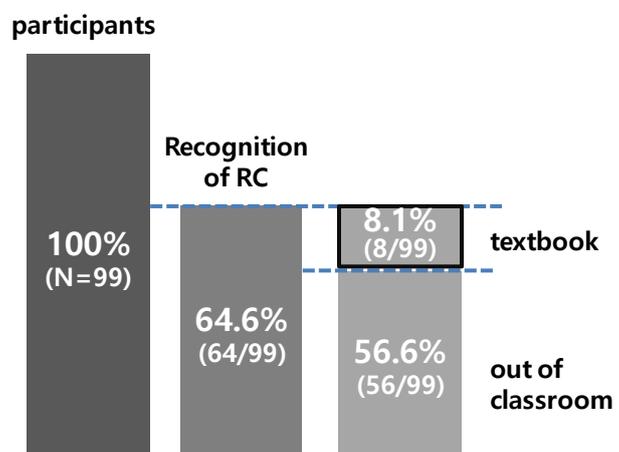


Figure 5.7. Participants' Construction Recognition and Learning Experience

Of the participants in Study I, 64.6% answered that they have been exposed to the English resultative construction (RC): They answered in the affirmative to the question inquiring whether they had seen the target structure somewhere. The following question, “Where have you encountered or learned the construction?”, yielded noteworthy answers. Only 8.1% of them answered that they had seen the RC in textbooks in school.

56.6% of them answered that they had learned it outside the classroom through private educational institutes, pop songs, movies, or authentic reading materials. Some participants stated that they had heard the RC when they lived in English-speaking countries. Three participants answered that they had seen the RC in Korean SAT test items.

Regarding a question about the necessity of teaching RCs in the classroom, 65.7% of the participants answered that they need to learn the RC in school. Some participants added further opinions; for instances, that a “teacher’s ability to teach the RC seems important for the learning of the target construction” [L002]; and that “contexts where this construction is used are important so the instruction should be provided with contexts” [H003].

The *Curriculum for English Education* (2011) was examined to see if the English RC is included. The list of linguistic forms for communicative competence is provided in the form of 33 functional groups. On this list, the [S V NP Complement] in the 10th refers only to the phrase *elect him chairman* (p. 93). The 15th group deals with *make/have/let* causatives (p. 95): The exemplars for teaching in school are heavily skewed towards causative constructions.

The Korean participants' demand for learning of RC could be satisfied by applying the Educational Grammar Hypothesis proposed by Yang (2003, 2008, 2010) and Yang, Kim, and Sung (2014) to classroom instruction. According to these research, we need to have a more balanced and systematic view of linguistic systems for successful foreign language teaching. Although the Communicative Language Teaching (CLT)-based national English curricula aimed to facilitate Korean learners' communication in English, it has been reported that Korean learners still have considerable difficulties acquiring basic communicative competence in English (Yang, Kim, & Sung, 2014, p. 99).

Furthermore, some classroom-based case studies regarding policy implementation in Korea have revealed problems in CLT-based instruction in EFL contexts (Ahn, 2008; Gilloteaux, 2004; Kim, 2008). Kim (2008) reported that the communicative activities presented in textbooks are not appropriate for low-level students and that CLT is not being implemented successfully in classrooms. A more localized instructional model might be more appropriate for the EFL context in Korea.

These reports of the inadequacy of CLT-based instruction in Korea also unveil the problem of UG accessibility to EFL learners. Hahn (2000b) found that this problem stems from an insufficient amount of input in foreign language contexts, in contrast to second language contexts, where UG was found to be accessible to learners (pp. 234-235).

Following Yang's Educational Grammar Hypothesis, this problem can be solved by incorporating core ideas of Constructional Grammar in the

development of language instructional systems. The Constructional Grammar approach understands a sentence as a propositional linguistic unit of form and meaning pairings, as illustrated in table 5.4.

Table 5.4 Form-Meaning Pairing of Resultative Construction

	<i>Tom</i>	<i>wiped</i>	<i>the table</i>	<i>clean</i>
Form	Subject	Verb	Object	Oblique _{AP/PP}
	↕	↕	↕	↕
Meaning	Agent	Predicate	Patient	Result-goal

(Adapted from Goldberg, 1995, p. 190)

The form-meaning pairings shown in the table are called argument structure constructions (ASCs), and they express propositional messages about events or situations. Syntax and semantics are interlinked with each other and they are stored and operate simultaneously. This interaction of syntax and semantics does hold in RCs in Korean, as seen in sections 2.1 and 2.2. As Yang, Kim, and Sung (2014, p. 109) highlighted, the form-meaning pairing properties of sentences need to be emphasized in developing foreign language curricula and instructional systems including teaching materials and methods.

Regarding teaching methodologies, problems with L1 influence can be addressed through FonF (focus on form), meta-linguistic information, and noticing including corrective feedback and enhanced input (Della Putta, 2016; Ellis, 2016; Grami & Alzughairi, 2012; Kang, 2009; Kartchava & Ammar, 2014;

Lee & Huang, 2008; Lightbown & Spada, 2000; Mackay, 2006; Norris & Ortega, 2000; Sharwood Smith, 1993). The findings of Norris and Ortega's (2000) meta-analysis of instructional studies showed that explicit FonF/FonFs are more effective than implicit meaning-driven instructions since explicit treatments are typically more intense and varied (p. 501).

Meanwhile, of course, we need to be cautious when applying the methodologies above. As DeKeyser (2012) and Lee (2014) pointed out, individual differences (AoA or aptitude) affect the overall effectiveness of L2 instruction, interacting with cognitive and linguistic variables²⁹.

