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Accomplishments in Korean

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An Intention-based Account of Accomplishments in Korean

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An Intention-based Account of Accomplishments in Korean

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In this dissertation, I investigate why Korean allows failed-attempt interpretations of accomplishment predicates, but languages like English do not. For example, the English sentence He broke the window, but the window was not broken is a contradiction, but the corresponding Korean sentence is possible with the interpretation He tried to break the window, but the window was not broken. Regarding this problem, I observe two related generalizations: (i) the Subject Realization Generalization (SRG), which states that in the event structure of a verbal predicate, the (sub)event directly related to the predicate's subject must occur in the actual world, and (ii) the Subject Intention Generalization (SIG), stating that nonoccurrence of an event requires the subject's intention regarding the event. I incorporate these generalizations into a possible world semantic analysis, which I argue accounts for various interpretations of accomplishments in Korean. In addition, with regard to complex predicate sentences (e.g. light verb constructions, serial verb constructions), I propose the Event Connection Generalization (ECG), which asserts that in the event structure of a complex predicate sentence, connecting event(s) must occur in the actual world. I also argue that the intention-based account is not just restricted to a certain class of lexical verbs that project accomplishment predicates, but a broader class of accomplishments involving complex predicates in Korean.

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Chapter 1

Introduction

The main purpose of this study is to account for how different interpretations (i.e. culmination and non-culmination readings) of accomplishments in Korean arise. In the following section, I present a description of the phenomenon dealt with in this dissertation and canonical examples of it.

1.1 The phenomenon

In an English sentence headed by an accomplishment predicate (see the aspectual classes in Kenny 1963, Vendler 1967, Dowty 1979, among many others), the relevant result encoded in the predicate must occur for the sentence to be true.¹ For example, the resultant states of the accomplishment predicates *break* and *open* cannot be denied when it is asserted that events of this sort occurred, as shown in the following:

- (1) a. He broke the window, #but it didn't break.
 - b. He opened the window, #but it didn't open.

¹ By "accomplishment," I mean predicates with a causation event structure (i.e. causatives) following Dowty 1979, Rappaport Hovav & Levin 1998, rather than predicates with a bundle of temporal properties (i.e. telicity and durativity) as in Rothstein 2004. So predicates like *break* are assumed to be an accomplishment predicate, rather than an achievement. In sections below (e.g. § 3.6.1), I use three grammatical properties as criteria to determine whether a predicate in Korean is an accomplishment or not.

This shows that the English accomplishment predicates *break* and *open* lexically entail the realization of their inherent results.

Furthermore, explicit reinforcement of the occurrence of the results sounds redundant, as illustrated in (2).

(2) a. He broke the window, ?so it broke.

b. He opened the window, ?so it opened.

This redundancy is expected if the verbs require result states to obtain. Since the realization of the relevant result states is already asserted in the first clauses in (2), it is not necessary to reassert this in the second clauses. This redundancy again suggests that the occurrence of the lexically encoded results is a necessary part of the truth-conditions of these sentences.

Interestingly, however, not every language behaves in the same way as English. In some other languages, the occurrence of the result encoded in an accomplishment predicate is not entailed for the sentence headed by the predicate to be true. Korean is one of those languages (see Japanese in Ikegami 1985, Hindi in Singh 1998, Arunachalam & Kothari 2008, Korean in Park 1993, Lee 2004, Thai in Koenig and Muansuwan 2000, Salish languages in Bar-el *et al.* 2004, Tamil in Pederson 2008, Chinese in Koenig and Chief 2008, *inter alia*). Some examples of some of these languages are presented in Chapter 2. The existence of this kind of interpretation in a range of languages suggests that the phenomenon is not idiosyncratic to Korean. In the following Korean sentences, the occurrence of the results of *kkay*- 'break' and *yel*-'open' can be denied, unlike in English:

(3) a. ku-ka changmwun-ul kkay-ss-ciman, changmwun-i he-Nom window-Acc break-Pst-but window-Nom kkay-ci-ci anh-ass-ta. break-Pass-Comp Neg-Pst-Dec
(lit.) 'He broke the window, but it was not broken.'

= 'He tried to break the window, but it was not broken.'

 b. ku-ka changmwun-ul yel-ess-ciman, changmwun-i yel-li-ci
 he-Nom window-Acc open-Pst-but window-Nom open-Pass-Comp anh-ass-ta.

Neg-Pst-Dec

(lit.) 'He opened the window, but it was not opened.'

= 'He tried to open the window, but it was not opened.'

As the English translations illustrate, the sentences in (3) instead mean that the subject tried but failed to bring about the lexically encoded result.² Furthermore, since the realization of the results is not required, explicit expressions of the realizations of the results do not sound redundant, as in (4).

² Tatevosov (2008) calls this kind of reading a 'failed attempt' interpretation. Martin and Schäfer (to appear) call it 'zero-CoS' reading. I adopt Tatevosov's (2008) terminology, since it reflects the core property of the interpretation; the subject's intention is required for the interpretation, which I will discuss in more detail in Chapter 3.

 (4) a. ku-ka changmwun-ul kkay-ss-ta. kulayse changmwun-i he-Nom window-Acc break-Pst-Dec so window-Nom kkay-ci-ess-ta.
 break-Pass-Pst-Dec

(lit.) 'He broke the window. So the window was broken.'

 b. ku-ka changmwun-ul yel-ess-ta. kulayse changmwun-i he-Nom window-Acc open-Pst-Dec so window-Nom yel-li-ess-ta.

open-Pass-Pst-Dec

(lit.) 'He opened the window. So the window was opened.'

Thus, contrary to English, these two properties of Korean accomplishments strongly suggest that the actual occurrence of the relevant resultant states is not required for these sentences to be true. Note that the default interpretation of an accomplishment predicate is one in which the result encoded in the accomplishment predicate actually occurs. Some native speakers of Korean find it difficult (or even impossible) to get the non-default interpretation. However, we can find uses of accomplishments with non-default readings in the Web:

(5) a.*ip-ul yel-ess-ciman, tomwuci yel-li-ci-lul*mouth-Acc open-Pst-but at.all open-Pass-Comp-Acc *anh-ass-ta*.³

Neg-Pst-Dec

(lit.) '.....He opened the mouth, but it was not opened at all.'

- b.ku-lul taywu-ess-ciman ku-nun tha-ci anh-ass-ta.⁴
 he-Acc burn-Pst-but he-Top burn-Comp Neg-Pst-Dec (lit.) '.....They burned him, but he did not burn.'
- c. *khathulinnu-ka ku-lul huntule kkaywu-ess-ciman ku-nun* Catherine-Nom he-Acc shaking wake-Pst-but he-Top *kkay-ci anh-ass-ta.*⁵ wake-Comp Neg-Pst-Dec

(lit.) 'Catherine woke him by shaking him, but he did not wake.'

This suggests that the failed-attempt readings of accomplishments are acceptable for some native speakers of Korean (see similar examples in e.g. Park 1993, Lee 2004).

Given this, the question that naturally arises is why Korean (and many other languages) allows the failed-attempt interpretations of accomplishment predicates, but languages like English do not. In this dissertation, I examine a range of data on this phenomenon in Korean, and propose two related generalizations: (i) the *Subject Realization Generalization* (SRG), which states that in the event structure of a verbal

³ https://books.google.co.kr/books?id=sUKxAgAAQBAJ&redir

⁴ http://budnlife.com/view.htm?origin_id=60

⁵ https://books.google.co.kr/books?id=6_NAAwAAQBAJ&pg

predicate, the (sub)event directly related to the predicate's subject must occur in the actual world, and (ii) the *Subject Intention Generalization* (SIG), stating that non-occurrence of an event requires the subject's intention regarding the event. In addition, with regard to sentences in which the main predicate is a derived rather than lexical accomplishment, I propose the *Event Connection Generalization* (ECG) that in the event structure of a complex predicate sentence, connecting event(s) must occur in the actual world. I ultimately suggest that these generalizations are formed from the same basic ingredients of which the event structures of Korean accomplishments are composed, which differ crucially from English in ways that explain why the two languages differ.

Before I discuss the relevant data and analyses in more detail in the chapters that follow, some clarifications about constructions with failed-attempt interpretation are presented in the following sections.

1.2 Perfective vs. imperfective

We might think that accomplishments with a failed-attempt interpretation are actually accomplishments in the progressive aspect, since an accomplishment in the progressive aspect does not entail the occurrence of the relevant result state, as shown in (6) for English.

- (6) a. When Jane entered the room, he was breaking the window. But the window was not broken.
 - b. When Jane entered the room, he was opening the window. But the window was not opened.

Korean imperfective aspect can be expressed in two different forms, and neither entails the realization of the result of the underlying predicate:

a. Jane-i tulewa-ss-ul ttay ku-ka changmwun-ul kkay-ss-ta/
 Jane-Nom enter-Pst-Rel time he-Nom window-Acc break-Pst-Dec/
 kkay-ko iss-ess-ta. haciman, changmwun-i kkay-ci-ci
 break-Comp exist-Pst-Dec but window-Nom break-Pass-Comp
 anh-ass-ta.

Neg-Pst-Dec

'When Jane entered, he was breaking the window. But it was not broken.'

b. Jane-i tulewa-ss-ul ttay ku-ka changmwun-ul yel-ess-ta/
Jane-Nom enter-Pst-Rel time he-Nom window-Acc open-Pst-Dec/
yel-ko iss-ess-ta. haciman, changmwun-i yel-li-ci
open-Comp exist-Pst-Dec but window-Nom open-Pass-Comp
anh-ass-ta.

Neg-Pst-Dec

'When Jane entered, he was opening the window. But it was not opened.'

However, a significant difference between the progressive and the failed-attempt constructions is that the former refers to an event in progress (or ongoing event) (see more about the progressive aspect in Comrie 1976, Landman 1992, among others), but the latter refers to a "completed" event, although the result states do not obtain, but instead are only attempted. Furthermore, in the progressive aspect, the relevant result states are not necessarily entailed to have not occurred, and they could actually have obtained. But in failed-attempt sentences, the result states must not have occurred. Summarizing, accomplishments with the past tense affix *-ess* are ambiguous between the past progressive and past perfective, but the constructions with a failed-attempt reading are in the perfective (see similar cases e.g. in Salish languages in Barel *et al.* 2004).

1.3 The conative construction

English conative constructions also do not entail the occurrence of the result state, as shown in the following (see more about conatives in Levin 1993, Goldberg 1995, Van der Leek 1996, Beaver 2006, Kim 2009):

- (8) a. He kicked at the ball. But he missed.
 - b. He shot at the ball. But he missed.

In addition, it seems that the English conatives require the subject's intention (see

Levin 1993):

- (9) a. He kicked at the ball (#unintentionally/#by mistake).
 - b. He shot at the ball (#unintentionally/#by mistake).

So one could hypothesize that sentences with the failed-attempt interpretations in Korean are actually conative constructions.

However, it is not clear if Korean really has conative construction. Even if I assume that Korean translations of English conative constructions are Korean "conative constructions," they have different properties from failed-attempt sentences. Consider the putative Korean conative constructions in (10). The realizations of the result states of the verbs are unspecified, so that the denial of the result states obtaining is acceptable; this is parallel to English conative constructions:

- a. ku-ka kong-ul hyanghay cha-ss-ciman, pisnaka-ss-ta.
 he-Nom ball-Acc toward kick-Pst-but miss-Pst-Dec
 (lit.) 'He kicked toward the ball, but missed.'
 - b. ku-ka kong-ul hyanghay sso-ass-ciman, pisnaka-ss-ta.
 he-Nom ball-Acc toward shoot-Pst-but miss-Pst-Dec (lit.) 'He shot toward the ball, but missed.'

