



## 저작자표시-비영리-변경금지 2.0 대한민국

이용자는 아래의 조건을 따르는 경우에 한하여 자유롭게

- 이 저작물을 복제, 배포, 전송, 전시, 공연 및 방송할 수 있습니다.

다음과 같은 조건을 따라야 합니다:



**저작자표시.** 귀하는 원저작자를 표시하여야 합니다.



**비영리.** 귀하는 이 저작물을 영리 목적으로 이용할 수 없습니다.



**변경금지.** 귀하는 이 저작물을 개작, 변형 또는 가공할 수 없습니다.

- 귀하는, 이 저작물의 재이용이나 배포의 경우, 이 저작물에 적용된 이용허락조건을 명확하게 나타내어야 합니다.
- 저작권자로부터 별도의 허가를 받으면 이러한 조건들은 적용되지 않습니다.

**저작권법에 따른 이용자의 권리는 위의 내용에 의하여 영향을 받지 않습니다.**

이것은 [이용허락규약\(Legal Code\)](#)을 이해하기 쉽게 요약한 것입니다.

[Disclaimer](#)

A STUDY ON  
THE ENGLISH RESULTATIVE  
CONSTRUCTIONS

Graduate School of Education,  
Chosun University

Department of  
English Language Education

Bo-Kyoung Kim

A STUDY ON  
THE ENGLISH RESULTATIVE  
CONSTRUCTIONS

August, 2008

Graduate School of Education,  
Chosun University

Department of  
English Language Education

Bo-Kyoung Kim

# A STUDY ON THE ENGLISH RESULTATIVE CONSTRUCTIONS

Thesis Supervisor: Lee Nam-Guen

A Master's Thesis  
Submitted to the Department of  
English Language Education  
and Chosun University  
Graduate School of Education  
in partial fulfillment of the requirements for the  
degree of Master of Arts in Education

April, 2008

Bo-Kyoung Kim

This certifies that the master's thesis of  
Bo-Kyoung Kim is approved.

---

COMMITTEE CHAIR

---

COMMITTEE MEMBER #1

---

COMMITTEE MEMBER #2

June, 2008

Graduate School of Education,  
Chosun University

## TABLE OF CONTENTS

ABSTRACT.....	ii
Chapter 1. INTRODUCTION.....	1
Chapter 2. SYNTACTIC ANALYSES OF RESULTATIVES.....	11
2.1. The Binary Small Clause Analysis.....	13
2.2. The Ternary Branching Clause Analysis.....	22
Chapter 3. SEMANTICS OF RESULTATIVES.....	28
3.1. Goldberg's (1995) Semantic Analysis: The Constructional Account.....	31
3.2. The Temporal Relations Between the Two Subevents.....	35
3.3. The Selectional Restriction on the Result Phrase, XPs.....	37
Chapter 4. RESULTATIVE PATTERNS.....	42
4.1. Syntactic Patterns.....	42
4.2. Semantic Patterns.....	45
4.2.1. Goldberg & Jackendoff's (2004) Semantic Patterns.....	45
4.2.2. Levin & Hovav's (2001) Semantic Patterns.....	49
Chapter 5. CONCLUSION.....	52
REFERENCES.....	54

# *ABSTRACT*

## **A Study on the English Resultative Constructions**

Bo-Kyoung Kim

Advisor : Prof. Nam-Geun Lee, Ph.D.

Major in English Language Education

Graduate School of Education, Chosun University

This thesis deals with the properties of the resultative constructions via syntactic analyses and semantics of resultatives and a summary of resultative patterns. The primary aim of this thesis is to categorize the syntactic analyses based on resultatives into two types according to the transitivity of the verb: transitive verbs and intransitive verbs. The problems that the two analyses – the small clause analysis and the ternary branching analysis – have are pointed out. The next purpose is to explain the temporal relations between two sub-events and to specify a semantic restriction on the result phrases.

Chapter one introduces general English resultative constructions.

In chapter two, for the syntactic analyses, the Binary Small Clause Analysis and the Ternary Branching Analysis are introduced with the syntactic properties of resultatives. The Small Clause analysis, based on Kayne (1985), assumes the postverbal NP is the subject of a result XP, not an internal argument of a main verb even in transitive resultatives. The Ternary Branching Analysis in accordance with Carried and Randall (1992), on the other hand, has the assumption that the verb, the postverbal, and the result XP are sisters.

As the syntax and semantics interact with each other, to complement the problems that cannot be accounted for syntactically, chapter three introduces the semantics of resultatives. It begins with Goldberg's semantic analysis, explains the temporal relations between two sub-events, and points out a selectional restriction on result phrases.

Chapter four summarizes resultative patterns on the basis of Carrier & Randall (1992), syntactically, and Goldberg & Jackendoff (2004), and Hovav & Levin (2001), semantically.

Finally, by considering all the syntactic and semantic accounts, it is suggested that the relation between syntax and semantics is not one-sided, rather it is a relation in which the two interact with each other.

---

Key words: resultative construction, syntactic structure, telicity, verbal sub-event, constructional sub-event, selectional restriction, resultative patterns



## Chapter 1. INTRODUCTION

A result phrase in the English resultative construction refers to a result XP that describes the changed final state of a postverbal NP as a result of the action denoted by a verb, whether the NP is an argument of the verb or not. The result phrase has a distinctive semantic connection in that a postverbal NP and a postnominated phrase are in a predicative relation. According to Goldberg & Jackendoff (2004), the English resultative construction has been a focus of research on the syntax-semantics interface. Let us consider the following examples that have been widely cited in the study of resultatives.

- (1) a. The gardener watered the tulips flat.  
b. The joggers ran their Nikes threadbare.  
(Carrier & Randall, 1992)

The possible reading of (1a) is “The gardener caused the tulips to become flat by watering them.” In this sentence, the adjective *flat* characterizes the ultimate state of the postverbal NP, *the tulips*. Similarly, the reading of (1b) means “The joggers caused their Nikes to become threadbare by running.” In brief, the two sentences in (1) have the result phrases *flat* and *threadbare*, respectively. Each resultative designates a state influenced by a verb. The sentence in (1a) is a transitive resultative and the one in (1b) is an intransitive resultative.

One of the main questions among linguists is whether resultatives can be predicated only of the direct object. Consider the following examples.

- (2) Fred cooked the stove black. (Jackendoff, 1990)

The sentence of (2) means (3a), while it does not mean (3b).

- (3) a. Fred caused the stove to become black by cooking something on it.  
b. Fred caused himself to become black by cooking something on the stove.

The sentence-final adjective *black* is predicated not of the subject *Fred* but of the object *the stove*. Therefore, (2) can not have a resultative reading like (3b).

The following sentence is worthy of notice in that it does not have any resultative readings.

- (4) Charlie ate the hot dogs full. (Jackendoff, 1990)

The sentence of (4) means (5a), whereas does not mean (5b).

- (5) a. Charlie ate the hot dogs when (or even though) he was full.  
b. Charlie became full as a result of eating the hot dogs.

Only if the resultative *full* can be predicated by the subject *Charlie*, the adjective *full* in the sentence (4) becomes a result phrase, and sentence (4) is able to mean (5b). However, that sentence (4) does not mean (5b) shows that resultatives can only be predicated of the object<sup>1)</sup>. That is, the adjective *full* in (4) is not the result phrase but the depictive phrase.<sup>2)</sup>

---

1) Simpson (1983) observes that resultative phrases are always predicated of the direct object in English, which Levin and Rapoport(1995) call the Direct Object Restriction (DOR). According to Levin and Rapoport (2001), when the result XP is predicated of the verb's own object, such resultatives are called the OBJECT-ORIENTED TRANSITIVE-BASED PATTERN. Many intransitive verbs do not allow result XPs to be predicated directly of their subjects. Rather, the result XP is predicated by a reflexive pronoun direct object. Such resultatives are called the REFLEXIVE INTRANSITIVE-BASED PATTERN. Yet notwithstanding the DOR, some intransitive verbs may predicate a result XP directly of their subjects. Such resultatives are called the BARE XP INTRANSITIVE-BASED PATTERN.

2) The depictive phrase is a sort of modifiers that designate an initial state of a noun that can be predicated by and so named depictive construction. The following sentence of (ia) means (ib).

(i) a. Charlie chewed the meat raw. (depictive predication, object host)  
b. The meat is raw as Charlie chews it.

The sentences of (ii) show that depictive phrases can be predicated of both the surface

According to Goldberg & Jackendoff (2002), resultatives must be distinguished from depictive phrases that superficially look like resultatives, but which differ syntactically in that they are clear adjuncts, not argument phrases, and differ semantically in that they do not designate states that are contingent on the action described by the main verb; that is, they do not designate results.

A resultative construction can be classified into two types, as shown in the following examples, in accordance with the transitivity of the verbs<sup>3)</sup> – transitive verbs or intransitive verbs. The sentences in (6) and (7) illustrate two kinds of resultatives in English.

(6) Transitive resultatives:

- a. The gardener watered the tulips *flat*.
- b. The grocer ground the coffee beans *(in)to a fine powder*.
- c. They painted their house *a hideous shade of green*.

(7) Intransitive resultatives:

- a. The joggers ran their Nikes *threadbare*.
- b. The kids laughed themselves *into a frenzy*.
- c. He sneezed his handkerchief completely *soggy*.

(Carrier & Randall, 1992)

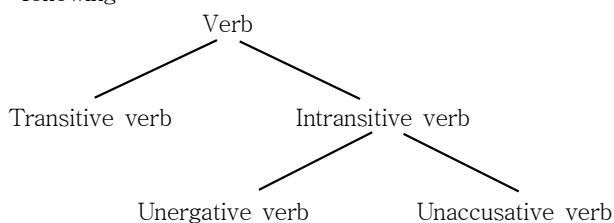
---

subject and the object, unlike resultatives.

(ii) a. John ate his supper full. (subject-oriented depictive phrase)

b. John ate carrots raw. (object-oriented depictive phrase) (Jackendoff, 1990)

3) Verbs in resultative constructions are divided into transitive verbs and intransitive verbs. Intransitive verbs are subdivided into unergative verbs and unaccusative verbs. Consider the following:



As explained above, the verbs used in (6) and (7) have different properties in that the verbs in (6) need a direct object in their base form, while those in (7) do not. In other words, the verbs in (6) can be used without a result phrase, as shown in (8), whereas the verbs in (7) can't be used without a result phrase, as shown in (9).

(8) Transitive resultatives:

- a. The gardener watered the tulips.
- b. The grocer ground the coffee beans.
- c. They painted their house.

(9) Intransitive resultatives:

- a. \*The joggers ran their Nikes.
- b. \*The kids laughed themselves.
- c. \*He sneezed his handkerchief.

The sentences in (9) are ungrammatical because the verbs used in (9) are not case-assigners. Therefore, the NPs – *their Nikes*, *themselves*, and *his handkerchief* – can't be assigned a case. However, the explanation doesn't make it clear that the intransitive-based resultatives in (7) are acceptable. As mentioned above, since the verbs in (7) are intransitive verbs that are not case-assigners, the intransitive-based resultatives should be ungrammatical, but they are not. Since in an intransitive resultative a verb does not have a direct object, that is, there is seemingly no host NP<sup>4)</sup> that can predicate a result phrase, it looks as if an intransitive resultative is impossible. However, the so-called fake object in the intransitive resultative is placed in direct object position for syntactic reasons and it functions as host NP of the result phrase. That is, an unergative verb that

---

4) "Host NP" is the term which Jackendoff used in denoting a subject of a result phrase or a depictive phrase in 1990. Goldberg and Jackendoff (2002) point out that normally the host of a transitive resultative is the object, while the host of an intransitive resultative is the subject. That is, the choice of host appears to correlate exactly with transitivity and therefore does not constitute an independent dimension of variation.

is one type of intransitive verb must take a fake object to make a resultative. Unergative verbs<sup>5)</sup> can take non-subcategorized postverbal NPs in resultative constructions as shown in (10).

- (10) a. The clock ticked *the baby* awake. (Hoekstra, 1988)  
b. The dog barked *him* awake. (Levin & Hovav, 1995)

Another type of fake object in unergative-based resultatives is a fake reflexive pronoun:

- (11) a. The joggers ran sick. (unresultative)  
b. The joggers ran themselves sick. (Carrier & Randall, 1992)
- (12) a. Sam cried sick. (unresultative)  
b. Sam cried *himself* sick. (Napoli, 1992)

Without fake reflexive pronouns as shown in (11a) and (12a), the sentences are not resultative. There should be fake reflexive pronouns like *themselves* and *himself* for the sentences to be resultative.