Importantly, L1 influence effects can be minimized through explicit meta-linguistic information. Lightbown and Spada (2000) suggested that since L1 clearly influences L2 performance, drawing learners' attention to these influences is important. They also emphasized that contrastive information need not be presented in contrasted features in de-contextualized sentences but we should help learners see the relationship between L1 and L2 patterns through brief, short explicit presentation or materials.

In this regard, noticing techniques, including corrective feedback and input enhancement are also known to be effective in eliciting learners' correct use of target language forms (Kartchava & Ammar, 2014; Mackay, 2006). In particular, a prompt technique, as a type of corrective feedback, is defined as elicited self-

²⁹ For instance, the interaction research by DeKeyser (1993) reported that the effectiveness of error correction depended on previous achievement, extrinsic motivation, and anxiety level of individual learners. A comprehensive discussion on Instructed Second Language Acquisition (ISLA) is provided by Lee (2014).

correction from the learner that includes metalinguistic information³⁰. This technique can be applied to the instruction of English RCs as well. Visual input enhancement in texts and materials has been reported to be effective in the improvement of L2 learners' learning of target languages (Lee & Huang, 2008; Sharwood Smith, 1993).

As, Grami and Alzughabi (2012) stated, language teachers should be equipped with proper knowledge about L1 transfer, and be able to address this problem in class. "Learners will be tempted to transfer the entire scope of the L1 rule to the L2" when an L1 rule has a wider scope than an L2 rule, as in the case of Korean and English RCs (Della Putta, 2016, pp. 219-220). Therefore, we need to help students not to merely translate meanings from their mother tongue to express L2 structures and meanings. In sum, teachers' and students' awareness of L1 transfer is the key to achieve a more satisfactory proficiency level of English.

5.4.2 Necessity of Teaching English Resultative Constructions

The final question is whether Korean learners need to learn the English RC. It is true that the RC is low in frequency. Boas (2003, 2005) found 6000 resultative sentences in the British National Corpus (BNC) which is a computer corpus of 100 million words of British English, written and spoken.

³⁰ In prompts, a teacher provides metalinguistic clues (e.g., How do we form the past in English?) and pushes the learner to self-correct (Kartchava & Ammar, 2014, p. 433).

However, the RC is a criterial construction for the B2 level (intermediate-advanced) of the CEFR (Common European Framework of Reference) (Hawkins & Buttery, 2010). The six levels, which are summarized in the Council of Europe's 2001 document "*CEFR: Learning, Teaching, Assessment*" (Cambridge University Press), are given in (17):

(17) The CEFR Levels: C2 Mastery

C1 Effective Operational Proficiency

B2 Vantage

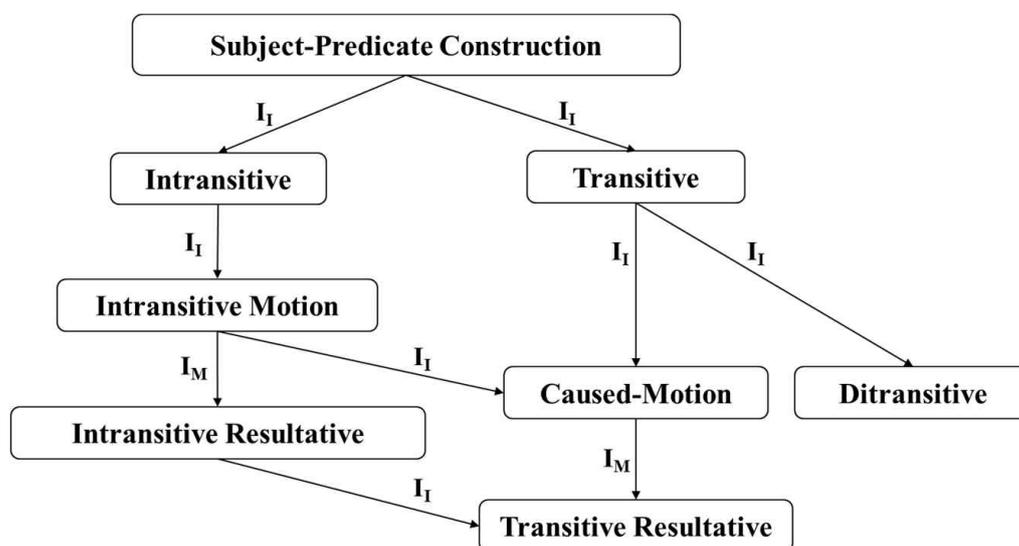
B1 Threshold

A2 Waystage

A1 Breakthrough

According to their research, the RC *He painted the car red* appears at the B2 level as a new verb co-occurrence construction, which means that the RC is a positive grammatical criterial feature for the B2 level (Hawkins & Buttery, 2010, pp. 12-13).

Moreover, Sung and Yang (2016) have shown that the learning of the RC, a "marked" construction facilitates the learning of other basic constructions. This facilitative effect of first learning the RC is explained by Goldberg (1995)'s hierarchical network of ASCs, as illustrated in figure 5.8.



(Adapted from Goldberg, 1995, p. 109 & Sung and Yang, 2016, p. 4)

Figure 5.8. Hierarchical Network of Argument Structure Constructions

According to Sung and Yang (2016), an inherited/metaphorically extended construction, the RC, contains the markedness³¹. As a result, the instruction of a more marked construction has positive effects on the learning of a less marked one. Similar instructional effects of network-based instruction of ASCs are reported in Rah’s (2014) study as well.