Note again that failed-attempt sentences require non-realizations of the results encoded in accomplishment predicates of the sentences. In addition, the putative Korean conative constructions do not entail the subject's intention; they can be modified by *uytohacianhkey* 'unintentionally' or *silswulo* 'by mistake,' as illustrated in the following:

- (11) a. ku-ka (uytohacianhkey/silswulo) kong-ul hyanghay cha-ss-ta.
 he-Nom unintentionally/by.mistake ball-Acc toward kick-Pst-Dec
 (lit.) 'He kicked toward the ball (unintentionally/by mistake).'
 - b. ku-ka (uytohacianhkey/silswulo) kong-ul hyanghay sso-ass-ta.
 he-Nom unintentionally/by.mistake ball-Acc toward shoot-Pst-Dec (lit.) 'He shot toward the ball (unintentionally/by mistake).'

Furthermore, some accomplishment verbs cannot be used in a conative construction, as shown in (12).

- (12) a. *ku-ka changmwun-ul hyanghay kkay-ss-ta.
 he-Nom window-Acc toward break-Pst-Dec
 (lit.) 'He broke toward the window.'
 b *ku-ka changmwun-ul hyanghay vel-ess-ta.
 - b. *ku-ka changmwun-ul hyanghay yel-ess-ta.
 he-Nom window-Acc toward open-Pst-Dec (lit.) 'He opened toward the window.'

So *kkay*- 'break' and *yel*- 'open' seem to not even be able to have a conative meaning, but do allow failed-attempt interpretations. These differences indicate that the sentences with failed-attempt interpretations cannot be reduced to something like conative construction in Korean.

1.4 Goals and organization

The goal of this dissertation is to provide an analysis of how different interpretations of accomplishment predicates in Korean arise. I hope this would shed light on the nature of the lexical meaning of some predicates in Korean and possibly in other languages that behave in a similar way to Korean. In this chapter, I briefly introduced the topic of the dissertation and some of the relevant issues. In Chapter 2, some previous studies are reviewed, and it is pointed out that they are not enough for an appropriate account of how different interpretations of accomplishments arise in Korean. In Chapter 3, I investigate the notion of intention itself and propose an intention-based analysis of failed-attempt interpretations of Korean accomplishments. In Chapter 4, I extend the intention-based analysis to *light verb constructions* (LVCs) and in Chapter 5, I extend it to *serial verb constructions* (SVCs). I summarize the results and discuss future work in Chapter 6.

Chapter 2

Previous Studies

In this chapter, I review the literature related to failed-attempt interpretations, and show what my dissertation will add to that literature in order to properly analyze failed-attempt interpretations in Korean.

2.1 Descriptive approaches

Teng (1972) observes that the English verb *kill* is composed of two subevents, a causal action and a resultant state, but the corresponding verb $sh\bar{a}$ 'kill' in Mandarin Chinese has only the causing action, although it may imply the resultant state of *si* 'dead.' Tai and Chou (1975) also compare and contrast the English verb *kill* and $sh\bar{a}$ 'kill' in Mandarin Chinese and present evidence to support Teng's claim. Tai (1984, 2003) shows that the Chinese verb $sh\bar{a}$ 'kill,' which is normally assumed to be equivalent to English *kill*, does not actually entail the death of the object, as illustrated in (13). The death of the object is only implied in an appropriate context (Tai 2003: 306):⁶

⁶ The examples taken from other papers are represented as they appear in those papers, except that the example sentences are italicized for consistency with the Korean examples.

- (13) Wo sha-le John liang-ci, ta dou mei si.
 - I kill-ASP John two-CL he all not die

'I performed the action of attempting to kill John twice, but he didn't die.'

However, the compound *sha-si* 'kill-die' does entail the death of the object, as shown in (14) (Tai 2003: 306).

(14) *Wo sha-si-le John liang-ci, ta dou mei si. I kill-die-ASP John two-CL he all not die *'I killed John twice, but he didn't die.'

That said, in (14) the implausibility can be ascribed to the infelicitous pragmatics involved in the sentence: if John died, we cannot kill him again in the actual world. Nonetheless, (13) does show that $sh\bar{a}$ 'kill' does not entail death.

Based on such interpretations, Lin (2004) argues that Mandarin Chinese has only state and activity stems. However, Lin's proposal ignores the set of induced change-of-state stems that do not license non-culmination interpretations (e.g. *zhuăn* 'to turn,' *zhà* 'to deep fry,' *yān* 'to pickle'), as pointed out in Koenig and Chief (2008: 250). These verb stems are unlikely to be either states or activities. Koenig and Chief (2008: 250) also point out that Lin's proposal does not recognize that Mandarin incomplete stems (whose proto-patient undergoes some change of state, but the degree of change-of-state may but need not be equal to the norm; e.g. *shā* 'kill') require that the patient should be at least significantly affected (i.e. a minimal changeof-state must occur). For instance, in (15a) *chi* 'eat' entails some consumption of the object, and in (15b) $sh\bar{a}$ 'kill' requires some injury of the object (data taken from Koenig and Chief 2008: 283).

(15) a. #Jintian zaoshang chi le yi ge hanbao, buguo
Today morning eat PERF one CL, hamburger, but
wo liean yi kou ye mei chi
I even one bit also Not eat

'I ate a hamburger this morning, but I didn't even have one bite.'

b. #Ta sha le Lisi, danshi Lisi mei shou bandian shang
He kill PERF Lisi, but Lisi not receive little.bit injury
'He killed Lisi, but Lisi was not even hurt a little bit.'

The verb stems with partial-result interpretations⁷ in (15) are clearly not states or activities. This falsifies Lin's proposal that Mandarin Chinese has only state and activity stems.

Unlike Mandarin Chinese, Korean does not require that a minimal change-ofstate should occur; it is possible that no result obtains at all. In other words, Korean allows both partial-result and failed-attempt interpretations of accomplishment predicates, while Mandarin Chinese allows partial-result readings, but not failedattempt readings. The fundamental difference between partial-result and failed-7 According to Tatevosov (2008), this kind of reading is called a *partial success* (PS) interpretation. Martin and Schäfer (to appear) call it a *partial-CoS* (change of state) *non-culminating reading*. Since what is partially successful can be a result state or result object, I call it a *partial-result* interpretation (as Stephen Wechsler suggested). attempt interpretations (at least in Korean) is that the former does not also entail the subject's intention in bringing about the result, but the latter does, which I discuss in more detail in Chapter 3. In sum, these studies of Mandarin Chinese provided an interesting set of data on partial-result sentences, but the core property of failed-attempt interpretations remains unaddressed.

2.2 Control over object

Some English and Japanese verbs of goal-directed actions have the same properties regarding the necessary realization of the goal, as shown in (16), as well as non-necessary realization of the goal, as illustrated in (17) (Ikegami 1985: 273).

- (16) a. *John killed Mary, but Mary didn't die.
 - b. *John-wa Mary-o koroshita keredomo, Mary-wa shinanakatta. John-topic Mary-obj. killed though Mary-topic didn't die
- (17) a. John invited Mary, but Mary didn't come.
 - b. John-wa Mary-o shotaishita keredomo, Mary-wa konakatta. John-topic Mary-obj. invited though Mary-topic didn't come

In (16), it is shown that the result of the action of killing (i.e. death) is entailed by the English verb *killed* and the Japanese verb *koroshita* 'killed.' By contrast, in (17), the English verb *invited* and the Japanese verb *shotaishita* 'invited' do not entail the

occurrence of the invitee's coming to the party. However, whether the invitee's coming to the party is really a lexical entailment of the verb *invited* or *shotaishita* 'invited' is not clear. In the Korean sentence in (18a), headed by the passive verb *chotay-toy-ess-ta* 'invite-Pass-Pst-Dec,' it is not necessary for Jane to come to the party. But in (18b) the passive of the canonical change-of-state verb *kkay*- 'break' entails brokenness.

(18) a. Jane-i chotay-toy-ess-ta.

Jane-Nom invite-Pass-Pst-Dec *kulena Jane-un phathi-ey ka-ci anh-ass-ta.* but Jane-Top party-to go-Comp Neg-Pst-Dec 'Jane was invited, but she didn't go to the party.'

b. *changmwun-i kkay-ci-ess-ta*. #kulena changmwun-i kutaylo-i-ta.
window-Nom break-Pass-Pst-Dec but window-Nom same-Cop-Dec
'The window was broken, #but the window is the same as before.'

Generally, the failed-attempt interpretation is not allowed in passive sentences in Korean, a point discussed in more detail later in Chapter 3, 4 and 5. This then indicates that Jane's coming to the party is not the inherent result of the verb *chotayha-* 'invite.' Furthermore, in (19a) what Tom must do is to invite all the people by today, but this does not mean that all the guests must come by today. By contrast, in (19b), what Tom must do is to break all the things today, and then those must be

broken by today.

- (19) a. *Tom-i onul-kkaci motwu-lul chotayhay-yaha-n-ta*.
 Tom-Nom today-by all-Acc invite-must-Pre-Dec
 'Tom must invite all the people by today.'
 - b. *Tom-i* onul-kkaci motwu-lul kkay-yaha-n-ta.
 Tom-Nom today-by all-Acc break-must-Pre-Dec
 'Tom must break all the things by today.'

So the denial of coming to a party is not related to a failed-attempt interpretation at least in Korean.

According to Ikegami (1985), English and Japanese verbs also differ systematically regarding whether the goal-directed action of a verb entails the realization of its goal. For example, in (20a), denial of the result of the English verb *burned* is not permitted, but in (20b) the result of the corresponding Japanese transitive verb *moeru* 'burn' can be denied without contradiction: (20b) refers to the omitted subject's attempt to burn something, which failed (Ikegami 1985: 273).

- (20) a. *I burned it, but it didn't burn.
 - b. *moyashita keredo, moenakatta*.burned though didn't burn

The Japanese sentence in (20b) shows that the occurrence of the relevant result state

of the verb is not necessary for the sentence to be true. Similar examples of failedattempt interpretations from Ikegami (1985: 274-279) are presented in the following:

- (21) a. *I boiled the water, but it didn't boil.
 - b. *wakashita keredo, wakanakatta.*boiled though didn't boil
- (22) a. *I melted the frozen food outdoors, but it didn't melt.
 - b. *reito-shokuhin-o tokashita keredo, tokenakatta.* frozen food-obj. melted though didn't melt
- (23) a. *I floated the boat, but it didn't float.
 - b. *boto-o ukabeta keredo, ukabanakatta*.boat-obj. floated though didn't float
- (24) a. *I woke Mary, but she was fast asleep.
 - b. Mary-o okoshita keredo, gussuri nemutteita.Mary-obj. woke though fast asleep was
- (25) a. *I kicked the man's shin, but missed it.
 - b. sono otoko no sune-o ketta keredo, ataranakatta. that man 's shin-obj. kicked though didn't hit

(26) a. *I stripped the bark from the tree, but it didn't come off.

b. *ki-no kawa-o muita keredo, mukenakatta.* tree-pos. bark-obj. stripped though didn't come off

Interestingly, the Korean equivalents of the sentences in (21) - (26) behave in the same way as the Japanese sentences.

Ikegami (1985) describes the contrast between English and Japanese verbs as one in which the Japanese expressions focus solely on the action in the examples given above (e.g. moyashita 'burned' refers to the act of trying to burn something), while the corresponding English expressions semantically entail both the action and the goal of the action. Ikegami (1985) further argues that the systematic difference is due to the typological differences of the languages. First, in Japanese, the subject or the object can be omitted in a sentence (i.e. Japanese is a pro-drop language), which he argues weakens the actor's control over the object, and in turn shifts the meaning of goal-directed action to the meaning of a simple action. However, it is not clear how the omission of an argument really weakens the subject's control over object, since context usually recovers the meaning of the omitted subject or object in Japanese. Although English is not categorized as a pro-drop language, in certain contexts the subject of a sentence can be omitted. This omission of the subject should likewise weaken the actor's control over the object according to Ikegami (1985), and we can expect that this should allow the shift from a goal-directed action to a simple action with the failed-attempt interpretation, just like in Japanese. But this is not the case, as

illustrated in (27).