In addition to a fake reflexive pronoun, according to Carrier and Randall (1992), such body parts like *her feet* in (13a), some noun phrases closely related to body parts such as *their shoes* in (13b), and some noun phrases making physical contact with body parts like *the pavement* in (13c) are used as fake objects as well.

---

5) According to Perlmutter's (1978) Unaccusativity Hypothesis, unaccusative verbs and unergative verbs, which are two distinct types of intransitive verbs, have different structural characteristics in accordance with a surface subject, that is, an argument which an intransitive verb has. In other words, if a surface subject is an underlying object in an intransitive-based sentence, the intransitive verb is an accusative verb. However, if a surface subject is a underlying subject in an intransitive-based sentence, the intransitive verb is an unergative verb. The thematic grid of the two types of intransitive verbs in D-structure are schematically as in (a) and (b), respectively.

a. Unaccusative verbs: \_\_\_\_ [VP V NP]  
b. Unergative verbs: NP [VP V]

- (13) a. Mary walked *her feet* sore. (Napoli, 1992)  
 b. The tourists walked *their shoes* ragged.  
 c. The joggers have run *the pavement* thin. (Carrier & Randall, 1992)

In sum, as stated so far, a fake object functions as a direct object in resultatives and it is an internal argument of a main verb as well. The two pieces of evidence verifying that a fake object is a direct object of a verb are presented.

Firstly, long-distance *wh*-extraction shows that a fake object is a direct-object of a verb. Consider the following:

- (14) a. ?Which metal<sub>i</sub> do you wonder who hammered t<sub>i</sub> flat?  
 b. ?Which metal<sub>i</sub> do you wonder whether to hammer t<sub>i</sub> flat?
- (15) a. ?Which sneakers<sub>i</sub> do you wonder who ran t<sub>i</sub> threadbare?  
 b. ?Which sneakers<sub>i</sub> do you wonder whether to run t<sub>i</sub> threadbare?  
 (Carrier & Randall, 1992)

(14) is the long-distance *wh*-extraction of an NP out of a transitive resultative, while (15) is the long-distance *wh*-extraction of an NP out of an intransitive resultative. As shown in (14), the extraction of an NP (direct object) out of a transitive resultative yields the result – a violation of subadjacency, not a violation of ECP. Interestingly, the extraction of an NP (fake object) out of an intransitive resultative yields the same result. Therefore, the sentences in both types of resultatives are awkward. Long-distance *wh*-extraction demonstrates that a fake object is an internal argument of a verb, like a direct object.

Secondly, intransitive resultatives can form verbal passives like transitive resultatives. Consider the following:

- (16) a. These cookies<sub>i</sub> were broken t<sub>i</sub> into pieces.  
 b. The socks<sub>i</sub> have finally been scrubbed t<sub>i</sub> clean.

- (17) a. Her Nikes<sub>i</sub> have been run t<sub>i</sub> threadbare.  
 b. We<sub>i</sub> have been talked t<sub>i</sub> into a stupor.  
 (Napoli, 1992)

Like (16), when the intransitive resultatives passivize, the postverbal NPs (fake objects) take the role of subject. The verbal passive formation shows that a fake object is an internal argument of a verb, like a direct object. The two pieces of evidence conform to the fact that a fake object in intransitive resultatives is a direct object. That results in a fake object having the accusative case, like a direct object of a transitive verb.

Now, an explanation of how accusative case is assigned by intransitive verbs that have no capacity of assigning accusative case are presented on the basis of Burzio's Generalization (Burzio, 1986). According to Burzio's Generalization, if a verb assigns accusative case to its object, then it assigns a  $\Theta$ -role to its subject. In sum, verbs that have an external argument can assign accusative case. Therefore, an unergative verb is always a potential Accusative Case assigner since it takes an external argument. That is, a fake object is placed in direct object position only in unergative-based resultatives. Unlike an unergative verb, since an accusative verb is not an Accusative Case assigner, it cannot take a fake object.

There is a range of categories that the result XPs can take. It can be an AP result phrase, PP result phrase, or NP result phrase. The resultatives can occur in various syntactic categories freely.

(18) AP result phrases

- a. She pounded the dough AP [*flat as a pancake*] .  
 b. She painted the barn AP [*red*] .

(19) PP result phrases

- a. They ran their sneakers PP [*to tatters*] .  
 b. She pounded the dough PP [*into a pancake*] .

(20) NP result phrases

- a. She painted the barn NP [*a weird shade of red*] .
- b. They ran their sneakers NP [*a dingy shade of grey*] .

(Carrier & Randall, 1992)

All resultative constructions have a fixed syntactic form: V-NP-Result XP. Any lexical categories except VP can be located in result phrase position.

(21) [vp V NP XP]

Resultative constructions have some semantic restrictions. Firstly, a subject which is assigned an agent by a verb must be an instigator making the change-of-state. Secondly, a verb is directly involved in a result phrase, and also the result XP expresses the endpoint of a scale. Finally, participles like *-ing* and *-ed* adjectives cannot be placed in the result phrase position. That is, the result XP must designate the final state, not the changing state or the state being changed. The following examples make this point clearer.

(22) a. \*The hammer/He pounded the metal flat.

b. He drank himself \*funny/out of a situation. (Goldberg, 1995)

c. The maid scrubbed the pot shiny/\*shining/\*shined.

(Carrier and Randall, 1992)

In sum, syntactic explanations do not offer an adequate account of the complexity that may be observed among resultative constructions. It is necessary to discuss semantic constraints. The discussion will center on developing a pertinent explanation of the resultative construction based on the event-argument homomorphism.

First, in this thesis, the approach to resultative constructions has assumptions on the syntactic properties of a postverbal NP and a result XP



in two basic types of resultatives: The Binary Small Clause Analysis and the Ternary Analysis. Studies in favor of the SC analysis, including Kayne (1985), claim that the postverbal NP is a subject of a result XP, not an internal argument of a main verb even in transitive resultatives. On the other hand, Carrier and Randall (1992) contend that all three – the verb, the postverbal NP, and the result XP – become structurally represented as sisters in the ternary branching VP. This demonstrates that the arguments associated with the syntactic status of resultatives have conflicting understanding about the argumenthood of the postverbal NP.

In connection with the syntactic approaches to resultative constructions, the consistent relation between syntactic and semantic structures is elucidated by verifying the syntactic and semantic properties. In addition to these properties, the semantic constraints are discussed on the basis of two classes – control resultatives and ECM (Exceptional Case-Marking) resultatives. The theoretical frameworks used in this section are Wechsler's (2001) *event-argument homomorphism model* and Kim Kyoung-hak's (2005) *resultatives and event structure*.

The goal of this thesis is to examine resultative constructions based on two types of resultatives: a transitive construction and an intransitive construction. To achieve this goal, I begin with grouping according to the verb's transitivity. Then I carefully investigate the selectional restriction on potential result predicates exerted by a main verb. The categories that result XPs can take can be AP, or PP. What is crucial for the categorial selection is whatever its category is, a result XP must designate the final state, in other words, the endpoint. Therefore, in selecting resultative predications in connection with the action denoted by the verb, semantic consideration is called for.

This thesis is organized as follows. In chapter 2, after the general syntactic characteristic of resultatives is presented, two competing syntactic analyses of resultative constructions are reviewed at some length. In the next chapter, with the introduction of the general semantic characteristic of resultatives, the semantics of resultatives is presented. There are three

sections – Goldberg's (1995) constructional account, the temporal relations between the two subevents, and the selectional restriction on result phrases, XPs. Based on the syntactic and semantic analyses of resultative constructions, in chapter 4, the syntactic types of resultatives and semantic types of resultatives are provided, respectively. The syntactic types of resultatives are based on the verbs' properties<sup>6)</sup> and the semantic types of resultatives are summarized by Goldberg & Jackendoff (2004) and Hovav & Levin (2001). In the last chapter, the summary and the conclusion are presented.

---

6) A first type of the resultative construction involving the use of the transitive verb is seen in the following example as previously stated:

- i) a. She wiped the table clean. (Goldberg & Jackendoff, 2004)
- b. They painted the door green.
- c. He washed the soap out of his eyes. (Hoekstra, 1988)

The second type of the resultative constructions is related to intransitive verbs falling into two distinct types: unergative verbs and unaccusative verbs. According to Saeed (1997), unaccusative verbs are intransitive verbs whose single argument is essentially a Patient. On the other hand, unergative verbs are intransitive verbs whose single argument is an Agent.

- ii) a. The vase broke to pieces. (unaccusative; Boas, 2003)
- b. Sam coughed himself into a hemorrhage. (unergative; Hovav & Levin, 2001)

In the case of b), the so-called fake object like reflexive as a posrverbal NP carrying no additional meaning must be placed on direct object place. Unless the reflexive is deletes, the sentence will become ungrammatical as shown in the following example:

- iii) \*Sam coughed into a hemorrhage.

## Chapter 2. SYNTACTIC ANALYSES OF RESULTATIVES

Before the two analyses – the binary small clause analysis and the ternary branching analysis – are introduced, the general syntactic characteristic of resultatives is presented on the basis of Wechsler's (2001) *event-argument homomorphism model* and Kim's (2005) *resultatives and event structures*. RPs seem to be predicated by NPs in object position, whether these NPs are arguments of verbs or not. This generalization is called the Direct Object Restriction (DOR).

- (23) a. Polly carefully wiped the area *dry*. (transitive; Boas, 2003)  
b. The river froze *solid*. (unaccusative; Levin & Hovav, 1995)  
c. The joggers ran *sick*. (unergative, unresultative)  
d. The joggers ran themselves *sick*.  
(fake reflexive; Carrier & Randall, 1992)

As shown above, in transitive resultatives such as (23a), the RP *dry* is predicated of the object *the area* naturally. The resultative based on the unaccusative verb *froze* can be predicated by the surface subject *the river* as shown in (23b). On the other hand, some intransitive verbs do not allow their RPs to be predicated directly by their subjects. Such intransitive verbs are called unergative ones whose single argument is an Agent. That is why the example in (23c) isn't resultative. For this reason, the reflexive that is a common type of fake object can be taken in the direct object position. Accordingly, by placing the reflexive pronoun *themselves* in the direct position, the example becomes grammatical as shown in (23d).

According to Wechsler (1997), resultatives fall into two classes: control constructions and ECM (Exceptional Case-Marking) constructions<sup>7)</sup>.

---

7) Wechsler (1997) states:

i) Control resultative: resultative phrase whose predication subject is a semantic argument of the matrix verb.

Therefore, transitive resultatives can be called control resultatives and intransitive resultatives can be called ECM resultatives (also called unergative resultatives) as illustrated in (24).

- (24) a. John hammered the metal [PRO *flat*] . (Goldberg, 1995)  
b. The dog barked [itself *hoarse*] . (Hovav, 1995)

The distinctive characteristic of the control resultative is that the predication subject for the resultative is the direct object. The action of the verb has a semantically close connection with the change of state. On the other hand, what is remarkable in the ECM resultative is that the predication subject for the resultative is a semantic argument of the verb. That is, the postverbal NP does not get a theta-role from the verb. The action of the verb is related syntactically to the change of state under the pragmatic connection rather than under the semantic connection.

Wechsler (1997) presents the two criteria of distinguishing control resultatives from ECM resultatives. The first criterion is according to whether the subject of the secondary predicate is a semantic argument of the main verb or not. His other criterion is Telicity, which is the so-called definite endpoint. Consider the following examples:

- (25) a. John is hammering the metal.  
= John has hammered the metal. (atelic)  
b. John hammered the metal (for an hour / \*in an hour).

- 
- ii) ECM resultative: resultative phrase whose predication subject is NOT a semantic argument of the matrix verb.

Consider the followings:

- i) The control construction:  
John persuaded Mary [ PRO to sing ] .  
ii) The ECM construction:  
John expected [ Mary to sing ] .  
Raising verbs can not assign a  $\Theta$ -role to a postverbal NP. Therefore, the postverbal NP is not an argument of the verb.