To summarize, the L1 affects the learning of RCs by L2 English learners. Moreover, little attention has been paid to the experience of learning the RC. Learners have been left on their own to acquire this “marked” target construction.

³¹ “Markedness” is used here in Haspelmath’s (2006) sense, which, according to Motrul (2009, p. 266), can be “in the typological sense (it is less frequent in languages of the world), in its formal sense (it involves more levels of representation or more derivations), in its functional sense (it is used less frequently), or in the acquisition sense (it is acquired later than others by children).”

The learners need to be helped by teachers and textbooks systematically to learn English RCs. This is because the developmental sequence is also shaped by the cognitive load from L1-L2 differences, not only by the internal syntactic complexity of the target forms (Slobin, 2004, 2006). The learnability of English constructions “is closely related not only to some morpho-syntactic mechanisms involved in syntactic derivation but also to their availability in the learner’s L1” (Lee, 2006, p. 650).

CHAPTER 6.

CONCLUSION

6.1. Major Findings and Pedagogical Implications

This dissertation has investigated how different resultative constructions in English and Korean are in terms of their syntactic and semantic properties, and how Korean EFL students' learning of the English resultative construction is influenced by their L1. In addressing these issues, the main focus was on how Korean students' comprehension and production of English resultative construction is affected by their L1.

The dissertation consisted of a linguistic discussion and two experimental studies. The linguistic discussion explored syntactic and semantic differences in resultative constructions in Korean and English. The syntactic discussion reviewed recent research on the syntactic properties of the Korean, *AP-key* phrases, pointing out that the current studies generally agree on an adjunct analysis. It also provided empirical evidence that Korean *AP-key* resultatives, as adjuncts, have fewer restrictions than English resultatives, which are complements.

The semantic discussion showed that Korean resultatives behave like atelic predicates, in that they allow *in/for*-phrases, negation (cancellability) test, as well as co-occurrence with some degree modifiers that the English RC does not allow.

These tests of telicity support the view that Korean AP-*key* phrases are adjunct phrases that can express result (telicity), manner, or degree (atelicity) depending on context. Accordingly, unlike English RCs, which are characterized by telicity, Korean AP-*key* phrases do not always indicate a culmination point (Hwang, 2011, p. 539), and therefore can denote atelic readings.

The experimental studies consisted of Study I (Comprehension Test) and Study II (Production Test). Study I involved two tasks: an acceptability judgment task (AJT) and an elicited choice task (ECT) in which two proficiency groups (High and Low) of Korean learners and a native-speaker control group participated. The two tasks of Study I explored how Korean students' comprehension of English RCs is influenced by their L1. Study II involved an elicited writing task (EWT) to explore how Korean students' production of English RCs is influenced by their L1.

The results showed that the Korean students' comprehension of the target construction was significantly lower than that of the NS control group. The Korean students' production of the English RC did not show native-like use of the target construction. Furthermore, the Korean learners' comprehension and production were found to be influenced by their L1 syntactically and semantically.

First, in the AJT, in contrast to the NSs' comprehension pattern, both Korean learner groups, regardless of proficiency, failed to accept the grammatical RCs (Type 1) and failed to reject the syntactically and semantically ungrammatical RCs (Types 2 and 3). Moreover, the two Korean learner groups showed much lower consistency rates than the NS control group in the AJT. This contrast among

groups is consistent with the linguistic hypothesis of this study: Since Korean RCs are adjuncts and can carry [-telic] meanings, Korean learners will fail to reject syntactically and semantically unacceptable RCs. Moreover, the task results showed an asymmetry in the high proficiency group's awareness of syntactic and semantic acceptability (as was also the case for a heritage speaker group; section 5.3). The existence of this asymmetry highlights the importance of learning the telic properties of English RCs.

Second, the ECT also showed a substantial difference in preferences for English RCs between the Korean learner groups and the NS control group. As expected, the NSs showed significantly higher preferences for English RCs than the two Korean learner groups. These group differences were also expected, as they accorded with the linguistic perspective of this study: Since Korean RCs are adjuncts, Korean learners will choose adjunct expressions among competing forms instead of the correct target forms, English RCs, which are complements.

Third, in the EWT, the Korean learner groups revealed L1 transfer influences on their production of English RCs. The Korean students could not produce English RCs in the sentence completion task. Instead, most of them produced "adjunct" type errors, as well as smaller numbers of various other error types. Their production of these errors highlights the L1 influence again, in that the adjuncthood of Korean RCs affected the Korean learners' production of English RCs.

Finally, the variety of error types observed in the EWT suggests that previous discussions of Korean resultatives are insufficient to account for the

broader range of Korean resultatives compared to English RCs. There is no one-to-one correspondence between RCs in the two languages. The Korean learners expressed English RCs in three types of translation equivalents in Korean: *-key* phrases denoting manner or degree, *-lo* phrases denoting resultant state, and serial verb constructions in Korean.

The results of the present study are in line with the Constructionist Approach that Goldberg (1995, 2013) describes below:

“Constructions are expected to vary in their specifics crosslinguistically, and this does seem to be the case... Finding two constructions in two different languages that are absolutely identical in form, function, and distribution is a rare occurrence outside of cases of shared diachronic history or language contact”

(Goldberg, 2013, p. 23).

The findings of this study have pedagogical implications concerning how to help Korean EFL learners learn English RCs. First, an examination of the national curriculum showed that Korean learners currently do not have the opportunity to learn the English RC in school. Since their learning experiences in school are not based on a balanced and systematic linguistic approach (Yang, 2003, 2008, 2010), they are left to their own devices to learn the basic argument structure constructions (ASCs). The Educational Grammar Hypothesis (Yang, 2003, 2008, 2010; Yang, Kim, & Sung, 2014) provides a way to help Korean learners by

applying the core ideas of Constructional Grammar to the language instructions. It is widely accepted that pedagogical tasks facilitating L2 form-meaning mappings are effective in learning target constructions (Slobin, 2004, 2006).