(27) Arthur: What did you do this morning?Jeremy: Kicked the door.

In the conversation of (27), Jeremy's answer to the question does not explicitly have the subject (which is recovered from the context), but it does not have a nonculmination reading. That is, the door must be kicked by Jeremy.

Second, for the following (a) sentences, Ikegami (1985: 298) argues that the definite article specifies the extension of the object to be affected by the action, and this clearly implies the realization of the relevant result. By contrast, in the (b) sentences (Ikegami 1985: 298), the indefiniteness blurs the realization of the relevant result.

- (28) a. *John dried the dishes for Mary, but he didn't dry all the dishes.
 - b. John dried dishes for Mary, but he didn't dry all the dishes.
- (29) a. *John cleared the snow from the path, but he didn't clear all the snow.
 - b. John cleared snow from the path, but he didn't clear all the snow.

Since it is not obligatory that Japanese nouns be marked for definiteness, they can be interpreted in an indefinite sense, and this non-delimitation of the object blurs the realization of the relevant result (Ikegami 1985). Since Korean behaves in a similar way in terms of the definiteness and *pro*-drop, Ikegami's analysis seems to predict that if definiteness is explicitly marked, which seems to clearly identify the actor's control over the object, only a culmination interpretation should be allowed.⁸ But this is not borne out, as illustrated in (30a). Another prediction is that when the subject and object explicitly appear in a sentence, which would arguably strengthen the notion of the actor's control over the object, only a complete-result interpretation should be permitted. This is not borne out, either, as shown in (30a,b).

(30) a. *Minse-ka ku cepsi-lul kkay-ss-ta*.
Minse-Nom the dish-Acc break-Pst-Dec
'Minse broke the dish' or
'Minse tried to break the dish (but it was not broken).'

b. *Minse-ka cepsi hana-lul kkay-ss-ta*.
Minse-Nom dish one-Acc break-Pst-Dec
'Minse broke a dish' or

'Minse tried to break a dish (but it was not broken).'

So, the data in (30) suggest that the non-obligatory expression of definiteness and arguments in a sentence has nothing to do with the failed-attempt interpretation (at least in Korean). Furthermore, partial-result readings are not sensitive to such

⁸ In the literature (e.g. Bar-el 2005, Tatevosov 2008, Jacobs 2011), when the result of a verb is completely realized, this reading is called a culmination interpretation; non-culmination interpretations can thus be classified into two types, failed-attempt and partial-result (see the classification in Tatevosov 2008). However, I will call the culmination interpretation the *complete-result interpretation*, since the distinction between culmination and non-culmination is not appropriate in Korean; see the types of accomplishment interpretations proposed in (90) in Chapter 3.

grammatical properties. So I believe that the definite article and *pro*-drop are not related to any non-culmination interpretation of accomplishments in Korean. In addition, the relation between the subject's intention and failed-attempt interpretation is not seriously discussed in Ikegami (1985), although he implicitly assumes that the non-realized goal is intended by the subject in Japanese. We then need to account for the subject's intention entailment in failed-attempt interpretations, which is the core property distinguishing them from partial-result and complete-result interpretations.

2.3 The modal operator

Park (1993: 21-22) points out that Korean morphological causative verbs do not necessarily entail the relevant result state, as exemplified in (31).

(31) a. Chelswu-nun mwul-ul el-li-ess-una,

Chelswu-Top water-Acc freeze-Cau-Past-but *mwul-i an el-ess-ta.* water-Nom Neg freeze-Past-Dec 'Chelswu froze the water, but the water did not freeze.' b. emeni-ka ai-eykey pap-ul mek-i-ess-una, mother-Nom child-Dat rice-Acc eat-Cau-Past-but ai-nun an mek-ess-ta.
child-Top Neg eat-Past-Dec

'The mother fed the rice to the child, but the child did not eat.'

Thus, accomplishment predicates in Korean appear to lack the achievement (e.g. [BECOME frozen' (water)] for (31a)) in their Logical Structure (i.e. something like an event structure in Role and Reference Grammar; Van Valin 2005). Park (1993: 24) proposed adding the modal operator '@' to the Logical Structure, as in (32). According to Park (1993: 24), "for the modal operator '@' of Korean accomplishment verbs, [Expect] will be appropriate in the sense that the achievement is not implied by default, but expected by inference."

(32) [do' (w)] [@ CAUSE] [BECOME predicate' (y,z)]]

If the modalized event structure in (32) is applied to, say, *kkay*- 'break,' this would explain the realization or non-realization of the expected result of the predicate. However, Park (1993) does not specify whether "expected by inference" refers to the agent's expectations or the speaker's. Furthermore, if the event structure of an accomplishment predicate really includes the modal operator, [Expect], then the adverb *yeysangchianhkey* 'unexpectedly' should not be able to modify a sentence headed by the accomplishment predicate. But the sentence is grammatical:

(33) Chelswu-nun yeysangchianhkey mwul-ul el-li-ess-ta.
Chelswu-Top unexpectedly water-Acc freeze-Cau-Pst-Dec kulayse mwul-i cokum/wancenhi el-ess-ta.
so water-Nom a.little/completely freeze-Pst-Dec 'Chelswu unexpectedly froze the water. So the water froze a little/completely.'

In addition, failed-attempt interpretations require the more restricted notion of the subject's intention rather than simply an expectation. Even if we assume that [Expect] is about the subject's expectation, the subject's expectations themselves are not sufficient to account for the failed-attempt interpretation; for instance, the subject's desire for the result is necessary, as shown in (34).

(34) [Context: Tom expects that if he kicks the window, then the window would become broken.]

Tom-ichangmwun-ul kkay-ss-ciman, changmwun-i kkay-ci-ciTom-Nom window-Accbreak-Pst-butwindow-Nom break-Pass-Companh-ass-ta.#kuliko Tom-unchangmwun-i kkay-ci-nunkes-ulNeg-Pst-DecandTom-Top window-Nom break-Pass-Rel thing-Accwenha-ci-nunanh-ass-ta.

want-Comp-Top Neg-Pst-Dec

(lit.) 'Tom broke the window, but it was not broken. #And Tom did not want

the window to be broken.'

In (34), the failed-attempt interpretation is not licensed by the subject's expectation that his action of kicking the window would break it, but the failed-attempt reading requires the subject's desire for the window to be broken. In Chapter 3, I discuss more about the relation between desire and failed-attempt readings. In short, in order to properly account for failed-attempt interpretations, other necessary notions should be identified, a task to be taken up in the next chapter.

2.4 Implied-fulfillment verbs

Talmy (2000: 268) claims that implied-fulfillment verbs have different degrees of implicature strength. For example, the first three verbs in (35a) have increasing degrees of implicature strength regarding the death of the object, though they can all be followed by the denial clause *…he was still alive when the police arrived.* However, the verb *drown* entails the death of the object, and thus such a denial clause cannot combine with the sentence in (35a) headed by *drown*. The increasing degree of implicature can also be verified in (35b), where the more implicature strength the verb has, the more redundant the satellite that confirms the implicature is.⁹

(35) a. The stranger choked/stabbed/strangled/drowned him.

⁹ However, native speakers I have consulted found the sentences in (35b) to be fine.

b. The stranger choked/stabbed/?strangled/*drowned him to death.

To take another example, Talmy (2000: 269) assumes that the agent's intention of making the patient clean is a part of the lexical semantics of *wash*, but not *soak*. As evidence, the following pair of sentences is provided:

(36) I soaked/??washed the shirt in dirty ink.

Furthermore, the realization of cleanness (i.e. 'become clean') is only an implicature, but not an entailment of *wash* (Talmy 2000: 270). As shown in (37a), the result of washing the shirt is not necessarily the cleanness of the shirt, but the result of cleaning the shirt must be the cleanness of the shirt, as illustrated in (37b).

(37) a. I washed the shirt, but it came out dirty.

b. *I cleaned the shirt, but it came out dirty.

Based on these two properties of *wash*, Talmy (2000: 271) proposes that *wash* gives rise to a lexicalized implicature, i.e. a defeasible implicature that the patient becomes clean that arises from the agent's intention of making the patient clean.

However, the agent's intention to make the patient clean is not actually an essential part of the meaning of *wash*, as shown in (38), in a context where Mary unintentionally pushed the start button of the washing machine, and as a result the shirt in it was washed clean, while some verbs include the agent's intention as part of

their meanings (e.g. *She unintentionally murdered the taxi driver.).

(38) She unintentionally washed the shirt (clean).

Also, something like a natural force can appear as the subject of *wash*, as in the following:

(39) The rainstorm/waterfall washed the shirt (clean).

Since the rainstorm or waterfall is a non-sentient thing and thus cannot have any intentions, it is not that the verb *wash* entails the agent's intention of making the patient clean. The corresponding Korean verb *ssis*- 'wash' is parallel to English with respect to intentionality:

- (40) a. *Misen-i (uytocekulo/silswulo) nay son-ul ssis-ess-ta.*Misen-Nom intentionally/by.mistake my hand-Acc wash-Pst-Dec
 'Misen washed my hand intentionally/by mistake.'
 - b. phokwu-/phokpho-ka nay son-ul ssis-ess-ta.
 rainstorm-/waterfall-Nom my hand-Acc wash-Pst-Dec
 'The rainstorm/waterfall washed my hand.'

Furthermore, the verb *ssis*- 'wash' in Korean seems not to be an accomplishment verb with cleanness as the relevant result state. In (41), cleanness is

not entailed no matter which kind of the subject the sentences have.

(41) a. *Misen-i (uytocekulo/silswulo) nay son-ul ssis-ess-ta.* Misen-Nom intentionally/by.mistake my hand-Acc wash-Pst-Dec *kulena son-i telep-ta.* but hand-Nom dirty-Dec
'Misen washed my hand by mistake. But my hand is dirty.'
b. *phokwu-/phokpho-ka nay son-ul ssis-ess-ta.*

rainstorm-/waterfall-Nom my hand-Acc wash-Pst-Dec *kulena son-i telep-ta.* but hand-Nom dirty-Dec

'The rainstorm/waterfall washed my hand. But my hand is dirty.'

In (42a), *tat*- 'close' is a typical accomplishment verb, and it is implausible to close a door which is already closed.¹⁰ This suggests that the state of being closed is an inherent part of the verb. Then if cleanness is really entailed in *ssis*- 'wash,' it is expected that washing a clean hand should be infelicitous; but as shown in (42b), we cannot find anything infelicitous in the event of washing a clean hand. This indicates that cleanness is not part of the verb's meaning.

¹⁰ If a certain context is given, the sentence in (42a) could mean that Misen opened the closed door, and then closed it again (i.e. a kind of restitutive reading context). But I assume here that the sentences in (42) are used in a normal context: no other event is assumed to happen before the events described by the verbs.

- (42) a. #Misen-i tathin mwun-ul tat-ass-ta.
 Misen-Nom closed door-Acc close-Pst-Dec
 (lit.) 'Misen closed the closed door.'
 - b. *Misen-i kkaykkushan nay son-ul ssis-ess-ta*.
 Misen-Nom clean my hand-Acc wash-Pst-Dec
 'Misen washed my clean hand.'

Rather, *ssis*- 'wash' appears to be an activity verb denoting an action of removing something (like *wipe*), usually employing some kind of liquid. The sentence in (43a) explicitly expresses the removal of foreign substance, and (43a) is almost equivalent to (43b), which implicitly implies removal of something from her face, not removal of her face. The removal of a foreign substance is likely to make her face clean, but this cleanness is inferred pragmatically.

(43) a. *Misen-i elkwul-eyse imwulcil-lul ssis-ess-ta*.
Misen-Nom face-from foreign.substance-Acc wash-Pst-Dec (lit.) 'Misen washed the foreign substance from her face.'
= 'Misen removed the foreign substance from her face.'
b. *Misen-i elkwul-ul ssis-ess-ta*.