- c. John is hammering the metal flat.  
     ≠ John has hammered the metal flat. (telic)
- d. John hammered the metal flat (\*for an hour / in an hour).

- (26) a. John is drinking.  
       = John has drunk. (atelic)
- b. John drank (for an hour / \*in an hour).
  - c. John is drinking himself to death.  
     ≠ John has drunk himself to death. (telic) (Wechsler, 2001: 259)
  - d. John drank himself to death (\*for an hour / in an hour).

In (25b), the *for*-preposition phrase, like *for an hour*, that expresses the durative adverbial state is grammatical, while in the resultative (25d), the *in*-preposition phrase, like *in an hour*, that expresses telicity is grammatical. This is applied in the same way to the ECM resultative (26d). In addition, Wechsler (1997) argues that control resultatives are subject to be influenced by the semantic restrictions imposed by the main verb, while semantic restrictions on ECM resultatives are even fewer.

## 2.1. The Binary Small Clause Analysis

As previously discussed, there is a semantic relation between a postverbal NP of a matrix verb and a result XP. The binary clause analysis verifies this semantic connection in syntactic structures. The small clause analysis is based largely on Kayne (1984). Kayne (1984) and Hoekstra (1988) argue that resultatives can be best analyzed as small clauses<sup>8</sup>). Hoekstra (1988) regards the close relationship between postverbal NPs and RPs as a Small Clause (SC). However, as Jaynseelan (1984) states, the

---

8) The following is from Jaynseelan (1984):

The Small Clause Rule

- a. it adds a small clause complement to the verb.
- b. it eliminates the internal arguments of the verb.
- c. it gives the verb a causative reading.

small clause rule does not just introduce a new SC node even though the predication relation is represented structurally well within the SC node, but eliminates the existent internal argument. Accordingly, in this analysis, resultatives have the same SC structure regardless of the transitivity of a verb, and SC is the only complement of the main verb.

(27) [vp V [ sc NP XP ] ]

To support this analysis, Kayne (1985) provides the following examples in which the result predicates are either particles or other categories such as AP and PP.

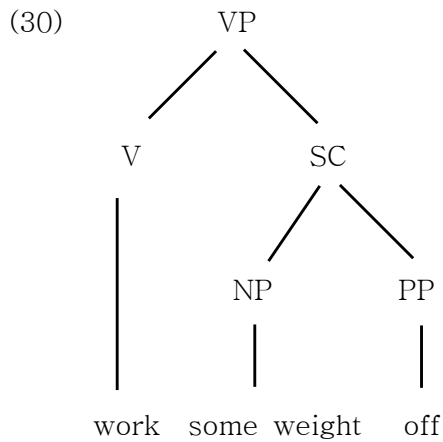
(28) Resultatives with a Particle

- a. He worked some weight off.
- b. He bid the stakes up.
- c. John stared Bill down.
- d. He shouted us down.

(29) Other Resultatives

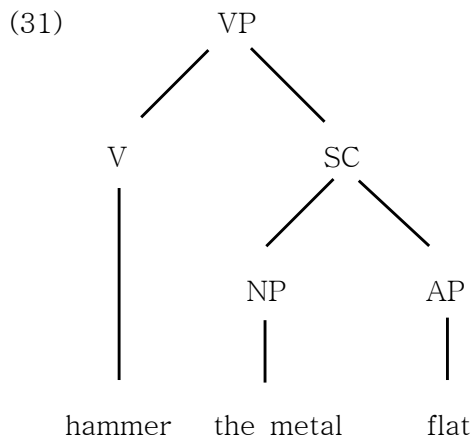
- a. They hammered the metal flat.
- b. They starved John into giving up.

As shown above, the sentences in (28) take a particle as their result XP, while those in (29a) and (29b) take AP *flat* and PP *into giving up*, respectively. The following illustrates the VP structure of (28a).



The postverbal NP *some weight* and the result phrase *off* are in a predicational relation and the predicational relation must be represented by combining the two elements within the SC code.

Similarly, the following illustrates the VP structure of other resulatatives.



The postverbal NP, *the metal*, and the result phrase, *flat*, are within the SC node, that is, they are sisters. Because both the postverbal NP and the result phrase are sisters, the postverbal NP, *the metal*, is considered as the subject of the predicate AP, *flat*, rather than the direct object of the verb *hammer*.

Kayne (1985) supports the SC analysis by pointing out that the nominal formation rule can not apply to both transitive resultatives and intransitive resultatives. Consider the following two examples: (32a) is the intransitive resultative and (32b) is the transitive resultative.

- (32) a. \*The starving of John into giving up could have been avoided.  
b. \*The hammering of metal flat is exceedingly difficult.

(Kayne, 1995)

He gives an explanation of why the sentences in (32) become ungrammatical by nominalizing the VPs. When verbs that take a small clause are nominalized, the VPs are ungrammatical. Likewise, as resultatives take a SC structure in the binary small clause analysis, the nominal formation of resultatives is unacceptable. Consider the following examples.

- (33) a. \*the considering of John a fool ...  
b. \*the believing of Gray to be sincere ... (Kayne, 1985)

According to Kayne, if the verb taking a small clausal argument is nominalized, it will not be able to take an argument, so that (32) and (33) become ungrammatical and unacceptable because of their syntactic structures – SC structures.

However, the examples in (34) illustrate that the formation of process nominals in only transitive resultatives is possible.

- (34) a. The watering of tulips flat is a criminal offense in Holland.  
b. The slicing of cheese into thin wedges is the current rage.  
c. The Surgeon General warns against the cooking of food black.  
(Carrier & Randall, 1992)



When considering semantically the nominal formation of transitive resultatives on the basis of Carrier and Randall (1992), who insist on the ternary analysis, as a counterargument to the point of Kayne (1984), the reason the sentences in (32) are ruled out is because their meanings do not contain any durative or general activity which is a necessary part of meaning for the process nominal formation. If the example sentences are modified into ones that contain the required meaning, they come to be grammatical as shown in (35).

- (35) a. The starving of rebels into submission has become a tactic of  
contras.  
b. In cold weather, mechanics find the hammering of metal flat to be  
exceedingly difficult. (Carrier & Randall, 1992)

To show that postverbal NPs are internal argument of verbs, Carrier and Randall (1992) present the nominal formation as mentioned above:

- (36) a. He watered the tulips.  
b. Watering of the tulips. . .

In a transitive-based sentence like (36a), the NP *the tulip* is the internal argument that is assigned a  $\Theta$ -role by the verb *water*. After the VP is nominalized, the NP *the tulip* is still the internal argument. Therefore, if verbs do not take an internal argument, the nominal formation rule cannot apply to the verbs. Consider the followings:

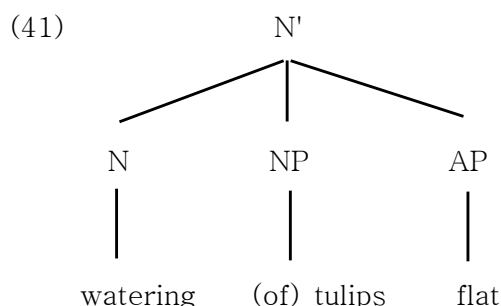
- (37) a. He expects there to be a riot.  
b. He believes there to be a spy among us.  
(38) a. \*The expecting of there to be a riot is in the news.  
b. \*The believing of there to be a spy among us is spooky.

The verb *expect* and *believe* in (37) are raising verbs. Since raising verbs cannot assign a  $\Theta$ -role to NPs, the NPs are not arguments of the verbs. That's why the sentences in (38) are ungrammatical. Let's consider other following examples:

- (39) a. It rained cats and dogs.  
b. The guests ate tons.

- (40) a. \*the raining of cats and dogs  
b. \*the eating of tons

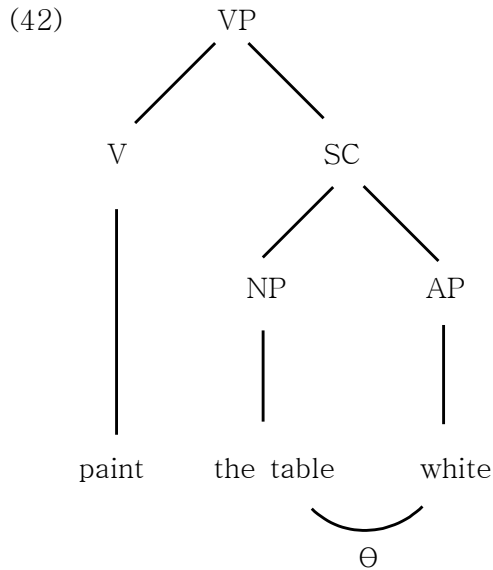
As shown in (39), when the sentences have the meaning of idiom chunks, verbs cannot assign a  $\Theta$ -role to NPs. Therefore, (40a-b) are not allowed. That is, according to Carrier and Randall (1992), the nominal formation rule can apply to only transitive-based resultatives. Since postverbal NPs are internal arguments of verbs in transitive resultatives, there are no problems in nominalizing the VPs. In addition, when Carrier and Randall (1992) analyze the structure of the nominal formation of resultatives, they insist there is a sister relationship as shown in the following structure.



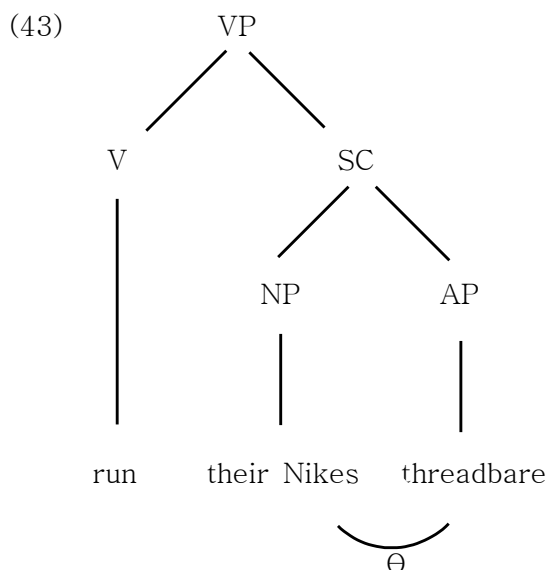
In brief, the postverbal NP turns out to be the direct internal argument of the verb from the viewpoint of process nominal formation. The nominal formation rule can apply to transitive verbs that take direct objects as shown above, though Kayne points out that the sentences in (32) are ruled

out.

The SC analysis does not account for the assumption that argumenthood requires sisterhood. Within the SC framework, a verb *paint* and a postverbal NP *the table* cannot be sisters and the SC prevents the verb from assigning its  $\Theta$ -role to the NP *the table*. The  $\Theta$ -role assignment mechanism under the SC basis is pictured as follows.



In sum, a postverbal NP in transitive resultatives is directly  $\Theta$ -marked by a verb, thus, it is certainly an internal argument of its own. But this is not accounted for in the SC analysis.



In contrast with the transitive-based resultatives, the  $\Theta$ -role assignment in intransitive resultatives seems to be justified within the SC analysis as shown in (43). Consequently the SC analysis in intransitive resultatives is acceptable in that the NP *their Nikes* is assigned a  $\Theta$ -role from the result AP *threadbare* and, at the same time, the NP and the result XP are sisters.

From the discussion so far, under this analysis the predication relationship between a postverbal NP and a result XP is structurally well represented. In addition, as shown in (44), although the verb is normally the transitive verb, the semantic relation between the verb and the postverbal NP differs from relation found in the sentence without a result phrase. That is, the sentence in which the postverbal NP seems not to be a direct argument of the verb can be easily explained. That's because a whole SC, not an individual component, is regarded as an argument of the verb.

- (44) a. \*Sam wiped the crumbs.  
 b. Sam wiped the crumbs off the table.

(Levin and Hovav, 1996)

Though the SC analysis proposes a uniform syntactic structure for all resultatives regardless of the transitivity of verbs, there remain unsolved problems. First, as a serious defect of the SC analysis, it cannot be explained that a result XP is an argument of a verb. The following examples illustrate the result XPs are s-selected by the verb.

- (45) a. The tulips are flat/beautiful/red.  
b. The gardener watered the tulips flat/\*beautiful/\*red.

- (46) a. She is crazy/happy/to the brink of ecstasy.  
b. He drove her crazy/\*happy/\*to the brink of ecstasy.