Second, L1 influence effects can be minimized through providing learners with metalinguistic information (Della Putta, 2016; Lightbown & Spada, 2000), feedback and noticing (Kartchava & Ammar, 2014; Mackay, 2006), input enhancement (Lee & Huang, 2008; Sharwood Smith, 1993), and focus on context (Collins, 2007). Drawing learners' attention to L1 influence and enhancing teachers' knowledge about L1 influence can help learners to achieve a more advanced level of English proficiency. Accordingly, well-organized input addressing L1 influence through corrective feedback and noticing techniques seem to be the best approach to help minimize the L1 Korean influence on L2 learners of English.

An important corollary is that instructions include appropriate contexts to promote learners' awareness of form-meaning relationships. The present study revealed an asymmetry in Korean learners' syntactic and semantic awareness of the English RCs, which strongly implies that we need to help these learners successfully map the syntax of English RCs onto its semantics. As the Interface Hypothesis (Sorace & Filliaci, 2006; White, 2011) points out, the long-lasting "non-nativeness" of advanced L2 speakers is often revealed in the form of L1 effects at interfaces such as syntax/discourse and syntax/semantics levels. Balanced instruction focusing on both form and meaning with authentic contexts needs to be provided to students.

6.2. Limitations of the Study and Suggestions for Future Research

This study provides baseline data on how Korean EFL students understand and produce English RCs, and the main research issues of the study await further investigation and exploration. In particular, further elaboration on these issues will require oral production data from more real-life dialogue contexts.

Despite the meaningful research findings, this study also has a number of limitations. First, it was impossible to compare learners' performances in Study I and Study II because the participants in the two studies were recruited in different places and times. Although there is a precedent for follow-up studies recruiting different participants in acquisition studies, more valuable data could have been collected if the same learners had participated in both experiments.

Second, the test items were limited in the two studies, as explained in chapter 3. Although unnatural sentences were excluded based on two native-speaker consultants' judgments and Boas' (2003) corpus data, more abundant data could have been obtained if a larger number of test items had been included in the experiments. Moreover, the number of test items in the AJT and the ECT/EWT were different, so it was not possible to compare the comprehension and production data.

Finally, and again in regard to the test items, pseudo-resultatives, *lo*-resultatives, and depictives were not considered in designing the experimental

tasks. Since these constructions are also related to English RCs and Korean RCs and to interpretations of learners' comprehension and production patterns of English RCs, the results would have been more meaningful if these constructions had been included in the test items.

Future research considering and overcoming these limitations will provide a more comprehensive view of L1 and L2 influences on the learning of English RCs. For instance, oral production data or self-paced reading, a cognitive linguistic experiment, (e.g., Hahn, 2015) could allow a more fruitful crosslinguistic analysis of English RCs and support clearer understanding of the asymmetry between learners' syntactic and semantic awareness. Finally, research with more than three groups of speakers of typologically different languages could be expected to provide insightful results in this type of acquisition study.

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Appendix A

Test Items of the Pilot Study

* 아래의 각 장면을 괄호 안의 단어를 활용하여 묘사해보세요.

한글 설명을 참고하세요!



(그녀가 문을 당겨 열었다.)

1) (pull, door, open): She _____



(그녀가 금속을 평평하게 두드려 편다.)

2) (hammer, metal, flat) She _____



PHOTO: ISTOCKPHOTO/THINKSTOCK

(그녀가 머리를 부드럽게 빗었다.)

3) (comb, hair, smooth) She _____



(그녀가 벽을 빨강색 칠하고 있다)

4) (paint, wall, red) She _____



(요리사가 반죽을 평평하게/얇게 민다)

5) (roll, paste, flat/thin) The cook _____



(그녀가 바닥을 깨끗이 걸레질한다.)

6) (mop, floor, clean) She _____



(그가 문을 발로 차서 열었다.)

7) (kick, door, open) He _____



(우리엄마는 나를 행복하게 해.)

8) (make, me, happy) My Mom _____



(그가 벽을 파랗게 칠하고 있다.)

9) (paint, wall, blue) He _____

Appendix B
Recruitment Poster for
Native Speaker Participants

Recruitment Poster
PARTICIPANTS NEEDED FOR
RESEARCH IN LINGUISTICS

I'm looking for native speakers of English (Whose first language is English) to take part in a study of *Resultative Construction in English and Korean*.

You would be asked to complete two written tasks:

- (i) The first task is *grammaticality judgment task* asking you to decide the grammaticality of English sentences. (ii) The second task is *written elicitation task* asking you to choose the most appropriate expressions.

Each task will take about 10 minutes and will be scheduled at your convenience.

**Your participation would involve 1 session,
and it will be about 20 minutes long in total.**

**In appreciation for your time, you will receive
*20,000 won in cash.***

For more information about this study, or to volunteer for this study,

please contact:

Sujeong Kim

Department of English Education at SNU

Call or Message: _____

Email: _____

**This study has been reviewed by, and received ethics clearance
by the SNU Institutional Review Board.**

Appendix C

Consent Form

Title of the Study : Resultative Construction in Korean

Name and Degree of Investigator : Sujeong Kim

(Doctoral Student of English Education Department at Seoul National University)

This is an invitation to you to participate in a study of resultative construction in English and Korean. The study is a part of my dissertation for the Doctoral Degree in Education which I am taking at Seoul National University in South Korea. This research project is designed to examine the typological differences of English and Korean on resultative constructions.