Misen-Nom face-Acc wash-Pst-Dec

'Misen washed her face.'

Thus the verb ssis- 'wash' is more like an activity predicate and does not entail the

agent's intention of cleaning.

2.5 Semi-perfectivity

Koenig and Muansuwan (2000) call the phenomenon of non-culmination *semiperfectivity*, and deal with non-culminating accomplishments in Thai. Thai aspect can be marked by serial verbs in post VP position, as shown in the following (Koenig and Muansuwan 2000: 155):

(44) Surii tèɛŋ klɔɔn k^hŵn
Surii compose poem ascend
'Surii composed a/the poem. (*perfective*)'

The verb $k^h \hat{w} n$ 'ascend' is restricted in its occurrence; it mainly combines with verbs of creation, and *loŋ* 'descend' mostly combine with verbs of destruction. Hence, in (45a), $k^h \hat{w} n$ 'ascend' is not compatible with the verb $k^h \hat{a} a$ 'kill,' which belongs to the class of destruction verbs, but as in (45b) *loŋ* 'descend' is compatible with the verb $k^h \hat{a} a$ 'kill' (Koenig and Muansuwan 2000: 156).¹¹

¹¹ It is thus predicted that *loŋ* 'descend' should be incompatible with the verb $t \hat{\epsilon} \epsilon \eta$ 'compose,' a kind of construction verb due to its compatibility with $k^h \hat{w} n$ 'ascend.' However, Koenig and Muansuwan (2000) did not provide data concerning this prediction.

- (45) a. *Surii k^hâa nôk săam tua k^hŵn
 Surii kill bird three CLASS ascend
 'Surii killed three birds.' (intended reading)
 - b. Surii k^hâa nôk săam tua loŋ
 Surii kill bird three CLASS descend
 'Surii killed three birds.'

In (46), it is shown that the perfective markers 'ascend' and 'descend' do not entail that the event was necessarily completed: the result state encoded by the underlying predicate (Koenig and Muansuwan 2000: 157) (see also Thepkanjana 1986).¹²

- (46) a. Surii tèɛŋ klɔɔn kʰŵn tèɛ jaŋ mâj sèd
 Surii compose poem ascend but still not finish
 'Surii composed a/the poem, but has not finished it yet.'
 - b. Surii kin k^hâaw sâam c^haam loŋ têc kin mâj mòd
 Surii eat rice three bowl descend but eat not finish.up
 'Surii managed to eat three bowls of rice, but did not finish them.'

In (46), the activity of writing or eating must have stopped (i.e. there is a partitive or degree achievement interpretation). But the poem need not be completed, nor rice (in the amount of three bowls) be finished, even though it is a frequent implicature of the

¹² According to the English translations of the Thai sentences, these sentences might have partialresult readings, since "not finishing" appears to entail at least some progress. But it not clear in Koenig and Muansuwan (2000) whether failed-attempt interpretations are also allowed in Thai.

sentences. The activity of composing in (46) must have been terminated prior to speech time. $K^h \hat{w}n$ 'ascend' thus indicates that the described event of composing ended (Koenig and Muansuwan 2000: 158).

(47) #Surii tèɛŋ klɔɔn sâam bòt kʰŵn lɛʔ kamlaŋ tèɛŋ jùu
Surii write poem three CLASS ascend and PROG compose CONT
'Surii composed three poems and is still composing them.'

The partitive interpretation arises from the combination of accomplishment stems and the semi-perfective markers $k^h \hat{w} n$ 'ascend' or *loŋ* 'descend.' Koenig and Muansuwan (2000) suggest that accomplishment verb stems in Thai are fundamentally imperfective: that is, lexical entries for all accomplishment stems have a built-in imperfective operator. The semi-perfective markers express the termination of the imperfective events (i.e. events in progress) of accomplishment verb stems.

However, imperfectivity is different from failed-attempt interpretations in Korean in that the former does not entail the subject's intention, as shown in (48), but the latter do, as shown in (49).

(48) [Context: He was opening the door and then stopped.]
ku-ka uytocekulo/uytohacianhkey mwun-ul yel-ko
he-Nom intentionally/unintentionally door-Acc open-Comp
iss-ess-ta.
exist-Pst-Dec

'He was intentionally/unintentionally opening the door.'

(49) ku-ka uytocekulo/#uytohacianhkey mwun-ul yel-ess-ciman,
he-Nom intentionally/unintentionally door-Acc open-Pst-but
mwun-i yel-li-ci anh-ass-ta.
door-Nom open-Pass-Comp Neg-Pst-Dec
'He intentionally/#unintentionally opened the door, but the door was not

opened.'

In addition, there seems to be no grammatical evidence for the existence of a built-in imperfective operator in Korean. If an imperfective operator is really part of the meaning of Korean accomplishments, then we have to deal with the unusual cases in which an accomplishment, which is therefore inherently in the progressive due to the built-in imperfective operator, is overtly marked for imperfective aspect, as in (50).

(50) ku-ka mwun-ul yel-ko iss-ess-ta.
he-Nom door-Acc open-Comp exist-Pst-Dec
'He was opening the door.'

It is not clear how to derive the appropriate meanings of sentences like (50) with the multiple imperfective operators. In addition, sentences with multiple markings of imperfective aspect sound very bad, as shown in the following:

- (51) a. *ku-ka mwun-ul yel-ko iss-ko iss-ess-ta.
 he-Nom door-Acc open-Comp exist-Comp exist-Pst-Dec
 (lit.) 'He was being opening the door.'
 - b. ku-ka talli-ko iss-ess-ta.
 he-Nom run-Comp exist-Pst-Dec
 'He was running.'
 - c. *ku-ka talli-ko iss-ko iss-ess-ta.
 he-Nom run-Comp exist-Comp exist-Pst-Dec (lit.) 'He was being running.'

If an imperfective operator is an essential part of Korean accomplishments, then the sentences like (50) and (51b), having more than one imperfective operator, should be ungrammatical, just like (51a,c) with multiple imperfective operators. However, they are simply well-formed sentences. So it seems hard to apply the analysis of Thai semi-perfectivity to Korean.

2.6 Inertia world analysis

According to Bar-el *et al.* (2005), bare roots in St'át'imcets (a Northern Interior Salish language spoken in the southwest interior of British Columbia) are unaccusative (i.e. have a single internal argument; Davis 1997), and have culmination readings as follows:

- (52) *mays ti q'láxan-a, t'u7 aoy t'u7 kw-s
 get.fixed DET fence-DET but NEG just DET-NOM ka-máys-ts-a
 OOC-fix-3POSS-OOC
 'The fence got fixed, but it couldn't get fixed.' (St'át'imcets)
 Speaker's comments: "Contradiction."
- (53) *mets ta púkw-a, t'u7 aoy t'u7 kw-s tsukw-s
 get.written DET book-DET but NEG just DET-NOM finish-3POSS
 'The book got written, but it isn't finished.' (St'át'imcets)
 Speaker's comments: "Contradiction."

The dependent morpheme known as 'control transitivizers' in St'át'imcets and Skwxwu7mesh have two functions: first, they introduce an agent in control over the event (which is missing in the bare root), and second, they remove the requirement of the bare root that the event culminate in the actual world (Bar-el *et al.* 2005), as illustrated in the following:

- (54) máys-en-lhkan ti q'láxan-a, t'u7 cw7ay t'u7 kw-s
 fix-TR-1SG.SU DET fence-DET but NEG just DET-NOM tsúkw-s-an
 finish-CAU-1SG.ERG
 'I fixed a fence, but I didn't finish.' (St'át'imcets)
- (55) kw John na kw'el-nt-as ta skawts
 DET John RL cook-TR-3ERG DET potato
 welh haw k-as 7i huy-nexw-as
 CONJ NEG IRR-3CNJ PART finish-LC-3ERG
 'John cooked a potato but never finished.' (Skwxwu7mesh)

Bar-el *et al.* (2005) apply the inertia world analysis of English imperfective aspect (Dowty 1977, 1979) to the perfective sentences in St'át'imcets. The basic analysis (57) of the perfective sentence in (56) using the inertia world is that if an action of fixing the fence is under the control of an agent and performed by the agent in the actual world and the action causes the fence to be fixed in all inertia worlds, then the sentence in (56) is acceptable (Bar-el *et al.* 2005).

(56) máys-en-lhkan ti q'láxan-a
fix-TR-1SG.SUBJ DET fence-DET
'I fixed the fence.'

(57) [[TENSEi PERF máysenlhkan ti q'láxana]]w,g = ∃e [I am the agent of e & e is controlled by me in w & [∀w' [w' is an inertia world w.r.t. w at the beginning of e [∃e' [the fence gets fixed in w' (e') & e causes e' in w']]]] & τ(e) ⊆ g(i)]

'I was the agent of an event e, whose running time is including in the contextually salient (past or present) reference time, and which in all inertia worlds causes the fence to get fixed.'

This analysis, however, is not appropriate for Korean failed-attempt interpretations. In particular, if an action of pushing a window could cause the window to be either broken or opened, yet neither result obtains, then the speaker should in principle be able to use the failed-attempt sentence headed by either *kkay*- 'break' or *yel*- 'open' for the same situation, since either result state is possible in all inertia worlds. But this is not the case; only a predicate related to the subject's intention can be used. For instance, consider the situation in which Tom pushed the window with the intention of opening it, but not with the intention of breaking it, and furthermore pushing the window could cause it to be opened or broken, but neither obtains. In this circumstance, we can only use a failed-attempt sentence headed by *yel*- 'open,' and not by *kkay*- 'break.'

In addition, although agent control entails the notion of intention or volition, and so the causing event e in (57) involves the agent's intention, the intentional causing event of an accomplishment does not guarantee the intentional event of the accomplishment itself. For example, if Tom intentionally kicked the door, this does not necessarily mean that Tom had an intention of breaking the door. However, a failed-attempt reading with kkay- 'break' requires the subject's intention about the result of the accomplishment. So the agent's intention in the causing event in (57) does not seem to be sufficient to properly describe failed-attempt readings in Korean.

Furthermore, the agent's control in the causing event in (57) is not necessary for the failed-attempt reading in Korean, although the notion of intention must be involved in the interpretation. For instance, in the context given in (58), the agent has limited control over the event described by the predicate (i.e. the agent has difficulty in achieving the event), but the failed-attempt reading is still available in this context.

(58) [Context: The steel door is heavy, and it can be opened only by pushing it. It is very difficult for Mary to open it, but Mary pushed the door to open it.]
Mary-ka mwun-ul yel-ess-ciman, mwun-i yel-li-ci
Mary-Nom door-Acc open-Pst-but door-Nom open-Pass-Comp anh-ass-ta.
Neg-Pst-Dec

(lit.) 'Mary opened the door, but it was not opened.'

In (58) since doing the causing action is difficult, opening the door is also difficult. In this context, Mary has limited control. But a failed-attempt reading is allowed only if Mary has intention of opening the door. I talk more about the notions of control and

limited control in §2.9, and the relation between intention and causation is discussed in more detail in Chapter 3.

Tatevosov (2008) also used an inertia world analysis to account for the nonculmination phenomenon in Karachay-Balkar (a Turkic language in the Caucasus). Consider the following examples of the language illustrating the phenomenon (Tatevosov 2008: 395-396):

- (59) a. kerim eki minut-xa ešik-ni ac-xan-di.
 Kerim two minute-DAT door-ACC open-PFCT-3SG
 'Kerim opened the door in two minutes.'
 - b. kerim eki saʁat ešik-ni ac-xan-di.
 Kerim two hour door-ACC open-PFCT-3SG
 'Kerim tried to open the door for two hours.'
 (lit. 'Kerim opened the door for two hours.')
 - c. kerim ešik-ni ac-xan-di, alaj boša-ma-вan-di.
 Kerim door-Acc open-PFCT-3SG but finish-NEG-PFCT-3SG
 Lit. 'Kerim opened the door, but (he) did not finish.'