As shown in (45) and (46), the result XPs are s-selected by the verbs, so the result XPs are arguments of the verbs. However, the SC analysis can not explain this.

Second, the SC analysis fails to explain the grammaticality of the sentences in (47).

- (47) a. The cook cracked the eggs into the glass.  
b. The cook sliced the mushrooms into the bowl.  
c. They emptied the tank into the sink.

(Levin and Hovav, 1996)

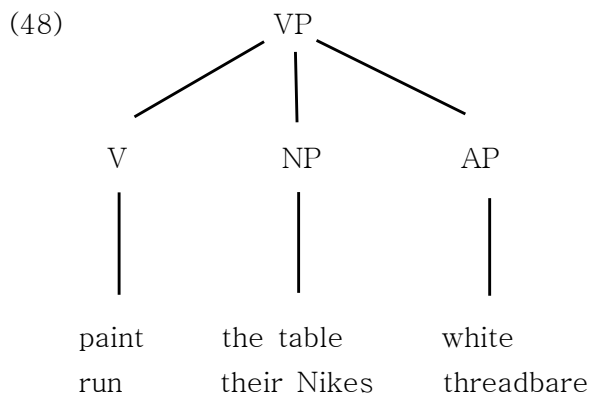
The sentences in (47) semantically have two sorts of changed states. For example, (47a) means that the eggs were cracked and then consecutively put into the glass. Therefore, there should exist two predicational relations in each sentence: one is the predicational relation between the verb and the postverbal NP; the other is the predicational relation between the postverbal NP and the result XP. This means that the sentences in (47) should have two SCs. However, taking two SCs is undesirable because a verb cannot take two SC complements.

Third, within the SC framework, a verb and a postverbal NP cannot be

sisters, so it cannot be explained that a postverbal NP in transitive-based resultatives is an internal argument of a transitive verb.

## 2.2. The Ternary Branching Analysis

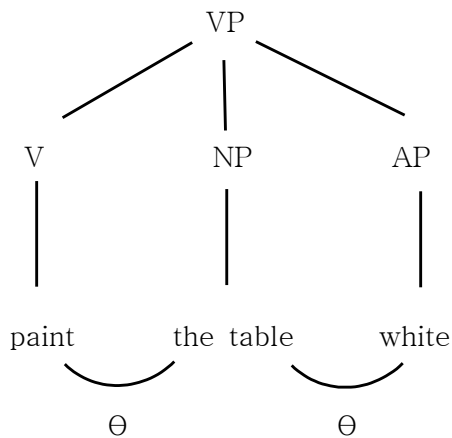
Contrary to the SC analysis, which does not establish that the postverbal NP is a direct argument of the main verb, Carrier and Randall (1992) argued that the proper syntactic representation of resultatives should be a ternary branching VP structure. Under the ternary branching VP, the verb, the postverbal NP, and the result XP become represented as sisters. Consider the following ternary branching VP to support the standard assumption that argumenthood requires sisterhood:



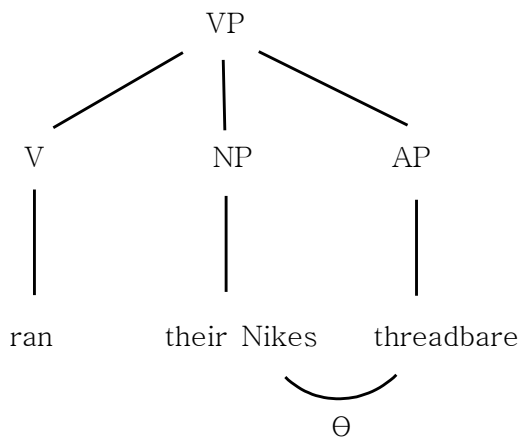
As shown in (48), according to Carrier and Randall (1992), the syntactic structures of transitive and intransitive resultatives are the same, although their argument structures are different.

In the transitive resultatives, the postverbal NP *the table* is an internal argument of the verb *paint* and, simultaneously, an external argument of the result XP *white*, as shown in (49a). On the other hand, like (49b) in the intransitive resultatives, the postverbal NP only carries an external argument of the result XP.

(49) a. Transitive resultatives



b. Intransitive resultatives



According to Carrier and Randall (1992), that a noun is assigned two  $\Theta$ -roles is no problem with revised  $\Theta$ -criterion<sup>9)</sup>. The revised criterion

---

9) i)  $\Theta$ -Criterion

Each argument bears one and only one  $\Theta$ -role and each  $\Theta$ -role is assigned to one and only one argument. (Chomsky, 1981)

ii) Revised  $\Theta$ -Criterion

An XP chain can be associated with at most one argument position in any given argument

allows the postverbal NP to be doubly  $\Theta$ -marked by *paint* and by *white*. However, the predication relation between the postverbal NP and the result XP is not represented structurally under the ternary structure.

The different argument structures of the two types of resultatives may be described in the following  $\Theta$ -grids:

(50)  $\Theta$ -Grids Under the Ternary Analysis

	Basic Verb		Resultative Verb	
paint	agent	[ <u>theme</u> ]	agent	[ <u>theme</u> r-state]
run	agent	[       ]	agent	[       r-state]

(Carrier & Randall, 1992)

The verb *paint* in the resultative construction has an internal argument which is assigned a  $\Theta$ -role [theme] <sup>10)</sup> and obtains another additional internal argument [r-state], while the verb *run* has only an internal argument, which is assigned a  $\Theta$ -role [r-state]. [r-state] in (50) is short for resultative-state and means the state by the result.

When the resultative  $\Theta$ -grids are acknowledged, the result phrase is an internal argument of the verb. However, there remains an unsolved syntactic question in a  $\Theta$ -role assignment under the ternary structure as shown in (51).

---

structure. Each argument structure position must be satisfied by one and only one XP chain in the syntax. (Jill Carrier & Janet H. Randall, 1992)

10) Kinds of Thematic Roles (Comper 1992)

– Agent / Patient / Theme / Experiencer / Goal / Instrument / Location

a. [His mother] sent [Dean] [a letter].

AGENT                      GOAL    THEME

b. [Dean] smelled [the freshly baked bread].

EXPERIENCER    PATIENT

c. [Alan] likes [cookies].

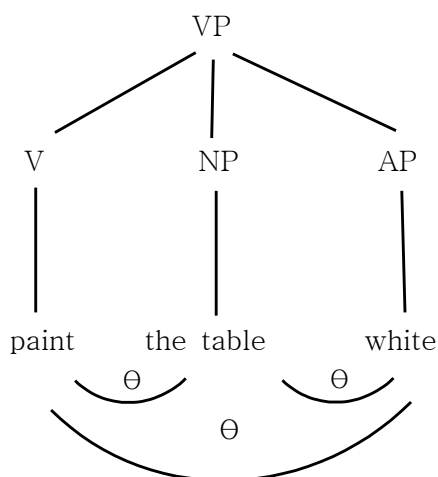
EXPERIENCER    THEME

d. [Amily] stayed [in Toronto].

AGENT                      LOCATION



(51) A Transitive Resultative



If a result XP, *white*, in the resultative construction is invariably an internal argument of the verb, it is assigned a  $\Theta$ -role from the verb, *paint*, and simultaneously, assigns a  $\Theta$ -role to the postverbal NP, *the table*. In sum, under the ternary analysis, two extensive revision in the standard  $\Theta$ -Criterion are required: one is for a postverbal NP which has two different  $\Theta$ -roles; the other is for a result XP which can assign and be assigned a  $\Theta$ -role at the same time. This leaves some important questions unanswered.

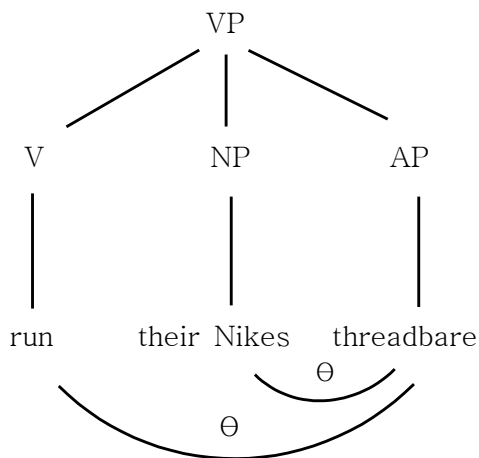
In addition, there also exist transitive resultatives that are not accounted for under the ternary structure. Observe the following examples:

- (52) a. John washed the soap. (unresultative)  
 b. John washed the soap out of the shirt.  
 c. Pat rubbed the oil. (unresultative)  
 d. Pat rubbed the oil into the wood.

Even though the sentences in (52a) and (52c) are based on transitive verbs, the postverbal NP seems not to be the direct object of the verbs. Therefore, the postverbal NPs, *the soap* and *the oil*, cannot be internal

arguments of the verbs, *wash* and *rub*, respectively under the ternary analysis. The sentences are unresultative without a result XP. Because the subcategorization features of the basic verbs and those of the verbs in resultatives are wholly distinct in the examples, the assumption that the basic  $\Theta$ -grid of a verb holds on in resultatives is not in accordance with the examples in (52).

(53) An Intransitive Resultative



The postverbal NP, *the Nikes*, in the intransitive resultative is a sister of the main verb, *run*, even though it is not assigned a  $\Theta$ -role from the verb. Considering the assumption that a syntactic sister of a verb is not necessarily an argument of the verb although an argument of the verb must be its syntactic sister, there seem not to be problems in the relation between the argument structure and the syntactic structure.

From the discussion so far, there are some problems in the ternary analysis. First, there is no distinction of syntactic structures between transitive resultatives and intransitive resultatives. Second, the subject–predicate relation between a postverbal NP and a result XP cannot be structurally represented under the ternary analysis because all three – the verb, the postverbal NP, and the result XP – are sisters. Third, since a

postverbal NP in intransitive resultatives is not an argument of a verb, it cannot be influenced by the action of a verb. However, considering the semantic and pragmatic interpretation, we cannot say that the postverbal *their Nikes* in (53) is not influenced by the action of the verb *ran*. So how is the relation between cause and effect in intransitive resultatives explained?

In brief, the SC analysis has difficulty in handling the transitive resultatives, whereas the ternary analysis does not succeed in dealing with the intransitive resultatives.

## Chapter 3. SEMANTICS OF RESULTATIVES

In this section, the semantic properties of resultative constructions are introduced based on Wechsler's (2001) *event-argument homomorphism model* and Kim's (2005) *resultatives and event structures*. Kim's (2005) assumptions are, to a large extent, shared by Wechsler (2001). They begin their discussions by pointing out a correlation between lexical semantic properties of main verbs and semantic restrictions on the resultative predicate. In presenting semantic restrictions, it is necessary for the syntactic form of the resultative construction to be taken into consideration.

Firstly, according to Wechsler (2001), there are restrictions on the resultative predicate that only resultative constructions have. In other words, uses of the resultative predicate presenting the result state are divers in accordance with main verbs. The following examples make this first property more obvious.<sup>11)</sup>

### (54) Intransitive Resultatives

- a. \*The vase broke *worthless*. (Jackendoff, 1990)
- b. \*The puddle froze *solid/\*slippery/\*dangerous*. (Wechsler, 2005)

According to Iwata (2006, 468–469), in spite of the fact that it is pragmatically plausible that the vase became worthless as a result of breaking, (54a) is unacceptable. Similarly, (54b) is unacceptable though we often encounter a situation in which the puddle became slippery or dangerous as a result of freezing. All the offending adjectives describe a state which may result from entailed change, rather than specifying an entailed change. In short, the intended result states are removed from the entailed changes.

---

11) The selectional restriction on the resultative predicates are explained in detail in section 3.3..

(55) Transitive Resultative

a. She wiped the table *clean/dry/\*dirty/\*wet/\*damp/\*stained*.

b. He hammered the metal *flat/smooth*

*/into the ground/\*beautiful/\*safe/\*tubular*<sup>12</sup>).

(Wechsler, 2005)

As previously discussed, as the verbs *hammer* and *wipe* in the examples in (55) denote somewhat repeatedly durative action, only the closed-scale adjectives<sup>13</sup>) such as *clean*, *dry*, *flat* and *smooth* designating the maximal endpoint are selected on the result predicate. That is, the open-scale adjectives such as *damp*, *dirty*, *stained*, *wet*, *beautiful* and *safe* are impossible because the adjectives designating the minimal endpoint do not capture the telicity.