Your participation in this research will consist of two tasks. The first task is grammaticality judgment task focusing on your perceptions towards target language forms. The second task is written elicitation task requiring you to choose the most appropriate one of the given three expressions. Each task will take about 10 minutes and will be scheduled at your convenience. Anything you write during the tasks will remain confidential. Once I completed coding and analysis, I will remove all identifying information. Only the researcher will have access to the task sheets and data containing information that would identify individuals.

From this research project, I hope to learn more about how the two languages are different and how we can implement the linguistic difference for English education in Korea.

You are free to withdraw from this study at any time without penalty or prejudice. If you any questions regarding this research, you may contact Sujeong Kim, principal investigator, at ---.

This study has been approved by the SNUIRB (Seoul National University Institutional Review Board). If you have any questions, please contact SNUIRB (02-880-5153).

Your signature below indicates that you have read the information above and have agreed to participate in the research project. Thank you for your participation in this research.

_____	_____	_____
Name of participant	Signature of participant	Date
_____	_____	_____
Name of investigator	Signature of investigator	Date

Appendix D

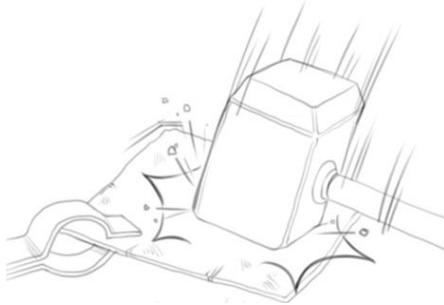
Elicited Choice Task and Acceptability Judgment Task for NSs

A. Forced Choice Task for Native Speakers

Native country: Residence period in Korea: (months/years) Age:

1. First, circle the most appropriate expression in the parentheses.
2. Second, underline the most awkward expression in the parentheses.

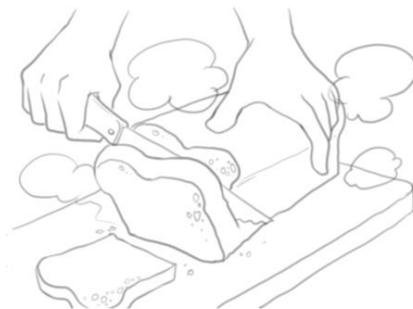
1.



He heated the metal until it was red, and

(hammered it flat/ flattened it by hammering/ hammered it flatly)..

2.



Don't' cut the bread (while it's hot/ during hot/ hot) unless you have to.

You will mash the whole loaf.

3.



A dance party was held last Friday night. Jenny went to the party.

She danced (dizzy/ herself dizzy/ dizzily).

4.



The forty-year-old runner finished third place in the marathon.

The reporters said he ran (his shoes threadbare/ until his shoes become threadbare/ his shoes to get threadbare).

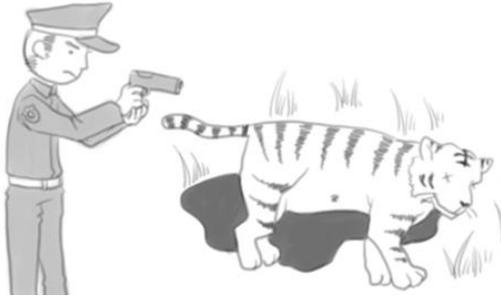
5.



If a potato slice is too thick, it may not crisp like a chip.

I slice the potato (thinly/ to be thin/ thin).

6.



Did you hear the gunfight last night?

A police officer shot the tiger (dead/to kill/to be dead) in the backyard.

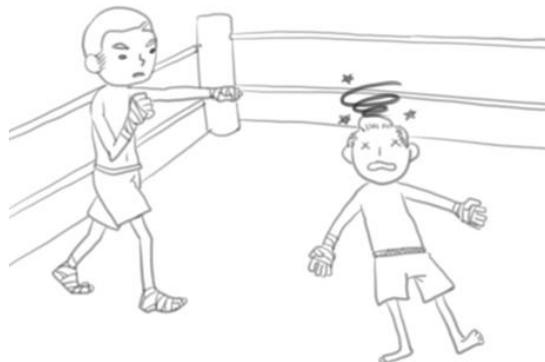
7.



I'm listening to the radio preparing for a mid-term exam.

I like the music. The music (sounds greatly/ sounds like great/ sounds great).

8.



He was a very good fighter. He could knock a man (to be unconscious/

unconscious/until he gets unconscious).

9.



A little girl got locked in the bathroom and no one could find the key.

His mother kicked (and opened the door/the door to open/the door open).

10.



I have a question I couldn't ask my teacher in class.

I sent (him an email/ an email him/ an email for him).

11.



The couple is expecting a boy next month.

They painted the room (with blue/ to blue/ blue).

12.



I couldn't get out of the room. The doors were shut.

He (nailed the window shut/ shut the window by nailing/
nailed the window to shut).

13.



I think James is hiding something.

Do you still consider (him to be honest/ him honest/ that he is honest)?

14.



Millie doesn't like to play in the sand box because

she (gets dirty her hands / gets her hands dirty/ hands get dirty).

15.



A boy was drowning in the river, and a woman saw him.

She pulled the boy (out of the water/ to get him out of the water/
and took him out).

B. Acceptability Judgment Task for Native Speakers

1. First, judge the grammaticality/ungrammaticality of the second sentence in each item by circling one number according to a 5-point scale.