In (59a) the accomplishment predicate *ešik-ni ac-xan-di* 'opened the door' has the canonical telic reading due to the time span adverbial, but in (59b) the same predicate appears in the sentence with the measure adverbial, which results in the interpretation that the agent tried to open the door but the activity for opening the door terminates

before the culmination. The example in (59c) shows more clearly that the culmination does not necessarily obtain: the denial of the occurrence of the result state encoded in the accomplishment predicate in the second clause does not contradict with the assertion of the accomplishment predicate in the first clause.

Tatevosov (2008: 397-399) classifies non-culmination interpretations into two types, failed attempt (FA) interpretations (i.e. attempt to make theme attain result fails, and so it undergoes no change at all) and partial success (PS) interpretations (i.e. theme undergoes some change, but result does not obtain completely). The accomplishment predicate *ešik-ni ac-xan-di* 'opened the door' has the failed attempt reading, as in (59c), but not a partial success reading. In (60), however, either reading of the predicate *oj-uan-di* 'demolish' is available depending on the appropriate scenarios given in (61) (Tatevosov 2008: 398).

(60) išci eki kün üj-nü oj-вап-di.

worker two day house-Acc demolish-PFCT-3-SG 'The worker was involved in taking down the house for two days.' (lit. 'The worker took down the house for two days.')

(61) Scenarios for (60):

a. **Failed attempt**: For two days, the worker was trying to take down the house, but the house was so firm that he gave up, not being able to remove a single brick.

b. **Partial success**: For two days, the worker was taking down the house; he removed the roof and one of the walls, but then was asked to stop.

Based on such non-culmination data, Tatevosov (2008) argues that the accomplishment predicates have three components, i.e. activity, process, and result state, building on the three-subevent decomposition of accomplishments (Ramchand 2002, 2003, 2008). The three types of readings are determined according to which component is in inertia worlds, as illustrated in (62) (Tatevosov 2008: 411).

CULMINATING NON-CULMINATING partial success failed attempt Agent's activity Actual world Actual world Actual world Actual world Inertia worlds Process in the undergoer Actual world Actual world Inertia worlds Inertia worlds Result state Event structure [v,Vi,Ri] [v,Vi inertia,Ri] [v inertia, Vi, Ri]

(62) Event structures of non-culminating accomplishments:

However, this analysis has the same problem as Bar-el *et al.* (2005). According to this analysis, either of *kkay* 'break' or *yel* 'open' should be applied to a situation in which pushing a door can possibly cause the door to be broken or opened. But in fact only a certain predicate associated with the subject's intention can describe the situation. As the English translation of the Karachay-Balkar example in (59b) suggests, the subject's intention regarding the event described by the accomplishment predicate is assumed for the failed-attempt interpretation. But this is not explicitly included in the analysis of the Karachay-Balkar non-culmination phenomenon.

In sum, we need a more refined system to explicitly refer to the subject's intention regarding events described by accomplishments. We cannot simply apply the inertial world analysis to the failed-attempt reading of Korean accomplishment predicates, although the basic notion of the inertia world may be required for a proper analysis of Korean failed-attempt readings. A proper analysis must explain how only some predicates but not others can be used to describe an event in which an action occurs that could in principle result in a variety of result states. In Chapter 3, basically assuming Bar-el *et al.* (2005) and Tatevosov's (2008) analysis of building modal operators into event structural primitives to account for the non-culmination readings, I propose an intention-based analysis of various interpretations of Korean accomplishments. This analysis is different from their approaches in that (i) I use intentions rather than inertial worlds as the modal base and (ii) I use Dowty (1979) and Rappaport Hovav & Levin (1998) style event structures rather than Ramchand's (2008) style.

2.7 Degree achievements

Koenig and Chief (2008) call the phenomenon of non-culmination interpretations the *Incompleteness Effect* (the IE). In Mandarin Chinese, *chi* 'eat' requires some consumption of the patient participant, as shown in (63a) (repeated from (15a)) and *sha* 'kill' entails some injury of the patient, as illustrated in (63b) (repeated from (15b)). In other words, in the non-culminating interpretations (or IE in Koenig and

Chief's terminology) in Mandarin Chinese, the patient must be at least significantly affected (i.e. partial-result) (Koenig and Chief, 2008: 243).

- (63) a. #Jintian zaoshang chi le yi ge hanbao, buguo Today morning eat PERF one CL, hamburger, but wo liean yi kou ye mei chi I even one bit also Not eat 'I ate a hamburger this morning, but I didn't even have one bite.'
 b. #Ta sha le Lisi, danshi Lisi mei shou bandian shang
 - He kill PERF Lisi, but Lisi not receive little.bit injury 'He killed Lisi, but Lisi was not even hurt a little bit.'

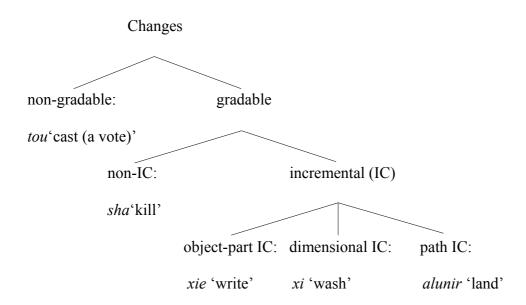
Mandarin Chinese is, however, different from Korean, which allows failed-attempt in addition to partial-result readings.

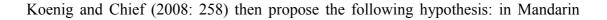
Since not all induced change-of-state stems lead to the IE in Mandarin, Koenig and Chief (2008) propose that there are two types of Mandarin predicates, as in the following table, where the predicates in Group I allow the IE, but those in Group C do not lead to the IE:

Group I			Group C
<i>jian</i> 'to cu	t', <i>xi u</i> 'to	repair',	zhuan 'to turn', zhà 'to deep fry',
quàn 'to pe	rsuade', sha	'to kill',	yan 'to pickle', k ao 'to bake', $f\hat{u}$
guan 'to cl	ose', niàn '	to read',	'to pay', jìn 'to soak/immerse in
<i>chi</i> 'to e	at' hong	'to dry	liquid'
(clothes)', x	a 'to wash',	<i>zh`u</i> 'to	
cook'			

Koenig and Chief (2008) suggest the following classification of (dyadic) state-change stems, and characterize the predicates of Group I as gradable predicates:

(65) Classification of state-change stems:





Chinese, some degree of change-of-state must occur, but in English the change-ofstate must be complete:

(66) In languages like Mandarin, sentences with main verbs that describe induced normative gradable changes entail that a normative gradable change occurred with degree $d_0 < d \le d_N$.

In languages like English, telic sentences with corresponding main verbs entail that a normative gradable change occurred with degree $d = d_N$.

However, although this may be true of Mandarin Chinese, it is not directly applicable to Korean. As already pointed out, Korean allows failed-attempt readings of accomplishments, and the result states of the accomplishment predicates can be gradable or non-gradable, as follows:

(67) a. ku-ka pwul-ul khi-ess-/kke-ss-ciman,
he-Nom light-Acc turn.on-Pst-/turn.off-Pst-but
pwul-i khie-/kke-ci-ci anh-ass-ta.
light-Nom turn.on-/turn.off-Pass-Comp Neg-Pst-Dec
(lit.) 'I turned on/off the light, but the light was not turned on/off.'
= 'I tried to turn on/off the light, but the light was not turned on/off.'

b. ku-ka changmwun-ul kkay-ss-ciman,
he-Nom window-Acc break-Pst-but
changmwun-i cenhye kkay-ci-ci anh-ass-ta.
window-Nom at.all break-Pass-Comp Neg-Pst-Dec
(lit.) 'He broke the window, but it was not broken at all.'
= 'He tried to break the window, but it was not broken at all.'

Thus, for gradable accomplishment predicates in Korean, we may propose the following hypothesis in accordance with Koenig and Chief (2008):

(68) In languages like Korean, sentences with main verbs that describe induced normative gradable changes entail that a normative gradable change occurred with degree $d_0 \le d \le d_N$.

Again, however, the essential difference between degree achievements ($d_0 < d \le d_N$) and failed-attempts ($d_0 = d$) in Korean (and probably in other languages) is that only the latter requires the subject's intention. This important distinction is not reflected in the scalar representation in (68). However, the degree achievement analysis may be used for partial-result and complete-result interpretations in the analysis of Korean accomplishments.

2.8 Defeasible causatives

Martin & Schäfer (2012, 2013, 2014) argue that with agentive subjects, verbs like *offer* in French and German (what they call *defeasible causatives*) are used to denote an act performed with the intention of triggering a certain result. The following data are taken from Martin & Schäfer (2012: 248).

(69) a. L'organisateur de la course lui a offert la première place. Mais elle a refusé ce marché.

'The organizer of the race offered her the first position, but she refused this deal.'

b. Hans schmeichelte Maria, aber sie fühlte sich überhaupt nicht geschmeichelt.

'John flattered Mary, but she felt absolutely not flattered.'

But when the subject is not sentient, the possible result cannot be denied, as in (70).¹³

(70) a. Son excellent résultat lui a offert la première place. # Mais elle ne l'a pas prise.

'Her excellent result offered her the first position. But she didn't take it.'

¹³ English *offer* allows non-sentient subjects, but unlike the French/German verbs, it does not require acceptance of the offer: for instance, *His good looks offered him a way to make a living as an actor, but he chose not to become an actor.*

b. Dass sie als Erste ausgewählt wurde, schmeichelte Maria, #aber sie fühlte sich überhaupt nicht geschmeichelt.

'That she was chosen first flattered Mary, but she felt absolutely not flattered.'

The corresponding Korean examples behave in a similar way. In (71a) the president position is offered to Marcus, but he rejected it, and in (71b) Jane flattered Marcus, but he never felt flattered.

(71) a. Jane-i ku-eykey sacang-cali-lul ceyanhay-ss-ta.
Jane-Nom he-to president-position-Acc offer-Pst-Dec kulena Marcus-nun ku cali-lul kecelhay-ss-ta.
but Marcus-Top the position-Acc refuse-Pst-Dec
'Jane offered the president position to him. But he refused it.'

b. Jane-i Marcus-eykey apwuhay-ss-ta.
Jane-Nom Marcus-to flatter-Pst-Dec kulena Marcus-nun wucculha-ci anh-ass-ta.
but Marcus-Top flattered-Comp Neg-Pst-Dec 'Jane flattered him. But he did not feel flattered.'

Unlike French and German, when the subject is non-sentient, the verbs *ceyanha*-'offer' and *apwuha*- 'flatter' cannot be used in Korean: (72) a. #hwullyunghan silcek-i Marcus-eykey sacang-cali-lul excellent result-Nom Marcus-to president-position-Acc *ceyanhay-ss-ta*.
offer-Pst-Dec
(int.) 'The excellent results offered him the president position.'
b. #ku-ka cheumulo ppop-hi-ess-ta-nun kes-i Marcus-eykey he-Nom first select-Pass-Pst-Dec-Rel thing-Nom Marcus-to

apwuhay-ss-ta.

flatter-Pst-Dec

(int.) 'That he was chosen first flattered Marcus.'

Martin & Schäfer (2012, 2013, 2014) argue that the interpretations which the first clauses have in (69) are non-culminating interpretations. However, it is not clear if they are really non-culminating readings (failed-attempts in this case), since accepting an offer and feeling flattered do not seem to be lexical entailments of *offer* and *flatter*, respectively. This is supported by passive constructions; in Korean, passive constructions of accomplishments do not allow failed-attempt interpretations:

(73) khemphyuthe-ka Jane-eyuyhay pwuswu-/kochi-e ci-ess-ta.
computer-Nom Jane-by break-/fix-Comp Pass-Pst-Dec
#kulena khemphyuthe-ka kutaylo-ta.
but computer-Nom same-Dec

'The computer was broken/fixed by Jane. #But it is the same as before.'