As the table can become clean or dry by wiping, (55a) has a resultative reading that she caused the table to become clean/dry by wiping it. The verb *wipe* in example (55a) has a causative interpretation, so the caused-motion construction is possible. In the caused-motion construction, the following notation is used:<sup>14</sup>)

---

12) According to Boas's large corpus search (2000):

i) a. Dry: 547 occurrences: suck (16), bleed (7), towel (6), wipe (6), rub (6), boil (5), pat (5), drink (5), milk (3), squeeze (3), hug (2), run (2), drain (2), blow (1), brush (1), cry (1), dab (1), eat (1), scrub (1), weep (1).

b. Wet: 0 occurrences

ii) a. Clean: 102 occurrences: wipe (41), wash (11), sweep (10), scrub (9), rub (6), lick (6), scrape (5), rinse (3), suck (3), scour (2), pare (2), whip (1), wag (1), swab (1), polish (1), pick (1)

b. Dirty: 0 occurrences

13) There are two types of gradable adjective: closed-scale adjectives and open-scale adjectives.

i) full/empty/straight/dry (closed-scale)

ii) long/wide/short/cool (open-scale)

14) i) This is borrowed from Van Valin & LaPolla (1997).

ii) Argument position in Logical Structure (Vendler (1967):

Verb Class	Logical Structure
a. STATE	<b>predicate'</b> (x) or (x,y)
b. ACTIVITY	<b>do'</b> (x, [predicate' (x) or (x,y)] )

- (56) a. do'(x, [wipe'(x,y)]) CAUSE [BECOME clean'/dry'(y)]  
 b. [do'(John, [hammer'(John, metal)])] CAUSE [BECOME flat'/smooth'/into the ground'(metal)]  
 c. do'(∅, [freeze'(puddle)]) CAUSE BECOME solid'(∅, puddle)

Since the unresultative sentences mentioned so far have pragmatically plausible situations, to dissolve a challenging problem for future studies on the selectional restrictions on the result phrases, the pragmatic account should be carefully considered.

Secondly, as previously discussed, there is a difference between uses of APs and PPs as resultative predicates designating a changed state. The difference depends on the lexical meaning of verbs used in resultative constructions. Consider a relevant example:

- (57) a. The rabbits had apparently been battered {\*dead/to death}.  
 b. He and a confederate shot the miller {dead/to death}. (Kim, 2005)

On account of the lexical meaning of the verb *batter* in (57a), in a resultative construction like (57a), only to +NP is possible in presenting a

- 
- |                   |   |
|-------------------|---|
| c. ACHIEVEMENT    | INGR <b>predicate'</b> (x) or (x,y), or<br>INGR <b>do'</b> (x, [ <b>predicate'</b> (x or (x,y))]) |
| d. ACCOMPLISHMENT | BECOME <b>predicate'</b> (x) or (x,y)   |

- iii) English Verb Classes (Van Valin & Lapolla, 1997)
- a. states: be sick, be tall, be dead, love, know, believe, have
  - b. achievement: pop, explode, collapse, shatter
  - c. accomplishment: melt, freeze, dry
  - d. activities: march, walk, roll, swim

- iv) In the book, *Goldberg Constructions at Work*, Goldberg states:  
 An example of correlations between form and meaning

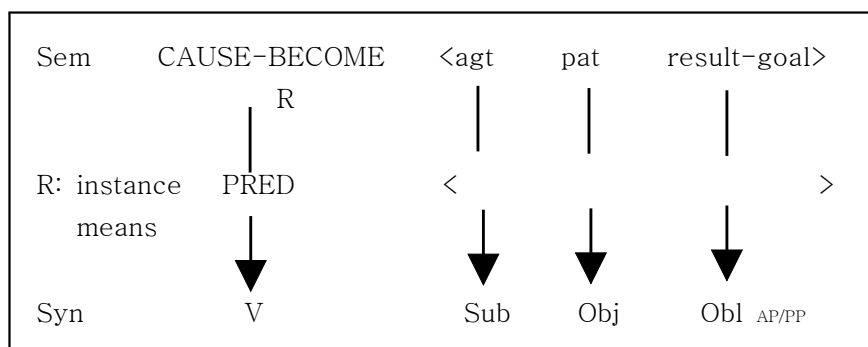
Form/Example	Meaning	Construction Label
•Subj V Obj RP	X causes Y to become Z state.	Resultative
e.g. She kissed him <i>unconscious</i> .		

result state as a resultative predicate, while in a sentence like (57b), both AP and PP are possible as resultative predicates.<sup>15)</sup>

### 3.1. Goldberg's (1995) Semantic Analysis: The Constructional Account

Resultatives can only be applied to arguments which potentially undergo a change of state as a result of the action denoted by the verb (Goldberg, 1995: 188). In the case of the transitive resultative construction, the syntactic frame [Subj V Obj Obl] is paired with the semantics CASUE-BECOME, as shown in (58).

(58) Transitive Resultative Construction



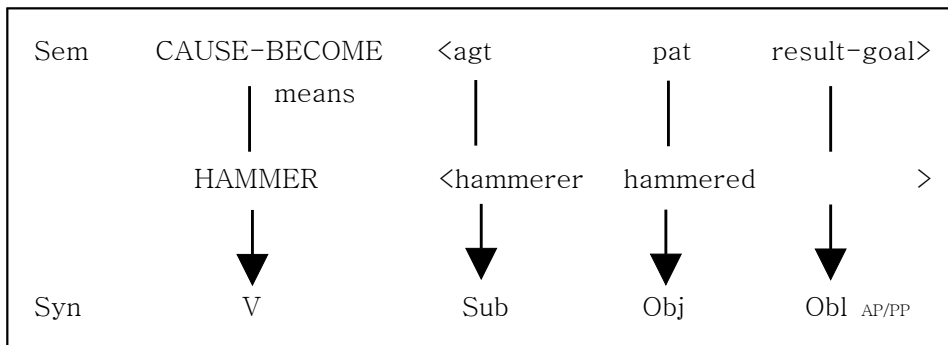
- (59) a. He hammered *the metal flat*.  
hammer <hammerer hammered>  
b. He talked *himself blue in the face*.  
talk <talker>

As shown in (60a-b), when the verb *hammer* occurs in the transitive resultative construction, two argument roles <agent patient> are fused with two participant roles <hammerer hammered>, but the third argument role <result-goal> is contributed by the construction. In the fake cases, two

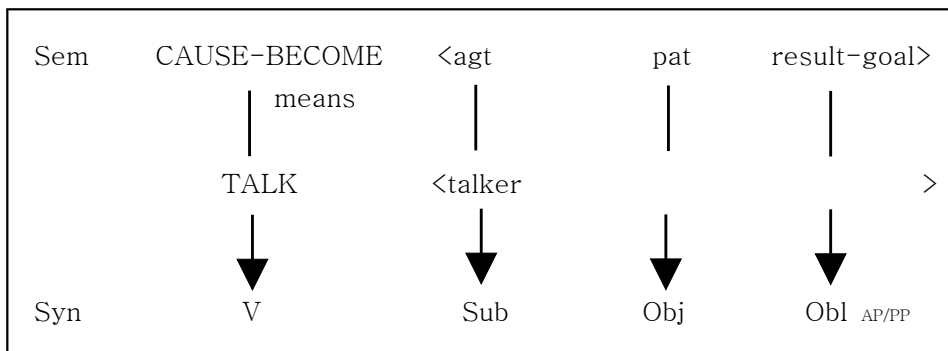
15) The difference between APs and PPs as resultative predicates are explained in the section 3.3. in detail.

argument roles <patient result-goal> are contributed by the construction. According to Goldberg (1995: 189), the post-verbal NP of the fake object cases is an argument of the construction, rather than of the verb.

(60) a.



b.



Goldberg's constructional approach can account for the cases of (59) in a uniform way. According to this account, resultatives including an object, whether the object is the direct object in (59a) or the fake object in (59b), have the following characteristics. First, resultatives can be appropriately paraphrased by means of “X causes Y to become Z by V-ing”. Second, the change of state denoted by the result phrase is not entailed by the verb.

Resultatives based on ergative verb<sup>16)</sup>s are somewhat distinctive, but

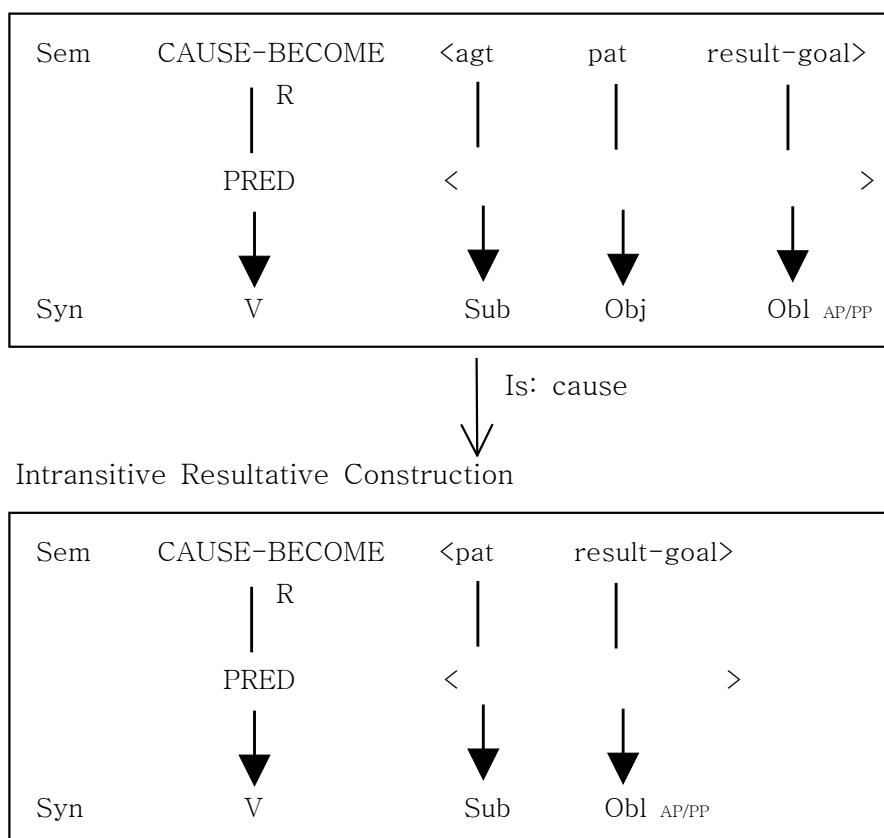
16) An ergative verb is a verb that can be both transitive and intransitive, where the subject of



they can be analyzed essentially the same way. Let us consider the following examples:

- (61) a. John froze *the water* solid.  
 b. *The water* froze solid.

(62)



Since *the water* in (61a) and (61b) is the arguments of the verb *froze*, and there are no other distinctions except the syntactic form, (61b) is viewed as the resultative construction that comes from (61a). Intransitive

---

the intransitive verb is the same as the object of the transitive verb. For example, 'open' is an ergative verb because you can say 'The door opened' or 'She opened the door'.

resultatives have the semantics “X becomes Y by V-ing”. In intransitive resultatives, the change of state denoted by the result phrase is not entailed by the verb as well. However, since in (61) the verb *freeze* entails the state of being solid, the examples in (61) do not fit the characterization mentioned above – “X becomes Y by V-ing”. To verify this point of Levin and Hovav (1999), who point out that (63b) is not a good paraphrase of (63a), the definition of the verb *freeze* is cited from COBUILD (1995) as shown in (64).

(63) a. The river froze solid.

b. The river became solid by freezing.

(Levin and Hovav, 1995)

(64) The definition of the verb *freeze*:

If a liquid or a substance containing a liquid freezes . . . ,  
it becomes solid because of low temperatures.

This doesn't mean that Goldberg's constructional account doesn't work for intransitive resultatives, though. There are intransitive resultatives which satisfy the characteristics noted above.

(65) a. the kettle boiled dry.

b. The kettle became dry by boiling.

(Levin and Hovav, 1999)

The verb *boil* in (65) does not entail the state of being dry.

Besides the resultative (63), there are other resultatives that cannot be analyzed by Goldberg's constructional account. For instance, in the sentence *John walked to the school*, the verb *walk* takes only <agt>, *John*, as its argument, so the pragmatic interpretation can not be explained. That is, Goldberg's constructional account has difficulty in explaining noncausative motion resultatives in which a subject argument moves along a path.