2. Second, please write the correct sentence if you think a certain sentence is awkward.

-2 ----- -1 ----- 0 ----- +1 ----- +2

completely impossible

unable to decide

completely possible

문 장	틀림<-->맞음				
1. Jenny was at the Karaoke party for hours. She sang hoarse. _____					
2. It was freezing this winter. The river froze solidly. _____					
3. Denny washed his shirt in warm soapy water. He wrung the shirt damp. _____					
4. My daughter hates to tie her hair up during hot summer days. I cut her hair short. _____					
5. The baseball fan was mad at the player. The fan beat him unconscious. _____					
6. Mom is making a pizza for lunch. She is rolling the dough thin large. _____					
7. I usually have coffee and bread for breakfast. I put strawberry jam the bread. _____					
8. My mom is so proud of me. She always calls me a genius. _____					

9. I can't find my car key. My sister put it. _____					
10. The pot is too dirty. Let's scrub the pot shiny. _____					
11. Sam wanted to look fancy. He dyed his hair red but it did not become red. _____					
12. I don't like sunbathing on the beach. It makes me to get a sunburn. _____					
13. John was half-dozing in English class. Mary shook him awake. _____					
14. Jim got a bad cold on the chest. He sneezed the tissue off the table. _____					
15. I don't have time to go to a library and borrow the book. Would you mind bringing me the book? _____					
16. She is a nagging person who always complains about everything. She will drive you mad for a few minutes. _____					
17. My teacher is a warm and friendly person. She always speaks kindly to everyone. _____					
18. Marinate the meat and pound it thoroughly. You can make the meat tenderly. _____					
19. I heard that he made the same mistakes again and again but I don't think him stupidly. _____					
20. Tony is a waiter in that pizza house. He is wiping the table very clean. _____					

Appendix E

Elicited Choice Task and Acceptability Judgment Task for Korean Learner Participants

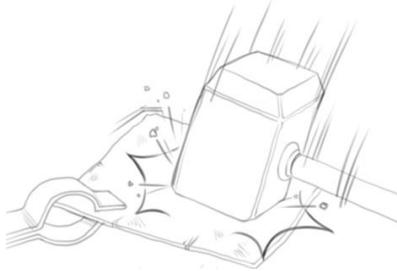
1. 표현 선택 과업 Forced Choice Task (15분)

학번(나이):

이름:

1. 괄호 안의 표현 중 가장 자연스러운 표현에 동그라미 하세요.
2. 괄호 안의 표현 중 가장 어색한 표현에 밑줄 치세요.

1.



He heated the metal until it was red, and

(hammered it flat/ flattened it by hammering/ hammered it flatly).

2.



Don't cut the bread (while it's hot/ during hot/ hot) unless you have to.

You will mash the whole loaf.

3.



A dance party was held last Friday night. Jenny went to the party.

She danced (dizzy/ herself dizzy/ dizzily).

4.



The forty-year-old runner finished third place in the marathon.

The reporters said he ran (his shoes threadbare/until his shoes become threadbare/ his shoes to get threadbare). [*threadbare: 닳은]

5.



If a potato slice is too thick, it may not crisp like a chip.

I slice the potato (thinly/ to be thin/ thin).

6.



Did you hear the gunfight last night?

A police officer shot the tiger (dead/to kill/to be dead) in the backyard.

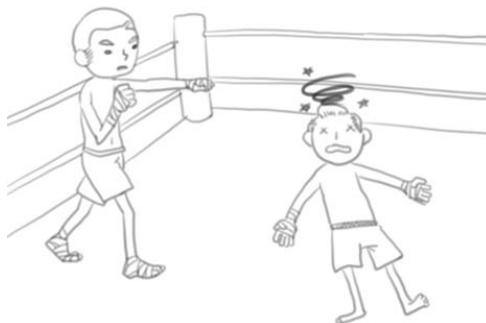
7.



I'm listening to the radio preparing for a mid-term exam.

I like the music. The music (sounds greatly/ sounds like great/ sounds great).

8.



He was a very good fighter. He could knock a man (to be unconscious/

unconscious/until he gets unconscious).

9.



A little girl got locked in the bathroom and no one could find the key.

His mother kicked (and opened the door/the door to open/the door open).

10.



I have a question I couldn't ask my teacher in class.

I sent (him an email/ an email him/ an email for him).

11.



The couple is expecting a boy next month.

They painted the room (with blue/ to blue/ blue).

12.



I couldn't get out of the room. The doors were shut.

He (nailed the window shut/ shut the window by nailing/

nailed the window to shut).

13.



I think James is hiding something.

Do you still consider (him to be honest/ him honest/ that he is honest)?

14.



Millie doesn't like to play in the sand box because

she (gets dirty her hands / gets her hands dirty/ hands get dirty).

15.



A boy was drowning in the river, and a woman saw him.

She pulled the boy (out of the water/ to get him out of the water/
and took him out).

2. 문법성 판단 과업 Acceptability Judgment Task (15 분)

1. 굵은 글씨로 된 두번째 문장을 아래와 같이 판단하여 해당 점수에 **동그라미** 하세요.

2. 그리고, 해석이 가능한 문장은 밑줄 친 빈칸에 우리말 해석을 써보세요.