The resultant states of breaking and fixing are entailed by the passive sentences in (73), respectively. By contrast, passive sentences with *ceyanha*- 'offer' or *apwuha*- 'flatter' do not entail the putative results:

- (74) a. ku-eykey sacang-cali-ka ceyan-toy-ess-ta.
 he-to president-position-Nom offering-do.Pass-Pst-Dec kulena ku-nun ku cali-lul kecelhay-ss-ta.
 but he-Top the position-Acc refuse-Pst-Dec
 'The president position was offered to him. But he refused it.'
 b. ku-ka Jane-eykey apwu pat-ass-ta.
 - he-Nom Jane-to flattering receive-Pst-Dec *kulena ku-nun wucculha-ci anh-ass-ta.*but he-Top flattered-Comp Neg-Pst-Dec
 'He received the flattering from Jane. But he did not feel flattered.'

This indicates that accepting an offer and feeling flattered are not lexical entailments of these verbs at least in Korean. Thus it is not that the first sentences in (71) have failed-attempt interpretations, since basically failed-attempt is an interpretation in which the occurrence of an inherent result is denied. In this regard, English is parallel to Korean. Since English does not allow failed-attempt interpretations, the denial of the result of an accomplishment predicate is simply unacceptable, as shown in (75).

(75) a. Jane broke/opened the window, #but it is the same as before.

b. The window was broken/opened, #but it is the same as before.

However, the verbs *offer* and *flatter* behave differently from canonical accomplishment predicates:

- (76) a. Jane offered the job to him, but he refused it.
 - b. The job was offered to him by Jane, but he refused it.
- (77) a. Jane flattered him, but he felt bad.
 - b. He was flattered by Jane, but he felt bad.

These indicate that acceptance of an offer is not an inherent result of *offer* and feeling flattered is not lexical entailment of *flatter*. Although the contrasts between (69) and (70) in the languages are interesting and they might be related to failed-attempt interpretations, the readings in (69) do not seem to be failed-attempt interpretations of accomplishments *per se*. Martin & Schäfer (2012, 2013, 2014) furthermore do not really incorporate the notion of intention into their formal analysis.

The intention requirement in failed-attempt interpretations is not a new idea; the relation between them has been hinted at in the literature (e.g. Ikegami 1985, Tsujimura 2003, Tatevosov 2008). But intention has been rarely discussed explicitly in the context of this phenomenon, and to the best of my knowledge has never been incorporated into a formal analysis of the interpretation of accomplishment predicates. This study is intended to fill this gap.

2.9 Agent control

I showed in §2.6 with (58) that the failed-attempt interpretation of an accomplishment predicate in Korean does not require agent control over the event described by the accomplishment, unlike in languages like Skwxwu7mesh. In this section, I discuss more about the relation between failed-attempt readings and the notion of control.

The notion of control has been considered to be the degree of control that an agent has over an event (see Thompson 1979, Thompson and Thompson 1992, Bar-el 2005, Jacobs 2011, among others). An agent having control is understood "to initiate an event on purpose, to have control over the process of the event and to bring the event to culmination" but an agent who has limited control may "unintentionally initiate an event, or have difficulty in the process of the event and thus only *managed to* bring the event to completion" (Jacobs 2011). The widely used definitions of control and non-control are given below (Thompson and Thompson 1992: 52 cited in Jacobs 2011: 10):

(78) Control

"Controlled situations are those in which the agent functions with usual average capacities in keeping things under control."

(79) Non-control

i) can be "events which are natural spontaneous-happening without the intervention of any agent," or

ii) can be events which are "unintentional, accidental acts," or,

iii) can be "limited control [which is] intentional premeditated [events] which are carried out to excess, or are accomplished only with difficulty, or by means of much time special effort and/or patience and perhaps a little luck."

The Skwxwu7mesh simplex verb kw'elh 'spill' in (80a) does not have an agent argument, but when the verb combines with a transitivizer, an agent argument is introduced, as in (80b,c) (Jacobs 2011: 1-2).

(80) a. na kw'elh ta tiy

RL spill DET tea 'The tea spilt.'

b. *chen kw'lh-at-Ø ta tiy*1S.SUB pour-TR-3OBJ DET tea
'I poured the tea.' (on purpose)

c. *chen kw'élh-nexw-Ø ta tiy* 1S.SUB spill-LCTR-3OBJ DET tea 'I spilt the tea.' (accidentally)

In (80b) the control transitivizer (c-transitivizer) *-at* trigers the meaning of a normal level of agent control, and in (80c) the limited control transitivizer (lc-transitivizer) *-nexw* trigers the meaning of a less than normal control by an agent. Predicates with a c-transitivizer are called c-predicates and predicates with a lc-transitivizer are called lc-predicates (Jacobs 2011: 2). For more examples, in (81a) the c-predicate indicates that the agent is functioning with usual, average capacities and as such satisfies the definition of control in (78) (Jacobs 2011: 10). By contrast, the lc-predicate in (81b) indicates that the agent performed the event accidentally and thus did not have control of the event, and this is captured by definition (79ii) (Jacobs 2011: 10). Finally, in (81c) the lc-predicate is used despite the fact that the agent is fully volitional, but the event was accomplished by the agent only with difficulty, and so the agent did not really have control over the result of the event: this is captured by definition (79iii) (Jacobs 2011: 10-11).

(81) a. chen kwélash-t-Ø ta nkw'ekw'chústn 1S.SUB shoot-TR-3OBJ DET window 'I shot the window.' (on purpose)

- b. chen kwélash-nexw-Ø ta nkw'ekw'chústn
 1S.SUB shoot-LCTR-3OBJ DET window
 'I shot the window.' (accidentally)
- c. chen kwélash-nexw-Ø ta nexwlámay
 1S.SUB shoot-LCTR-3OBJ DET bottle
 'I managed to shoot the bottle.'

Context: the subject is practice-shooting bottles

Interestingly, lc-predicates are only compatible with a culminated event, while c-predicates are compatible with either a culminated event or a non-culminated event (see Bar-el 2005 for Skwxwu7mesh, Gerdts 2008 for Halkomelem, Kiyota 2008 and Turner 2010 for Saanich, Watanabe 2003 for Sliammon). That is, non-culmination interpretations in Skwxwu7mesh require agent control (see also the Agent Control Hypothesis (ACH), "the availability of non-culminating construals for accomplishments correlates with the control of the agent over the described event," proposed in Demirdache & Martin 2013). For instance, the c-predicate in (82a) does not require event culmination, whereas lc-predicate in (82b) does (Jacobs 2011: 98).

(82) a. c-predicate does not require culmination

kwélash-**t**-Ø chen ta míxalh, 1S.SUB shoot-TR-3OBJ DET bear 'I shot the bear,' welh na t'emt'ám te-n skwélash RL astray **DET-1S.POS** shot but 'but I missed (lit. my shot went astray).' b. lc-predicate requires culmination chen kwélash-**nexw**-Ø ta míxalh. 1S.SUB shoot-LCTR-3OBJ DET bear 'I shot the bear,' #welh na t'emt'ám te-n skwélash **DET-1S.POS** shot but RL astray 'but I missed.'

The notion of control is important in relation to culmination and non-culmination interpretations in languages like $S\underline{k}w\underline{x}wu7mesh$.

However, it is not clear when we can say that an agent is in control or in limited control. Although there are clear cases where an agent has control or limited control, the boundary between them seems to be so vague. Furthermore, the notion of control is not required for interpretation of accomplishment predicates in Korean. If we assume that Korean failed-attempt readings require agent control, just like in S<u>k</u>w<u>x</u>wu7mesh, failed-attempt readings of Korean accomplishments should not be compatible with a situation in which an agent has limited control. However, this is rejected, as shown in (83) and (84).

- (83) [Context: The door is very heavy. Martin was weak and uncertain about whether he can open the door, but he pushed it to open it.]
 Martin-i ce mwun-ul yel-ess-ciman, cenhye wumciki-ci
 Martin-Nom that door-Acc open-Pst-but at.all move-Comp anh-ass-ta.
 Neg-Pst-Dec
 - (lit.) 'Martin opened that door, but it did not move at all.'
- (84) [Context: The door is very strong. Martin was weak and uncertain about whether he can break the door, but he hit it to break it.]
 Martin-i ce mwun-ul kkay-ss-ciman, cenhye kkay-ci-ci
 Martin-Nom that door-Acc break-Pst-but at.all break-Pass-Comp anh-ass-ta.

Neg-Pst-Dec

(lit.) 'Martin broke that door, but it did not break at all.'

The other interpretations of *kkay*- 'break' and *yel*- 'open' (i.e. partial- and completeresult readings) also do not require the notion of control. It is simply plausible that some result of breaking or opening obtains despite the difficulty the agent experiences. Why Korean and S $\underline{k}w\underline{x}wu7$ mesh differ cross-linguistically in terms of requirements of non-culmination readings is an interesting question, but this is not dealt with in this dissertation. I focus on accounting for the intentional property of failed-attempt readings in Korean.

In summary, previous approaches to non-culmination interpretations are not appropriate or sufficient to account for Korean failed-attempt readings of accomplishment predicates, although I adopt the insight that combines modality and event structure (e.g. Bar-el *et al.* 2005, Tatevosov 2008) for my analysis in Chapter 3.

Chapter 3

Intention-based Analysis

In the previous chapter, I reviewed some important analyses of non-culminating interpretations and approaches related to them in the literature. However, I suggested that these prior approaches are not sufficient to properly account for the core properties of failed-attempt interpretations of accomplishments in Korean. In this chapter I propose an intention-based analysis of two related puzzles: (i) how failed-attempt interpretations arise in Korean, but not in English, and (ii) why the subject's intention is part of the failed-attempt readings.

3.1 Interpretations of Korean accomplishment predicates

First I present basic facts about the possible interpretations of Korean lexical accomplishment predicates (or equivalently, lexical causatives; see e.g. Levin & Rappaport Hovav 1994). Following are some canonical examples of failed-attempt readings of accomplishments:¹⁴

¹⁴ Please recall that I view accomplishment predicates as having a causation event structure (i.e., [[x ACT] CAUSE [y BECOME <STATE>]]), rather than having a set of temporal properties.

- (85) a. ku-ka changmwun-ul kkay-ss-ta.
 he-Nom window-Acc break-Pst-Dec
 kulena changmwun-i kkay-ci-ci anh-ass-ta.
 but window-Nom break-Pass-Comp Neg-Pst-Dec
 (lit.) 'He broke the window. But the window was not broken.' =
 (roughly) 'He tried to break the window. But the window was not broken.'
 - b. ku-ka changmwun-ul yel-ess-ta.
 he-Nom window-Acc open-Pst-Dec kulena changmwun-i yel-li-ci anh-ass-ta.
 but window-Nom open-Pass-Comp Neg-Pst-Dec (lit.) 'He opened the window. But the window was not opened.' = (roughly) 'He tried to open the window. But the window was not opened.'
 - c. ku-ka changmwun-ul tat-ass-ta.
 he-Nom window-Acc close-Pst-Dec kulena changmwun-i tat-hi-ci anh-ass-ta.
 but window-Nom close-Pass-Comp Neg-Pst-Dec (lit.) 'He closed the window. But the window was not closed.' = (roughly) 'He tried to close the window. But the window was not closed.'

d. na-nun pwul-ul khi-ess-ta.

I-Top light-Acc turn.on-Pst-Dec *kulena pwul-i khi-e ci-ci anh-ass-ta*. but light-Nom turn.on-Comp Pass-Comp Neg-Pst-Dec (lit.) 'I turned on the light. But the light was not turned on.' = (roughly) 'I tried to turn on the light. But the light was not turned on.'

e. na-nun pwul-ul kke-ss-ta.

I-Top light-Acc turn.off-Pst-Dec *kulena pwul-i kke ci-ci anh-ass-ta.* but light-Nom turn.off.Comp Pass-Comp Neg-Pst-Dec (lit.) 'I turned off the light. But the light was not turned off.' = (roughly) 'I tried to turn off the light. But the light was not turned off.'