### 3.2. The Temporal Relations Between the Two Subevents

Goldberg & Jackendoff (2004)<sup>17)</sup> basically focus on the meaning of a resultative sentence that contains two separable subevents. They note that the semantics and syntax of resultatives explain the possibilities for temporal relations between the two subevents – the verbal subevent and the constructional subevent. The former, the verbal subevent, is determined by the verb of the sentence. The latter, the constructional subevent, is determined by the construction. For instance, in the sentence *The gardener watered the tulips flat*, the two subevents are related: The gardener made the tulips flat by watering them. That is, the verbal subevent is the means by which the constructional subevent takes place. Many properties of the resultative construction can be explained by using the semantics of the two subevents and the semantic relationship between them. Consider the following notation:<sup>18)</sup>

(66) a. Causative property resultative (e.g., *Bill watered the plants flat*)

Syntax: NP<sub>1</sub> V NP<sub>2</sub> AP<sub>3</sub>

Semantics: X<sub>1</sub> CAUSE [Y<sub>2</sub> BECOME Z<sub>3</sub> ]

MEANS: [ *VERBAL SUBEVENT* ]

b. Noncausative property resultative (e.g., *The pond froze solid*)

Syntax: NP<sub>1</sub> V AP/PP<sub>2</sub>

Semantics: X<sub>1</sub> BECOME Y<sub>2</sub>

MEANS: [ *VERBAL SUBEVENT* ]

c. Noncausative path resultative (e.g., *The ball rolled down the hill, The truck rumbles into the station.*)

Syntax: NP<sub>1</sub> V PP<sub>2</sub>

Semantics: X<sub>1</sub> GO Path<sub>2</sub>

i. MEANS: [ *VERBAL SUBEVENT* ]

---

17) The temporal relations between the two sub-events are discussed based on Goldberg & Jackendoff's (2004) the English resultative as a family of constructions.

18) The notation is cited from Goldberg & Jackendoff (2004: 563).

- ii. RESULT: [ *VERBAL SUBEVENT: X1 EMIT SOUND*]
- iii. RESULT: [ *VERBAL SUBEVENT: X1 DISAPPEAR*]
- d. Causative path resultative (e.g., *Bill rolled the ball down the hill.*)
  - Syntax: NP<sub>1</sub> V NP<sub>2</sub> PP<sub>3</sub>
  - Semantics: X<sub>1</sub> CAUSE [Y<sub>2</sub> GO Path<sub>3</sub> ]
  - MEANS: [ *VERBAL SUBEVENT*]

A different relation between the verbal and constructional subevents appears in (66c). Although sound-emission<sup>19)</sup> and disappearance resultatives have the same syntactic form, they entail a result relation between the two separable subevents – the construction subevent and the verbal subevent – instead of a means relation.

Let us take a more careful look at the temporal properties of resultatives. According to Goldberg & Jackendoff (2004), resultatives suggest that the sentence expresses the result of some action. Moreover, Dowty (1979: 77–78), following an earlier suggestion of Kenny's quoted in (67), proposes that the end-points of accomplishments and achievements define result states, hence capturing their telicity.

- (67) But every performance must be ultimately the bringing about of a state or of an activity... One performance differs from another in accordance with the differences between states of affairs brought about: Performances are specified by their ends.

---

19) This is intransitive path resultatives in English in which the verb expresses emission of a sound. According to Goldberg & Jackendoff (2004), it is called a sound-emission path resultative. The class of resultatives has a different relation between the verbal and constructional subevents. Consider the following examples:

- a. The trolley rumbled through the tunnel.
- b. The bullets whistled past the house.

(Goldberg & Jackendoff, 2004)

In particular, take a look at the sentence (c), and then compare it with the sentence *\*Bill whistled past the house*. In (c), the whistling noise is a result of the bullets' motion whereas Bill's whistling is a separate act, that is, a separate volitional act. In conclusion, the sound-emission resultatives have a different relation between the two subevents.

In accordance with the statement of Goldberg & Jackendoff (2004), the telicity of motion events correlates with the end-boundness of the path of motion. For example, the PP *into the room* expresses a path that terminates in the room, and *John went into the room* expresses a telic event, that is, one whose termination is clear. The termination means John is in the room. By contrast, the PP *along the bank* expresses a path whose end is not specific, and *John went along the bank* expresses an atelic event, that is, one whose termination is not specific. In turn, the telicity of an event amounts precisely to the end-boundedness of its time-course.

As Goldberg & Jackendoff (2004) state, on the analysis in (66), the verbal subevent is a means toward the constructional subevent. To do X by MEANS of doing Y, one cannot do X first and then do Y. Since the verbal subevent is interpreted as a means of effecting the constructional subevent, the constructional subevent can not entirely precede the verbal subevent. However, this prediction leaves the question of whether the verbal subevent is concurrent with the constructional subevent, overlaps it, or entirely precedes it. All of these are possible. The possibilities only depend on the pragmatics of the situation.

To sum up, according to Goldberg & Jackendoff (2004: 546), the temporal relations between the verbal subevent and the construction subevent are predicated by three necessary factors: (i) the semantic relation between the two subevents, whether it be means or result, (ii) our pragmatic world knowledge of the particular subevents in question, and (iii) the strong tendency to interpret means expressions in monoclausal events as cotemporal.

### 3.3. The Selectional Restriction on the Result Phrase, XPs

Let us move on to semantic restrictions on the resultative predicate XPs. Because a large variety of APs can be result phrases, the semantic restrictions on APs as XPs are firstly mentioned. According to Goldberg & Jackendoff (2004), there is some generalization about which APs are more

productive. For instance, more productive APs tend to be non-gradable<sup>20</sup>, and, when used as RPs, strongly tend to encode a clearly delimited state. Consider the contrast between *dry* and *wet*. *Dry* is quite productive as an RP, but *wet* is not productive. Things are either dry or wet. On the other hand, things can be more or less wet. Consider the other examples that are not allowed because of the property of those adjectives such as *dry* and *wet* as stated above.

- (68) a. He danced himself to fame/\*famous. (Verspoor, 1997)  
 b. We danced ourselves to dust/\*dusty. (Boas, 2003)

*Famous* and *dusty* are gradable adjectives, and it is natural to say someone is ‘a little famous’ or ‘a little dusty’. Because of the properties of the two adjectives, they are less productive when used as RPs and, at the same time, unacceptable. However, if APs like *famous* or *dusty* turn to PPs like *to fame* or *to dust*, the resultatives are acceptable.

The choice of possible RPs is often highly dependent on the main verb involved (Boas, 2000; Dowty, 1979; Goldberg, 1995; Green, 1972; Verspoor, 1997; Wechsler, 1997). According to Wechsler (2001: 395), as shown in example (69), hammering something normally is intended to change either its location (into the ground) or its shape and/or texture (flat/smooth/shiny), and so the verb *hammer* selects possible RPs for result properties of this kind. Subjective properties like *beautiful* and *safe* are not generally

---

20) Adjective can be divided largely into two classes – gradable adjectives and non-gradable adjectives.

- (i) The gradable adjective
  - a. very/quite/extremely {long/flat/expensive/straight/full/dull}
  - b. longer, flatter, more expensive, straighter, fuller, duller
- (ii) The non-gradable adjectives
  - a. ?? very/quite/extremely {dead/triangular/invited/sold}
  - b. ?? more dead/triangular/invited/sold

Like (ia), the gradable adjectives can be modified by adverbs such as *very*, *quite* or *extremely*... etc. and also it is possible to make the comparative with the adjectives as shown (ib). However, the adverbs can not modify non-gradable adjectives and there do not exist the comparative in non-gradable adjectives. That is, non-gradable adjectives represent the telicity in that they mean either *dead* or *alive*.

productive in this construction.

- (69) a. Sally painted the door red/a pale shade of red/?sticky/\*beautiful/\*noticeable.  
b. John hammered the metal flat/smooth/?shiny/into the ground/\*beautiful/\*safe.

In (70), we see a few more intransitive verbs based on Wechsler (2001). The verb *freeze* selects solidity as its result, but not subjective properties like *slipperiness* or *dangerousness*. The verb *roll* specifies that its result must be a location<sup>21</sup>). Even if we imagine the ball rolls through a puddle, we still cannot use *wet*. In the same manner, even if we imagine the gate loses its grease from rolling and becomes squeaky, the predicate *squeaky* is still unacceptable.

- (70) a. The puddle froze solid/\*slippery/\*dangerous.  
b. The ball rolled down the hill/into the room/clear of the car/\*wet.  
c. The gate rolled into the wall/open/shut/\*squeaky.<sup>22</sup>)

In Boas's large corpus search, the verbs *stab*, *bat*, *put*, *batter*, *frighten*, *crush*, *scare*, and *burn* occur only with the RP *to death* and never with *dead*. According to Goldberg & Jackendoff (2004), *dead* is used as an RP when the end state is an instantaneous result of the action denoted by the verb. It is possible to shoot someone and cause them to die instantly. If more than one shot is used, *to death* is preferred with the corresponding verbs.<sup>23</sup>)

---

21) That is wechsler's (2001) statement. However, According to Levin & Hovav (1995), the result of the verb *roll* is not necessary to be a location. Other cases are presented in chapter five.

22) The reason that there are selectional restrictions on the result phrase is that APs will be discussed more deeply in the next section.

23) The followings are in accordance with Boas's large corpus search (2000).

i) Dead: 429 occurrences: shoot (408), cut (11), kill (9), strike (8), stop (6), knock (3),

- (71) a. Riddling him with 16 bullets, Billy Bob shot him to death/??dead.  
 b. Firing a single bullet to the heart, Billy Bob shot him dead/?to death.

(Goldberg & Jackendoff, 2004)

As shown in (72), the resultative excludes past participial adjectives as RP, whereas more or less synonymous PPs are acceptable.

- (72) a. \*He sang himself exhausted/bored/exhilarated.  
 b. He sang himself to exhaustion/to boredom/to (a state of) exhilaration.

(Goldberg & Jackendoff, 2004)

As Goldberg & Jackendoff (2004) noted, *asleep* describes both a normally nongradable and clearly delimited state and yet it is far less conventional than *to sleep* or *awake* as an RP.

- (73) a. ?She cried herself asleep.  
 b. She cried herself to sleep.  
 c. She jerked herself awake.

Secondly, unlike APs that are very productive, PPs are for the most part impossible as RPs as shown in (74).

- (74) a. He danced his feet sore.  
 b. \*He danced his feet to soreness. (Verspoor, 1997)

---

flatten (1), kick (1), smite (1)

- ii) To death: 547 occurrences: stab (114), beat (74), batter (39), frighten (34), crush (25), scare (24), burn (18), torture (16), drink (15), starve (15), bludgeon (12), hack (12), shoot (11), kick (11), club (9), bore (8), knife (8), choke (8) ...



However, any spatial PPs can be used as RPs. Consider the sentences in (75):

(75) a. Pat ran into the room.

b. Pat ran towards the room.

(Goldberg & Jackendoff, 2004)

In sum, since an interpretation is imaginable, there must be a lexical cross-referencing between verbs and RPs. For example, as shown above, the adjective *flat* is acceptable as an RP with the verb *hammer*. However, *beautiful* is completely unacceptable with *hammer*. That is, the sentences are semantically unacceptable whereas the situations are pragmatically plausible.

## Chapter 4. RESULTATIVE PATTERNS

In this chapter, I show resultative patterns on the basis of syntactic types and semantic types of English resultative constructions. There are two syntactic types of resultative constructions in accordance with the transitivity of the verbs – transitive verbs and intransitive verbs. In semantic types, the summary of resultative patterns is presented based on Goldberg & Jackendoff (2004) and Hovav & Levin (2001). Goldberg & Jackendoff (2004) posit four major subconstructions and Hovav & Levin (2001) demonstrate resultative patterns according to whether the patterns involve necessarily temporally dependent subevents or not.

### 4.1. Syntactic Patterns

In this section, the syntactic patterns of resultatives are presented. Resultatives are classified into transitive resultatives and intransitive resultatives on the basis of the transitivity of the main verbs. These two types have also been proposed by Dowty (1979), Simpson (1983), and Bowers (1997). According to Bowers (1997, 2001), the two types of resultatives are called the control construction and the raising construction.