-2점 ----- -1점 ----- 0점 ----- +1점 ----- +2점

완전히 틀림 약간 틀림 모르겠음 어느정도 맞음 완전히 자연스러움

문 장	틀림←-----→맞음				
1. Jenny was at the Karaoke party for hours. She sang hoarse. _____					
2. It was freezing this winter. The river froze solidly. _____					
3. Denny washed his shirt in warm soapy water. He wrung the shirt damp. _____					
4. My daughter hates to tie her hair up during hot summer days. I cut her hair short. _____					
5. The baseball fan was mad at the player. The fan beat him unconscious. _____					
6. Mom is making a pizza for lunch. She is rolling the dough thin large. _____					
7. I usually have coffee and bread for breakfast. I put strawberry jam the bread. _____					
8. My mom is so proud of me. She always calls me a genius. _____					

9. I can't find my car key. My sister put it.					
10. The pot is too dirty. Let's scrub the pot shiny.					
11. Sam wanted to look fancy. He dyed his hair red but it did not become red.					
12. I don't like sunbathing on the beach. It makes me to get a sunburn.					
13. John was half-dozing in English class. Mary shook him awake.					
14. Jim got a bad cold on the chest. He sneezed the tissue off the table.					
15. I don't have time to go to a library and borrow the book. Would you mind bringing me the book?					
16. She is a nagging person who always complains about everything. She will drive you mad for a few minutes.					
17. My teacher is a warm and friendly person. She always speaks kindly to everyone.					
18. Marinate the meat and pound it thoroughly. You can make the meat tenderly.					
19. I heard that he made the same mistakes again and again but I don't think him stupidly.					
20. Tony is a waiter in that pizza house. He is wiping the table very clean.					

Appendix F

Elicited Writing Task for Korean Learner Participants

1. Elicited Writing Task (쓰기 과업)

학번(학년-반-번호):

나이:

* 예시와 같이, 주어진 상황을 읽고 밑줄 친 문장을 괄호 안 단어를 활용하여 영어로 완성하세요.

요즘은 Mary가 잘 웃지 않아 걱정이야. 그런데 오늘만은,

나는 Mary가 웃는 것을 보았어.

I saw Mary laugh (laugh, see)

1. 대장장이가 금속을 빨갛게 되도록 달구어서,

금속(metal)을 평평하게 두드려 폈다.



He

(flat, hammer)

2. 그는 손님들에게 갓 구운 따뜻한 빵을 대접하고 싶었어.

원래는 빵이 식은 후에 자르는게 좋은데, 이날만은

빵이 따뜻할 때 잘랐지.



He _____ (cut, hot)

3. 지난 금요일에 댄스파티가 열렸는데, 그녀가 그 파티에 가서는,

어지럽도록 춤췄대.



She _____ (dance, dizzy: 어지러운)

4. 그는 이번 마라톤대회가 마지막이었다. 그래서 그는 각오를 단단히 하고

신발이 닳도록 달렸어.



He _____ (run, threadbare: 닳은)

5. 포테이토칩을 만들 때, 감자 조각이 얇지 않으면, 바삭바삭해지지 않아.

그래서 어제 나는 감자를 얇게 잘랐어.



I (slice, thin)

6. 너 어제 밤에 총소리 들었어? 뒷산에 호랑이가 나타났는데,

경찰이 호랑이를 쏘아 죽였다.



A police officer (dead, shoot)

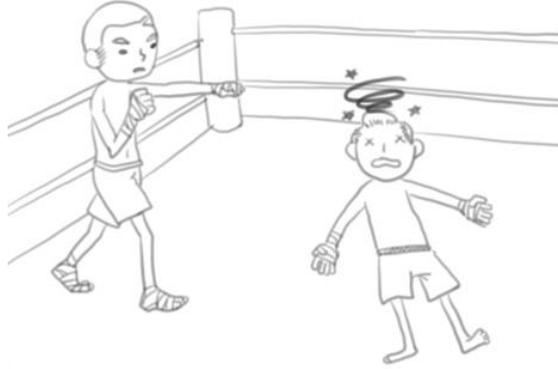
7. 시험공부하면서 라디오를 듣는데,

음악소리가 참 좋아.



The music (great, sound)

8. 그는 최고의 격투기 선수야.
지난 경기에서 펀치 한방으로,
그 사람을 의식을 잃도록 때려 눕혔어.



He (knock, unconscious: 의식이 없는)

9. 화장실 안에 여자아이가 혀 있었는데, 열쇠를 잃어버려서
아이 엄마가 문을 차서 열었다.



Her mom (kick, open)

10. 그는 수업시간에 못했던 질문이 생각나서,
선생님께 이메일을 보냈어.



He (email, send)

11. 그 부부는 다음 달에 아들을 낳을 예정이야.

그래서, 그들은 방을 파랗게 칠했어.



They

(blue, paint)

12. 난 밖으로 나갈 수가 없었어. 문도 잠겨있고,

그가 창문을 못박아 달아버렸어.



He

(nail, shut)

13. James가 요즘 무언가 숨기고 있는 거 같아.

넌 그를 정직하다고 생각해?



Do you

(consider, honest)

14. Millie는 모래놀이를 싫어했어. 왜냐하면, 모래놀이를 할 때마다

손이 더러워졌거든.



She _____ (dirty, get)

15. 한 소년이 물에 빠져있었어. 마침 지나가던 여자가 물에 들어가

그 소년을 물 밖으로 끌어냈어.



She _____ (out, pull)

-----쓰기 과업 끝. 감사합니다.-----

Appendix G

Construction Recognition and Information Survey

4. 구문 인식 설문지 Construction Recognition Survey

1. 당신은 다음과 같은 문장형식들을 배워 본 적이 있습니까?

문장들을 읽고 (a), (b), (c) 중, 자신에게 해당하는 문장에 v표 하세요.