Note again that the sentences like (85) can be found in the Web. In (85) the realization of the result state encoded by the accomplishment predicate is denied in the subsequent sentence, yet such denials are not contradictory with the first sentences. This compatibility strongly suggests that lexical accomplishment predicates do not entail the occurrences of their inherent result states.

An accomplishment predicate interpreted in this way must furthermore be intentional, as the English translations in (85) above suggest. That is, the failedattempt interpretation of an accomplishment requires the subject's intention regarding the coming about of the result state encoded by the accomplishment. This requirement can be verified by the fact that when the accomplishment state is not intended by the subject, the reading cannot be a failed-attempt reading, as illustrated in (86).

- (86) a. ku-ka (#uytohacianhkey/#silswulo/#wuyenhi) changmwun-ul he-Nom unintentionally/by.mistake/accidentally window-Acc kkay-ss-ciman, changmwun-i kkay-ci-ci anh-ass-ta. break-Pst-but window-Nom break-Pass-Comp Neg-Pst-Dec
 (lit.) 'He broke the window (#unintentionally/#by mistake/#accidentally), but the window was not broken.'
 - b. ku-ka (#uytohacianhkey/#silswulo/#wuyenhi) changmwun-ul
 he-Nom unintentionally/by.mistake/accidentally window-Acc
 yel-ess-ciman, changmwun-i yel-li-ci anh-ass-ta.
 open-Pst-but window-Nom open-Pass-Comp Neg-Pst-Dec
 (lit.) 'He opened the window (#unintentionally/#by
 mistake/#accidentally), but the window was not opened.'
 - c. ku-ka (#uytohacianhkey/#silswulo/#wuyenhi) changmwun-ul
 he-Nom unintentionally/by.mistake/accidentally window-Acc *tat-ass-ciman, changmwun-i tat-hi-ci anh-ass-ta.*close-Pst-but window-Nom close-Pass-Comp Neg-Pst-Dec
 (lit.) 'He closed the window (#unintentionally/#by mistake/#accidentally),
 but the window was not closed.'

d. na-nun (#uytohacianhkey/#silswulo/#wuyenhi) pwul-ul
I-Top unintentionally/by.mistake/accidentally light-Acc
khi-ess-ciman, pwul-i khi-e ci-ci
turn.on-Pst-but light-Nom turn.on-Comp Pass-Comp
anh-ass-ta.
Neg-Pst-Dec

(lit.) 'I turned on the light (#unintentionally/#by mistake/#accidentally), but the light was not turned on.'

e. na-nun (#uytohacianhkey/#silswulo/#wuyenhi) pwul-ul

I-Top unintentionally/by.mistake/accidentally light-Acc *kke-ss-ciman, pwul-i kke ci-ci* turn.off-Pst-but light-Nom turn.off.Comp Pass-Comp *anh-ass-ta*.

Neg-Pst-Dec

(lit.) 'I turned off the light (#unintentionally/#by mistake/#accidentally), but the light was not turned off.'

This denial of the result is not compatible with the lack of the intention on the part of the subject, as expressed, for example, by adverbial modifiers that require unintentionality. This suggests that the subject's intention is part of the failed-attempt interpretation of an accomplishment. For instance, the failed-attempt sentence without the adverb in (86e) cannot be used in the context in which the subject accidentally bumped the light switch and this accident could have caused the light to be turned off, but the light was not actually turned off, since there was a problem with the electrical wiring between the switch and the light.

When an accomplishment predicate is modified by an adverb like *uytocekulo* 'intentionally' or *ilpwule* 'on purpose,' the failed-attempt reading of the accomplishment predicate seems to sound awkward, but is not ruled out. This is illustrated in (87).

(87) a. ku-ka (?uytocekulo/?ilpwule) changmwun-ul he-Nom intentionally/on.purpose window-Acc kkay-ss-ciman, changmwun-i kkay-ci-ci anh-ass-ta. break-Pst-but window-Nom break-Pass-Comp Neg-Pst-Dec (lit.) 'He broke the window (?intentionally/?on purpose), but the window was not broken.'

b. ku-ka (?uytocekulo/?ilpwule) changmwun-ul
he-Nom intentionally/on.purpose window-Acc
yel-ess-cimna, changmwun-i yel-li-ci anh-ass-ta.
open-Pst-but window-Nom open-Pass-Comp Neg-Pst-Dec
(lit.) 'He opened the window (?intentionally/?on purpose), but the window was not opened.'

- c. ku-ka (?uytocekulo/?ilpwule) changmwun-ul
 he-Nom intentionally/on.purpose window-Acc *tat-ass-ciman, changmwun-i tat-hi-ci anh-ass-ta.*close-Pst-but window-Nom close-Pass-Comp Neg-Pst-Dec
 (lit.) 'He closed the window (?intentionally/?on purpose), but the window was not closed.'
- d. na-nun (?uytocekulo/?ilpwule) pwul-ul
 I-Top intentionally/on.purpose light-Acc
 khi-ess-ciman, pwul-i khi-e ci-ci
 turn.on-Pst-but light-Nom turn.on-Comp Pass-Comp
 anh-ass-ta.

Neg-Pst-Dec

(lit.) 'I turned on the light (?intentionally/?on purpose), but the light was not turned on.'

e. na-nun (?uytocekulo/?ilpwule) pwul-ul

I-Top intentionally/on.purpose light-Acc

kke-ss-ciman, pwul-i kke ci-ci

turn.off-Pst-but light-Nom turn.off.Comp Pass-Comp

anh-ass-ta.

Neg-Pst-Dec

(lit.) 'I turned off the light (?intentionally/?on purpose), but the light was not turned off.'

This kind of awkwardness is expected if failed-attempt readings of accomplishment predicates require the subject's intention. Since the failed-attempt readings of the first clauses in (87) already include the subject's intentions, it is not necessary to modify the sentences with an intention-related adverb like *uytocekulo* 'intentionally.'

When modified by adverbials that deny the subject's intention, accomplishments must instead have at least partial results:

(88) a. ku-ka uytohacianhkey/silswulo/wuyenhi changmwun-ul he-Nom unintentionally/by.mistake/accidentally window-Acc kkay-ss-ta. kulayse changmwun-i cokum/wancenhi break-Pst-Dec so window-Nom a.little/completely kkay-ci-ess-ta.
break-Pass-Pst-Dec

'He broke the window unintentionally/by mistake/accidentally. So the window was a little/completely broken.'

b. ku-ka uytohacianhkey/silswulo/wuyenhi changmwun-ul he-Nom unintentionally/by.mistake/accidentally window-Acc yel-ess-ta. kulayse changmwun-i cokum/wancenhi open-Pst-Dec so window-Nom a.little/completely yel-li-ess-ta.
open-Pass-Pst-Dec

1

'He opened the window unintentionally/by mistake/accidentally. So the window was a little/completely opened.'

 ku-ka uytohacianhkey/silswulo/wuyenhi changmwun-ul he-Nom unintentionally/by.mistake/accidentally window-Acc *tat-ass-ta.* kulayse changmwun-i cokum/wancenhi close-Pst-Dec so window-Nom a.little/completely *tat-hi-ess-ta.*

close-Pass-Pst-Dec

'He closed the window unintentionally/by mistake/accidentally. So the window was a little/completely closed.'

- d. *na-nun uytohacianhkey/silswulo/wuyenhi pwul-ul*I-Top unintentionally/by.mistake/accidentally light-Acc *khi-ess-ta. kulayse pwul-i cokum/wancenhi*turn.on-Pst-Dec so light-Nom a.little/completely *khi-e-ci-ess-ta.*turn.on-Comp-Pass-Pst-Dec
 'I turned on the light unintentionally/by mistake/accidentally. So the light
 was a little/completely turned on.'
 e. *na-nun uytohacianhkey/silswulo/wuyenhi pwul-ul*
- I-Top unintentionally/by.mistake/accidentally light-Acc *kke-ss-ta. kulayse pwul-i cokum/wancenhi* turn.off-Pst-Dec so light-Nom a.little/completely *kke-ci-ess-ta.*

turn.off-Pass-Pst-Dec

'I turned off the light unintentionally/by mistake/accidentally. So the light was a little/completely turned off.'

Actual-result interpretations of the examples in (88) can be partial-result or completeresult depending on the gradability of the predicates (see e.g. Koenig & Chief 2008, Kennedy & Levin 2008, Piñón 2008). Whether the results of breaking, opening, closing, turning on and turning off are gradable or non-gradable can be determined by the utterance context. For example, the property that results from turning off a light is normally non-gradable (either on or off) and so (88e) must have a complete-result reading when modified by an adverb like *uytohacianhkey* 'unintentionally.' However, *cokum* 'a little' coerces a gradable interpretation, i.e. 'dimmer.' In this context, (88e) allows a partial-result or complete-result reading.

In (88) the actual-result interpretations are clearly non-intentional due to adverbial modification. However, it is not that actual-result interpretations require non-intentionality; actual-result readings (whether they be partial-result or complete-result) are compatible with the subject's acting intentionally. The sentences in (89) modified by *uytocekulo* 'intentionally' or *ilpwule* 'on purpose' are compatible with the sentences explicitly expressing the realizations of the relevant result states of the various accomplishment predicates:

(89) a. ku-ka uytocekulo/ilpwule changmwun-ul kkay-ss-ta.
he-Nom intentionally/on.purpose window-Acc break-Pst-Dec kulayse changmwun-i cokum/wancenhi kkay-ci-ess-ta.
so window-Nom a.little/completely break-Pass-Pst-Dec
'He broke the window intentionally/on purpose. So the window was a little/completely broken.'

b. ku-ka uytocekulo/ilpwule changmwun-ul yel-ess-ta.
he-Nom intentionally/on.purpose window-Acc open-Pst-Dec kulayse changmwun-i cokum/wancenhi yel-li-ess-ta.

so window-Nom a.little/completely break-Pass-Pst-Dec 'He opened the window intentionally/on purpose. So the window was a little/completely opened.'

c. ku-ka uytocekulo/ilpwule changmwun-ul tat-ass-ta.
he-Nom intentionally/on.purpose window-Acc close-Pst-Dec kulayse changmwun-i cokum/wancenhi tat-hi-ess-ta.
so window-Nom a.little/completely close-Pass-Pst-Dec
'He closed the window intentionally/on purpose. So the window was a

little/completely closed.'

d. *na-nun uytocekulo/ilpwule pwul-ul khi-ess-ta*.
I-Top intentionally/on.purpose light-Acc turn.on-Pst-Dec *kulayse pwul-i cokum/wancenhi khi-e-ci-ess-ta*.
so light-Nom a.little/completely turn.on-Comp-Pass-Pst-Dec
'I turned on the light intentionally/on purpose. So the light was a little/completely turned on.'

e. na-nun uytocekulo/ilpwule pwul-ul kke-ss-ta.
I-Top intentionally/on.purpose light-Acc turn.off-Pst-Dec kulayse pwul-i cokum/wancenhi kke-ci-ess-ta.
so light-Nom a.little/completely turn.off-Pass-Pst-Dec

'I turned off the light intentionally/on purpose. So the light was a little/completely turned off.'

Summarizing, lexical accomplishments in Korean basically have two kinds of reading: (i) actual-result interpretations (i.e. partial-result or complete-result), in which at least some results occur and the subject may or may not have caused this result intentionally, and (ii) failed-attempt interpretations, where the result of the accomplishment does not obtain but was intended by the subject.¹⁵ This interpretation system of accomplishments can be represented, as in (90).