#### (76) Transitive resultatives

- a. The gardener watered the tulips flat.
- b. The grocer ground the coffee beans into a fine powder.
- c. They painted their house a hideous shade of green.

(Carrier & Randall, 1992)

#### (77) Intransitive resultatives

- a. The joggers ran their Nikes threadbare.
- b. The kids laughed themselves into a frenzy.
- c. He sneezed his handkerchief completely soggy.

(Carrier & Randall, 1992)

It is a well-established fact that intransitive verbs seem to fall into two distinct types: unergative verbs, which have only an external argument, and unaccusative verbs, which conversely have only an internal argument.

(78) Unergative verb resultatives

- a. Bill laughed himself sore. (Levin & Hovav, 1995)  
(\*Bill laughed sore.)
- b. Sam cried himself sick. (Napoli, 1992)  
(Sam cried sick.) (unresultative)
- c. Sylvia ate herself sick.  
(Sylvia ate herself.) (unresultative)
- d. They drank the teapot dry.  
(\*They drank the teapot.)
- e. “Cooking all your flesh dry and brittle.”  
(\*Cook all your flesh.) (Levin & Hovav, 1995)
- f. Sam cried his eyes out. (Napoli, 1992)
- g. The joggers have run the pavement thin. (Carrier & Randall, 1992)

In (78a-b), the fake objects, *himself* and *herself*, are placed in direct object position just for syntactic reasons. Simpson (1983) call this special case of unergative verb resultatives, as in (78a) and (78b), a FAKE REFLEXIVE. The reflexive object cannot alternate with other NPs. In (78c-e), a certain class of transitive verbs such as *eat*, *drink*, and *cook* that are allowed to be used as intransitive verbs can take either fake reflexive or non-subcategorized NPs in a direct object position. In (78f-g), body parts or some noun phrases related to body parts can be placed in a direct object position.

(79) Unaccusative verb resultatives

- a. The river froze solid.  
(\*The river froze itself solid.)

- b. The curtain rolled open.<sup>24)</sup>  
 (\*The curtain rolled itself open.)
- c. The snow melted slushy.  
 (\*The snow melted the road slushy.) (Levin & Hovav, 1995)

Unlike unergative verbs, unaccusative verbs cannot appear with result phrases predicated by either fake reflexive or non-subcategorized NPs. That is, result phrases based on unaccusative verbs can be predicated by surface subjects. According to Burzio (1986), when result phrases in the sentences (79a-c) are predicated by fake reflexive *itself* and non-subcategorized noun phrase *the road*, respectively, the reason the sentences are ungrammatical is that an unaccusative verb cannot assign its  $\Theta$ -role to two arguments, that is, to both the surface subjects such as *the river*, *the curtain*, and to *the snow*, which are the underlying objects.

---

24) Levin & Hovav (1995) argue manner of motion verbs are basically classified as unergative verbs, but if directional phrases follow the manner of motion verbs, they have a meaning shift, in other words, they are considered unaccusative verbs. Consider the following examples:

- (i) a. They ran their shoes threadbare. (unergative verb, resultative)
- b. John ran to the school. (unaccusative verb, resultative)

However, according to Levin & Hovav (1995), the verb *roll* has a few differences with the verb *ran*. The verb *roll* can be classified as an unaccusative verb i) when it is followed by a result phrase presenting the change-of-state and ii) when a subject followed by the verb *roll* doesn't cause some action. In some constructions, the verb *roll* can be regarded as an unergative verb, too. If the verb *roll* take a subject causing some action, it becomes an unergative verb. The following examples make this assumption clearer.

- (ii) a. The children rolled the grass flats. (unergative verb, resultative)
- b. The curtain rolled open. (unaccusative verb, resultative)
- c. Max rolled down the hill. (unaccusative or unergative verb, resultative – according to Levin & Hovav's manner of motion verbs analysis)

Levin & Hovav's meaning shift rule is problematic in that the verb *roll* can be an unaccusative verb or an unergative verb.

## 4.2. Semantic Patterns

### 4.2.1. Goldberg & Jackendoff's (2004) Semantic Patterns

First of all, Goldberg & Jackendoff (2004) classify resultatives into two types: transitive resultatives and intransitive resultatives. The two types of resultatives are based on the existence and nonexistence of a direct object. In other words, if a resultative contains a direct object, in which case the RP follows the object, it is a transitive resultative. Conversely, if a resultative lacks a direct object, in which case the RP is immediately after the verb, it is an intransitive resultative. They state that an AP or PP occupies the normal position of a verbal argument.

#### (80) Transitive resultatives

- a. Herman hammered the metal flat.
- b. The critics laughed the play off the stage.

#### (81) Intransitive resultatives

- a. The pond froze solid.
- b. Bill rolled out of the room.

(Goldberg & Jackendoff, 2004)

According to Goldberg & Jackendoff (2004), in some transitive resultatives, a direct object is independently selected by a verb; in others, it is not. They refer to the former cases as selected transitive resultatives and the latter as unselected resultatives.

#### (82) Selected transitive resultatives

- a. The gardener watered the flowers flat.  
(The gardener watered the flowers.)
- b. Bill broke the bathtub into pieces.  
(Bill broke the bathtub.)

(83) Unselected transitive resultatives

- a. They drank the pub dry.  
(\*They drank the pub.)
- b. The professor talked us into a stupor.  
(\*The professor talked us)

(Goldberg & Jackendoff, 2004)

In addition, Goldberg & Jackendoff (2004) present fake resultatives as a special case of unselected transitive resultatives. A fake resultative has a reflexive object that cannot alternative with other NPs.

(84) Fake reflexive resultatives

- a. We yelled ourselves hoarse.  
\*We yelled ourselves.  
\*We yelled Harry hoarse.
- b. Harry coughed himself into insensibility.  
\*Harry coughed himself.  
\*Harry coughed us into insensibility.

(Goldberg & Jackendoff, 2004)

That is, as shown in (84a-b), the resultatives do not allow other NPs such as *Harry* and *us* to be put in the reflexive pronoun position.

To sum up, according to Goldberg & Jackendoff (2004), resultatives can be divided in two kinds – transitive resultatives and intransitive resultatives. A transitive resultative is further subdivided into selected resultatives and unselected resultatives. Within unselected resultatives, there are subdivided two resultatives – normal resultatives and fake reflexive resultatives.<sup>25)</sup>

---

25) Goldberg & Jackendoff (2004: 537) present three dimensions of variation in resultative sentences including what is mentioned in this thesis.

- a. RP = AP vs. RP = PP
- b. RP = property vs. RP = spatial configuration
- c. Intransitive vs. transitive

Now, on the basis of the four major subconstructions stated in the section 4.2., semantic patterns based on a constructional subevent are discussed. According to Goldberg & Jackendoff (2004), in particular, there are two dimensions of variation: property vs. path resultatives and noncausative vs. causative resultatives.

(85) Property resultatives

- a. She watered the plants flat.
- b. The pond froze solid.

(86) Path resultatives

- a. Bill rolled the ball down the hill.
- b. Fred tracked the leak to its source.
- c. Bill spit out the window.

The resultatives in (85) are referred to as property resultatives while the resultatives in (86) are referred to as path resultatives. The property resultative (85a) means that the plants came to be flat, and (85b) means that the pond came to be solid. However, the path resultative (86a) means the ball traveled down the hill, (86b) means Fred (the host is subject)<sup>26)</sup> traveled a path terminating at the source of the leak, and (86c) means the spit (the host is the implicit argument) traversed a path that went out the window.<sup>27)</sup> As shown in (86a-c), in path resultatives, the constructional

---

i. Within transitive: selected vs. unselected

1. Within unselected: normal vs. fake reflexive

26) Normally, the host of a transitive resultative is a object and the host of an intransitive resultatives is a subject. However, according to newly emerging literature by Hovav & Levin 2001, Verspoor 1997, and Wechsler 1997, the host is the subject in the following transitive examples.

Transitive resultatives with subject host:

- a. Bill followed the road into the forest.
- b. We drove Highway 5 from SD to SF.

27) As another distinct subclass, the types involving verbs of bodily emission, substance emission, and ingestion doesn't express overtly the entity in motion in the sentence. Therefore, the host is an implicit argument.

Intransitive resultatives with implicit (nonsubject) host

subevent consists of the host traversing the path expressed by the RP.

The next dimension of variation is noncausative vs. causative resultatives. In noncausative resultatives like (87), the constructional subevent is simply a change of state or change of position when the host is the subject. However, in causative resultatives like (88), the constructional subevent consists in the subject causing the host, the direct object, to do what it does. Consider the following examples:

(87) Noncausative resultatives

- a. The pond froze solid.
- b. The ball rolled down the hill.

(88) Causative resultatives

- a. Bill watered the tulips flat.
- b. Bill rolled the ball down the hill.

In addition to the four subconstructions stated so far, there is a special class of intransitive path resultatives – sound-emission resultatives.

(89) Sound-emission path resultatives

- a. The wagon creaked down the road.
- b. The knee-replacement candidate groaned up the stairs.

According to Goldberg & Jackendoff (2004), the constructional subevent is the subject moving along the path expressed by the PP – the wagon moves down the road. However, the meaning of the sentence is that the motion causes the sound to be emitted: the creaking is a result of the wagon's motion. What is crucial is that the cause of the sound must be related to the motion.

- 
- a. Bill sweated/bled on the floor.
  - b. The toilet leaked through the floor into the kitchen below.
  - c. Bill drank from the house.



#### 4.2.2. Levin & Hovav's (2001) Semantic Patterns

Levin & Hovav propose semantic patterns based on the following three properties – i) whether the patterns involve temporally dependent subevents or not, ii) whether there is a postverbal NP or not, and iii) whether the result XP is subject- or object-predicated.

(90) *The pond froze solid.*

Resultatives with no distinct subevents (simple event structure):<sup>28)</sup>

Bare XP resultative

Intransitive-based, no postverbal NP, subject-predicated XP

(Levin & Hovav, 2001: 793–794)

The example sentence in (90) is a resultative with no distinct subevents, that is, it has a simple event structure. The details of (90) are intransitive-based, no postverbal NP, and subject-predicated XP. It is called a bare XP resultative.

(91) Resultative with temporally dependent coidentified subevents

(simple event structure):

a. *Robin danced out of the room.*

Bare XP resultative

Intransitive-based, no postverbal NP, subject-predicated XP

b. *The wise men followed the star out of Bethlehem.*

Subject-oriented transitive-based resultative

Transitive-based, subcategorized NP, subject-predicated XP

c. *We pulled the crate out of the water.*

Object-oriented transitive-based resultative

Transitive-based, subcategorized NP, object-predicated XP

(Levin & Hovav, 2001: 793–794)

---

28) Levin & Hovav (2001) give the label in small caps, followed by its most salient identifying properties and a representative sample. (Levin & Hovav, 2001: 793)

(91a-c) are resultatives with temporally dependent subevents. First, the details of (91a) are the same as (90) – intransitive-based, no postverbal NP, and subject-predicated XP. Moreover, it is referred to as a bare resultative like (90). (91b) is a subject-oriented and transitive-based resultative. It takes a subcategorized NP as a direct object. The only difference that (91c) has, when compared to (91b), is that (91c) has a object-predicated XP.

(92) Resultatives whose subevents need not be temporally dependence (complex, causative event structure):

a. *The joggers ran the pavement thin.*

Nonsubcategorized NP intransitive-based resultative

Intransitive-based, nonsubcategorized NP, object-predicated XP

b. *We yelled ourselves hoarse.*

Reflexive intransitive-based resultative

Intransitive-based, reflexive object, object-predicated XP

c. *They drank the pub dry.*

Nonsubcategorized NP transitive-based resultative

Transitive-based, nonsubcategorized NP, object-predicated XP

d. *The cows ate themselves sick.*

Reflexive transitive-based resultative

Transitive-based, reflexive object, object-oriented XP

e. *The critics panned the play right out of town.*

Object-oriented transitive-based resultative

Transitive-based, subcategorized NP, object-predicated XP

(Levin & Hovav, 2001: 793-794)

(92a-e) are resultatives whose subevents need not be temporally dependent. That is, they have a complex and causative event structure. (92a) has three properties – intransitive-based, nonsubcategorized NP, and object-predicated XP as a nonsubcategorized NP and intransitive-based resultative. (92b) is a reflexive intransitive-based resultative. Its XP is an

object-predicated XP. (92c) is a nonsubcategorized NP and transitive-based resultative. It has an object-predicated XP, too. When compared with (92b), (92d) has one distinction – it is based on a transitive verb. Lastly, (92e) is an object-oriented and transitive-based resultative. It takes a subcategorized NP.