- (1) Kevin drove a car.
- (2) Michael threw Susan a ball.
- (3) Peter gave a book to Mary.
- (4) My daddy drives me mad.
- (5) You kissed me unconscious.

(a) ___ 네, 저는 위 모든 문장들을 알고 있습니다/배운 적이 있습니다.

(b) ___ 아니요, 저는 위 문장들을 하나도 모르겠습니다/배운 적이 없습니다.

(c) ___ 네, 저는 위 문장들 중 일부만 알겠습니다/배운 적이 있습니다.

2. 만약, 당신의 대답이 (a)나(c)라면, (1)~(5) 중 알고 있는 문장 번호들과 그 문장을 배운 곳을 써보세요.

알고 있는 문장번호: _____ 배운 곳: 학교 / 학원 또는 과외/ 기타(_____)

[기타 예) 드라마/팝송/여행 등]

3. 특히, 당신이 (4), 혹은 (5)번과 같은 문장을 알고 있다면, 아래 질문에 대답해주세요.

3-1. (4)혹은 (5)번 문장을 어디에서 배우거나 접한 적이 있는지 다시 한번 자세히 기술해주세요.

[예: 학교 교과서/외국거주 시 들은 적 있음/학원 리딩 교재에서 봄]

3-2. (4)혹은 (5)번과 같은 문장을 학교 영어시간에 배우는 것에 대해 어떻게 생각하는지 체크해주세요.

ㄱ. 배운다면 학생들의 영어구사능력 향상에 좋을 것 같다. ()

ㄴ. 배우지 않아도 상관없을 것 같다. ()

ㄷ. 기타의견 (_____)

5. 설문지 Background Information Survey

귀중한 시간을 내어 실험에 참가해주시는 여러분께 감사드립니다.

아래의 정보는 연구 외의 목적으로 사용되지 않을 것을 약속드립니다. 간단히 답해주세요.

1. 당신은 언제부터 처음 영어를 배우기 시작하였습니까?

(a) 학년/나이 _____

(b) 사설 영어교육 (학원 또는 학습지, 과외 등) 의 경험이 있다면 간략히 써주세요.

2. 당신은 영어를 모국어로 사용하는 나라에서 거주하신 적이 있습니까? 있다면 얼마나 거주하셨습니다?

있다: () 없다: ()

국가: _____ 기간: _____ (년/달)

감사드립니다. 연구자: 김 수 정 (서울대학교 영어교육과 박사과정): 메일:

국 문 초 록

본 연구는 영어와 한국어 결과구문의 통사 및 의미 구조를 비교 탐색하였다. 또한, 한국인 영어 학습자들의 영어 결과구문 이해와 발화를 살펴보았다.

결과구문은 개별 언어별로 상당한 변이성을 보여주며(Eckardt, 2003; Legendre, 1997; Nakazawa, 2008; Napoli, 1992), 영어와 한국어가 그 정례에 해당한다. 영어 결과구문은 종결적(telic) 의미를 외연 하는 보어(complement)로 분석된다(Goldberg, 1995; Kearns, 2007). 이에 반해, 본 연구는 한국어의 가장 대표적 결과구(resultative phrase/resultative)인 “형용사-게”(AP-key) 구가 비종결적(atelic) 의미를 허용하는 부가어임을 보여준다.

한국인 학생들의 영어 결과구문 이해와 발화를 살펴보기 위해 두 개의 실험 연구가 실시되었다. 연구 I (이해도 테스트)은 수용성 판단과업(AJT)과 표현 선택 과업(ECT)을 포함하였으며, 99명의 한국인 고등학생 및 대학생들, 그리고 17명의 영어 화자들이 참가하였다. 연구 II (발화 테스트)에서는 작문 과업(EWT)에 총 97명의 한국인 고등학생 및 대학생들이 참가하였다.

수용성 판단 과업(AJT)은 한국인 학생들의 목표 구문에 대한 이해도가 영어 화자들보다 현저히 낮음을 보여주었다. 영어 화자들과는 대조적으로, 한국인 학생 두 그룹은, 그들의 능숙도와 상관없이, 문법적인 영어 결과구문을 수용하는데 실패한 반면, 통사 및 의미적으로 어색한 문장들을 걸러내지 못했다.

선택 과업(ECT)에서도 한국인 학생들은 영어 화자들과 다른 선호도 양상을 보였다. 대부분의 영어 화자들은 영어 결과구문을 선택한 반면, 한국인 학생들은 상당수가 한국어의 영향을 받아 부사적 표현을 선택하였기 때문이다. 이러한 결과는 앞선 언어적 논의에서 예측된 것으로서, 한국어의 결과구가 영어와 달리 부사구에 해당하기 때문인 것으로 추정된다.

마지막으로, 작문 과업(EWT) 역시 한국인 학생들의 영어 화자들과는 다른 영어 결과구문 사용 양상을 확인 할 수 있었고, ‘부사구’ 타입의 오류문장을 상당수 발화하였다. 영어 결과구문 학습에 대한 위와 같은 모국어의 영향은 이전 관련 선행 연구들의 결과와도 일치한다 (Slabakova, 2002; Whong-Barr, 2005).

결론적으로, 영어와 한국어의 결과구문은 통사 및 의미적으로 다른 구문이며, 한국인 학생들의 영어 결과구문 이해와 발화는 그들의 모국어에 상당한 영향을 받았다. 따라서, 한국인 학생들이 목표 구문을 체계적이고 효율적으로 배울 수 있도록 적절한 고려가 필요하다.

주요어: 영어 결과구문, 한국어 결과구문, 모국어 영향, 결과구문의 통사적 구조, 결과구문의 의미적 구조

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