From the discussion so far, both of the syntactic and semantic analyses of resultative constructions leave unsolved questions. For future studies, based on the syntactic and semantic patterns after complementing the questions, it is necessary that the constructional patterns are presented.

## Chapter 5. CONCLUSION

In this thesis, we have explored the syntactic and semantic analyses of English resultative constructions. A result phrase in resultative constructions describes the changed final state of a postverbal NP as a result of the action denoted by a verb, regardless of the argumenthood of a verb. Resultative constructions are classified into two types according to the transitivity of a verb: transitive resultatives and intransitive resultatives. For the syntactic analyses, the emphasis is put on the Direct Object Restriction (DOR). In connection with the syntactic analyses of resultative constructions, the consistent relation between syntactic and semantic structures is elucidated by verifying the syntactic and semantic properties. For the semantics of resultatives, the possibilities for temporal relations between the two subevents – the verbal subevent and the constructional subevent – are explained. In addition, the selectional restrictions on the result phrases, XPs, are pointed out. The semantic properties on the resultative predicate are related to lexical semantic properties of main verbs and syntactic form of resultative constructions.

For the syntactic analyses, the two basic types of resultatives – the Binary Small Clause analysis based on Kayne (1985), and the Ternary Branching analysis based on Carrier & Jackendoff (1992), respectively – are presented. Since, in the SC analysis, the postverbal NP and the result XP are sisters within the SC node, it fails to illustrate the argument structure of a transitive verb. On the other hand, the problem in the ternary analysis is that the differences between transitive verbs and intransitive verbs aren't syntactically represented because all three – the verb, the postverbal NP, and the result XP – are in sister relations. That is, although the SC analysis accounts for the predication relation between a postverbal NP and a result XP, it has great difficulty in explaining that the postverbal NP in transitive-based resultative constructions is an internal argument of a verb. The ternary analysis also has difficulty in providing an explanation for the distinct argument structures.

Since problems still remain for the syntactic account of resultative constructions, it is necessary to consider the semantics of resultatives. The semantics of resultatives begins with Goldberg's (1995) semantic analysis – *the constructional account* – and illustrate an account based on the event structures associated with the different resultative patterns. Resultatives contain separable subevents – a verbal subevent and a constructional subevent. There are temporal relations between the two subevents. The verbal subevent is the means by which the constructional subevent takes place. According to the property of resultatives that a resultative sentence shows the result of some action, there exists the telicity of events – the end points of accomplishments and achievements. In addition, in the section of semantics of resultatives, the semantic restrictions on the result phrases, XPs are pointed out. The selectional restrictions on XPs depend on the lexical property of a main verb and the syntactic form of resultatives. The situations of resultative sentences are pragmatically acceptable but they are semantically unacceptable.

The summary of resultative patterns, based on syntactic patterns and the semantic patterns, are presented. The syntactic patterns are on the basis of Carrier & Randall (1992), and the semantic patterns are on the basis of Goldberg & Jackendoff (2004), Hovav & Levin (2001). By presenting the diversity of lists of resultative patterns, we can better understand the syntactic and semantic properties of resultatives.

To conclude, by analyzing the syntactic structures of resultatives and presenting an account for the semantic of resultatives, the importance of focusing on the syntax – semantics interface is proposed. That is, the relation between the syntax and semantics of resultatives is not one-sided, but correlated to each other. Moreover, for future studies on resultatives, the pragmatic approach is required after sufficient recognition of the relation between syntactic and semantic resultative constructions. In addition, after complementing the questions that the syntactic and semantic analyses leave, it is necessary that the constructional patterns are presented.

## REFERENCES

- Choi, Mun-Hong. "Syntactic Structures of Resultative Constructions in English." Master's thesis, University of Seoul, 2005.
- Kim, Kyoung-Hark. "Analysis and Semantic Interpretation of Resultatives." *Language*, 25(1), (2000), pp. 31-50.
- Kim, Kyoung-Hark. "Resultatives and Event Structures." *Language research*, 41(3), (2005), pp. 517-541.
- Kim, Youn-Ju. "Analyses of English Resultative Construction." Master's thesis, University of Chosun, 2001.
- Lee, Nam-Guen and Jeong, Hye-In. "An Analysis of English Resultatives Based on Head-driven Phrase Structure Grammar." *Humanities Research*, 31, (2004), pp. 211-236.
- Lee, So-Young. "A Comparative Study of Two Approaches to Some English Resultative Constructions." Master's thesis, University of Dongguck, 1999.
- Lee, Youn-Wha. "Resultatives vs. Depictives." *The Journal of Namseoul Univ.*, 11(2), (2005), pp. 35-57.
- Lee, Chang-Su. "Intransitive Resultative Constructions and Fake Objects." *Studies in Language*, 31, (1995), pp. 657-686.
- Noh, Myong-Hwa. "On the Analysis of the Semantic and Syntactic of the Resultative Construction in English." Master's thesis, University of Kwangwoon, 2004.
- Ryu, Ran. "Argument Structure and Syntactic Structure of English Resultatives." *Studies in Language*, 17(2), (2001), pp. 69-88.
- Yoo, Eun-Ju. "An Aspectual Analysis of the English Resultative Construction." Master's thesis, University of Yonsei, 2005.
- Carrier, J., and J. Randall "The Argument Structure and Syntactic Structure of Resultatives. " *Linguistic Inquiry*, 23, (1992), pp. 173-234.

- Dowty, D.R. "Thematic Proto-Roles and Argument Selection." *Language*, 67, (1991), pp. 547-619.
- Goldberg, Adele E. "A Semantic Account of Resultatives." *Linguistic Analysis*, 21, (1992), pp. 66-96.
- \_\_\_\_\_. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press, 1995.
- Goldberg, A., and Jackendoff, R., "The English Resultatives as a Family of Constructions." *Language*, 80, (2004), pp. 532-568.
- Goldberg, Adele E. *Constructions at Work: The Nature of Generation in Language*. Oxford: Oxford University Press, 2006.
- Iwata, S. "Argument Resultatives and Adjunct Resultatives in a Lexical Constructional Account: The Case of Resultatives with Adjectival Result Phrases." *Language Sciences*, 28, (2006), pp. 449-496.
- Jackendoff, R. *Semantic Structure*, Cambridge, Mass.: The MIT Press, 1990.
- \_\_\_\_\_. "The Proper Treatment of Measuring Out, Telicity, and Perhaps Even Quantification in English." *Natural Language and Linguistic Theory*, 14, (1996), pp. 305-54.
- Kayne, R. *Connectedness and Binary Branching*. Foris, Dordrecht, 1984.
- \_\_\_\_\_. "Principles of Particle Constructions." In J. Gueron, G. Obeauer, and J. Y. Pollock, eds., *Grammatical Representation*, Dordrecht: Foris, 1985.
- Rappaport Hovav, M., and B. Levin. "An Event Structure Account of English Resultatives." *Language*, 77, (2001), pp. 766-797.
- \_\_\_\_\_. "The Semantic Determinants of Argument Expression: A View from the English Resultative Construction" (2002).
- Stowell, Tim and Wehrli, Eric. *Syntax and Semantics: Syntax and the Lexicon Vol. 26*. London: Academic Press, 1992.

Wechsler, Stephen, and Noh, Bokyung. "On Resultative Predicates and Clauses: Parallels Between Korean and English." *Language Sciences*, 23, (2001), pp. 391-423.

Wechsler, Stephen. "An Analysis of English Resultatives under the Event-Argument Homomorphism Model of Telicity." *Proceedings of the 3rd Workshop on Text Structure*, University of Texas, Austin, October 13-15, 2000, (2001).

\_\_\_\_\_. "Resultatives under the 'Event-Argument Homomorphism' Model of Telicity." In N. Erteschik-Shir and T. Rapoport. (Eds.), *The Syntax of Aspect*. Oxford University Press, Oxford UK., (2005), pp. 255-273.



## 국문 초록

### 영어 결과구문 연구

본 논문은 결과문의 통사론적 분석과 의미론을 통해 결과구문의 특성과 유형을 다루고자한다. 이를 위하여 영어결과구문을 동사의 타동성 여부에 따라 타동결과구문과 자동결과구문으로 나누어 통사론적 분석을 유별하며 문제점을 지적하고 있다. 또한 두 사건구조 사이의 시간적 관계를 설명하고 결과구에 대한 의미론적인 제약을 상술하고 있다.

본 논문의 구성은 다음과 같다. 제 1장은 일반적인 영어결과구문을 소개한다.

제 2장에서는 통사론적 분석의 일환으로 이분지 분석과 삼분지 분석이 통사론적 특성과 함께 소개된다. Kayne (1985)에 근거를 두고 있는 이분지 분석은 동사 뒤에 오는 후치 명사를 타동사의 내적 논항이 아닌 결과구와 주술관계에 있다는 것에 가정을 두고 있다. 반면에 Carrier와 Randall (1992)에 근거한 삼분지 분석은 동사, 후치 명사구, 그리고 결과구가 자매관계에 있다는 것을 가정하고 있다.

제 3장에서는 통사론적으로 설명되지 못한 문제점들을 보완하기 위해서 Goldberg (1995)의 의미론적 분석인 구조적 설명을 시작으로 하여 두 사건구조 사이의 시간적 관계성 및 결과구문의 완결성과 결과구에 대한 선택제약을 지적함으로써 결과문의 의미론이 소개되어진다.

제 4장은 영어결과구문을 Carrier & Randall (1992)의 통사적 유형과 Goldberg & Jackendoff (2004) 그리고 Hovav & Levin (2001)의 의미론적 유형으로 나누어 제시함으로써 결과구문을 분석이 아닌 유형으로 보고자 한다.

마지막으로 통사론적 그리고 의미론적 설명을 고려하여 통사론과 의미론 사이의 관계가 일방적이기 보다는 오히려 서로 영향을 미치는 관계에 있다는 것이 제안되어진다.

주요어: 결과구문, 통사구조, 하위사건구조, 선택제약, 결과구문 유형

# 저작물 이용 허락서

학 과	김보경	학 번	20058221	과 정	석사
성명	한글: 김보경                      한문: 金甫經                      영문: Kim Bo-Kyoung				
주소	전라남도 화순군 화순읍 벽라리 37 (15/3) 서라 3차 301동 1205호				
연락처	061.371.3713 (011.9430.3395)                      E-MAIL: bk_kim7@yahoo.com				
논문제목	한글 : 영어 결과구문 연구 영문 : A STUDY ON THE ENGLISH RESULTATIVE CONSTRUCTIONS				

본인이 저작한 위의 저작물에 대하여 다음과 같은 조건 아래 조선대학교가 저작물을 이용할 수 있도록 허락하고 동의합니다.

- 다 음 -

1. 저작물의 DB구축 및 인터넷을 포함한 정보통신망에의 공개를 위한 저작물의 복제, 기억 장치에의 저장, 전송 등을 허락함.
2. 위의 목적을 위하여 필요한 범위 내에서의 편집·형식상의 변경을 허락함.  
다만, 저작물의 내용변경은 금지함.
3. 배포·전송된 저작물의 영리적 목적을 위한 복제, 저장, 전송 등은 금지함.
4. 저작물에 대한 이용기간은 5년으로 하고, 기간종료 3개월 이내에 별도의 의사표시가 없을 경우에는 저작물의 이용기간을 계속 연장함.
5. 해당 저작물의 저작권을 타인에게 양도하거나 또는 출판을 허락을 하였을 경우에는 1개월 이내에 대학에 이를 통보함.
6. 조선대학교는 저작물의 이용허락 이후 해당 저작물로 인하여 발생하는 타인에 의한 권리 침해에 대하여 일체의 법적 책임을 지지 않음.
7. 소속대학의 협정기관에 저작물의 제공 및 인터넷 등 정보통신망을 이용한 저작물의 전송·출력을 허락함.

2008년    4월    24일

저작자: 김보경 (서명 또는 인)

조선대학교 총장 귀하