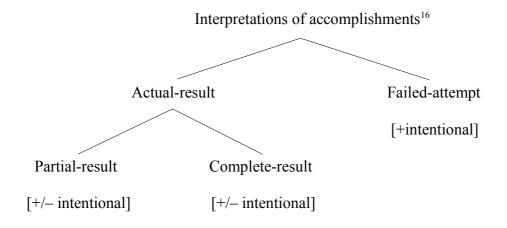
i) *Miya-ka mwun-ul yel-ess-ko, Tom-to kulay-ss-ta.* Miya-Nom door-Acc open-Pst-and Tom-also do.so-Pst-Dec (lit.) 'Miya opened the door, and so did Tom.'

¹⁵ A canonical ambiguity test is the identity test (see various ambiguity tests and discussions of them in Zwicky & Sadock 1975, Cruse 1986, 2000, Jaszczolt 1999). Korean accomplishment predicates have the identity constraint, suggesting that Korean accomplishments are ambiguous between actual-result and failed-attempt readings. For instance, in the following example, the first clause and the second clause must have the same type of interpretation in terms of the actual-result and failed-attempt readings:

By contrast, the noun *chinkwu* 'friend' has no identity constraint, and thus is not ambiguous (but underspecified) with respect to e.g. gender. In the following example, the gender of the friend Miya invited can be different from the gender of the friend Tom invited:

ii) *Miya-ka chinkwu-lul chotayhay-ss-ko, Tom-to kulay-ss-ta.* Miya-Nom friend-Acc invite-Pst-and Tom-also do.so-Pst-Dec 'Miya invited a friend, and so did Tom.'

(90) Interpretations of accomplishment predicates in Korean:



In (90) actual-result interpretations are further classified into partial-result and complete-result; they are unspecified regarding intentionality, and so they can be intentional partial-result or complete-result or non-intentional partial-result or complete-result. By contrast, the failed-attempt reading combines intentionality and non-realization of result. In total, we have five types of interpretation for an accomplishment whose result is gradable, and three types of reading for an accomplishment whose result is non-gradable.

In the literature (e.g. Bar-el 2005, Tatevosov 2008, Jacobs 2011), accomplishment interpretations are normally classified into two types, culmination and non-culmination (partial-result or failed-attempt). However, this kind of classification ignores the distinct property of partial-result and failed-attempt, and

¹⁶ The default readings of accomplishments are complete-results. This is also true of some other languages that allow non-culminating interpretations (e.g. Salish languages in Bar-el *et al.* 2005, Hindi in Arunachalam & Kothari 2011). Failed-attempt interpretations are the most marked reading in this classification of interpretations.

does not reflect the common property of partial-result and complete-result interpretations. So I believe the classification proposed in (90), motivated by intentionality, is more natural and appropriate in Korean. Regarding the facts presented in this section, I propose an intention-based account for how failed-attempt interpretations arise in Korean, but not in English, employing the inertia world semantics (Dowty 1977, 1979), as adopted in particular by Tatevosov (2008). I refine the appropriate inertia worlds in terms of worlds corresponding to the subject's intentions $\dot{a} \, la$ Inman (1993).

In the examples above, I identify the existence of the subject's intention by using adverbs such as *uytocekulo* 'intentionally' or *ilpwule* 'on purpose.' In the following section, I discuss the basic meaning components of the notion of intention that will serve as additional diagnostics for intentionality (building on Anscombe 2000, Grice 1972, Searle 1983, Sinhababu 2013, among others).

3.2 Components of intention

In the failed-attempt interpretation of an accomplishment predicate, the subject participant must intend to perform the action denoted by the predicate. In order to answer why the subject's intention is required in failed-attempt interpretations, we should first analyze the notion of intention, which is not primitive itself, but the combination of some basic meaning components. I argue here that at least three meaning components are inherent parts of intention, at least in Korean. My goal is not

to offer an analysis of intention so much as to identify superficial properties of intention for purposes of identifying intention when a predicate entails it.

First, the existence of an intention (or equivalently, having an intention) in someone's mind requires a desire for a certain state, as shown in the following:

- (91) a. ku-nun Tom-ul cwuk-i-l uyto-ka iss-ess-ta.
 ku-Top Tom-Acc dead-Cau-Rel intention-Nom exist-Pst-Dec
 #kulena ku-un Tom-i cwuk-ki-lul wenha-ci anh-ass-ta.
 but he-Top Tom-Nom dead-Nmz-Acc want-Comp Neg-Pst-Dec
 'He intended to kill Tom. #But he didn't want Tom to die.'
 - b. ku-nun Tom-ul cap-ul uyto-ka iss-ess-ta.
 ku-Top Tom-Acc catch-Rel intention-Nom exist-Pst-Dec
 #kulena ku-un Tom-i cap-hi-ki-lul wenha-ci
 but he-Nom Tom-Nom dead-Pass-Nmz-Acc want-Comp anh-ass-ta.

Neg-Pst-Dec

'He intended to catch Tom. #But he didn't want Tom to be caught.'

In (91a), the denial of the subject's desire for Tom's death is not compatible with the first sentence asserting the existence of the subject's intention about Tom's death, and similarly for (91b). Equivalently, in a context where the subject has no desire for a particular state, the subject cannot be said to have an intention regarding that state.

This suggests that the subject's intention in the examples above involves a desire for a certain state. That said, we can imagine a situation in which there was an intention in the subject's mind to kill Tom, but it is against his will because of some serious threat from other people to kill someone else he wants to keep from harm. Even in this situation, we can say that the subject wants Tom to die so that, say, he could survive or save someone else, but at the same time, he wants him not to die since he personally does not have any ill feeling toward Tom. Thus the subject's desire for a certain result in at least some sense is necessary for the notion of intention in the sentences. However, the subject's desire is not a sufficient condition for intention. In the following, we can see that the subject can have a desire for something without an intention to bring it about:

- (92) a. ku-nun Tom-i cwuk-ki-lul wenhay-ss-ta. kulena ku-nun ku-Top Tom-Nom dead-Nmz-Acc want-Pst-Dec but ku-Top Tom-ul cwuk-i-l uyto-ka eps-ess-ta.
 Tom-Acc dead-Cau-Rel intention-Nom not.exist-Pst-Dec 'He wanted Tom to die. But he did not intend to kill Tom.'
 - b. ku-nun Tom-i cap-hi-ki-lul wenhay-ss-ta. kulena ku-nun ku-Top Tom-Nom catch-Pass-Nmz-Acc want-Pst-Dec but ku-Top Tom-ul cap-ul uyto-ka eps-ess-ta.
 Tom-Acc catch-Rel intention-Nom not.exist-Pst-Dec 'He wanted Tom to be caught. But he did not intend to catch Tom.'

In (92a), the subject desired for Tom's death, but there was no intention to kill Tom himself. Perhaps the subject might want Tom to die from an accident or disease. Similarly, in (92b) the subject might want Tom to be caught by the police with no intention in his mind to catch Tom himself. Thus desire does not entail intention. Another piece of evidence supporting this is that we can desire something which we believe is impossible, but we cannot have an intention to do such a thing. Consider the following example within the context given in (93).¹⁷

(93) [Context: I think it would be great if I could fly in the sky just like Superman. But I know it is impossible.]
#kulayto swuphemayn-chelem hanul-ul nal uyto-ka yet Superman-like sky-Acc fly.Comp intention-Nom iss-ess-ta.
exist-Dec
#'Yet I intended to fly in the sky just like Superman.'

Flying just like Superman (without any flying gear) in the sky is physically impossible, and we know this. So desire for something which we believe is possible is necessary for intention. This constraint on possibility is related to a second component of intention discussed right below.

Second, the existence of an intention about causing a certain result by a certain

¹⁷ According to some native speakers of English, the corresponding English sentence of (93) can be used in the context in (93). If this is correct, then the notion of intention in English does not require some belief or knowledge about a possible causation.

means requires some belief or knowledge about a possible causation relation between the causing event and the result. In the following examples, the subjects' ignorance regarding causation is incompatible with his intention:

- (94) a. ku-nun Tom-ul tok-ulo cwuk-i-l uvto-ka iss-ess-ta. he-Top Tom-Acc poison-Inst dead-Cau-Rel intention-Nom exist-Pst-Dec Tom-ul cwuk-i-l #kulena ku-un tok-i swu iss-ta-nun but he-Nom poison-Acc Tom-to dead-Caus-Rel way exist-Dec-Rel moll-ass-ta. kes-ul thing-Acc not.know-Pst-Dec 'He intended to kill Tom with poison, #but he didn't know that poison could kill Tom.'
 - b. ku-nun Tom-ul pascwul-lo cap-ul uvto-ka iss-ess-ta. catch-Rel intention-Acc have-Pst-Dec he-Top Tom-Acc rope-Inst #kulena ku-un pascwul-lo Tom-ul cap-ul swu iss-ta-nun but he-Nom rope-Inst Tom-Acc catch-Rel way exist-Dec-Rel kes-ul moll-ass-ta. thing-Acc not.know-Pst-Dec

'He intended to catch Tom with rope, #but he didn't know that he could catch Tom with a rope.'

In (94a), the subject could intend to kill Tom with poison only because he knows that

poison could kill Tom. Similarly in (94b), only if the subject has the knowledge that he can catch Tom with a rope, can he have an intention to catch Tom with rope. Note, however, that whether poison can actually kill Tom or not is not important for the subject to have an intention to kill Tom with poison. Rather, the subject must have some belief or knowledge that the poison is able to kill Tom, even if in fact it cannot. This is illustrated below:

(95) [Context: the subject believes that the poison is strong enough to kill a human being, but the poison is actually not that strong.] *ku-nun Tom-ul tok-ulo cwuk-i-l uyto-ka iss-ess-ta.*he-Top Tom-Acc poison-Inst dead-Cau-Rel intention-Acc exist-Pst-Dec
'He had an intention to kill Tom with the poison.'

(96) [Context: the subject believes that the rope is strong enough to catch Tom, but the rope is actually not that strong.] *ku-nun Tom-ul pascwul-lo cap-ul uyto-ka iss-ess-ta.*he-Top Tom-Acc rope-Inst catch-Rel intention-Acc exist-Pst-Dec
'He had an intention to catch Tom with the rope.'

In (95), the subject has an incorrect belief that the poison is strong enough to kill Tom. While other people may know that this belief is incorrect, the subject does not; in his mind, the possible causal relation between using the poison and Tom's death holds. We cannot say that the subject does not intend to kill Tom simply because he has a false belief. Sentence (96) is parallel to (95). Thus the subject's belief or knowledge is an important component of intention. Conversely, if something is physically possible, but Tom believes it to be impossible, then Tom cannot have an intention regarding it:

(97) [Context: Tom believes that it is impossible for him to be the most rich man in the region by doing what he is doing.]
#kulayto Tom-un ciyek-eyse kacang pwuca-ka toy-l
yet Tom-Top region-at most rich.man-Nom become-Rel
uyto-lul kaci-ko iss-ta.
intention-Acc have-Comp exist-Dec
#'Yet Tom intends to become the richest man in the region.'

However, if Tom believes that he can be the richest man in the region by winning a lottery, then (97) can be used in this context. Furthermore, the subject's belief must be related to causation. In (98), the example is incompatible with the given context.

(98) [Context: Emma knew that the tool box was necessary to fix the notebook computer, and so she got the tool box. However, she has absolutely no idea of how to fix the computer with the tools in the box.]
#Emma-nun casin-i khemphyuthe-lul kochi-l uyto-ka
Emma-Top self-Nom computer-Acc fix-Rel intention-Nom iss-ess-ta.

exit-Pst-Dec

#'Emma intended to fix the computer herself.'

Getting the tool box is necessary for fixing the computer, but it is not a causing subevent of fixing the computer. Rather, it belongs to a preliminary event of it. In the context given in (98), Emma has no knowledge about a possible causal relation between using the tools and the state of the computer being fixed. We can say that Emma has the ultimate purpose of fixing the computer with the tools, but it sounds awkward to say that Emma had an intention of fixing the computer by getting the tools. Hence only if the subject has some belief or knowledge that a causal relation is possible can the subject have an intention regarding the causation.

Third, the subject's intention about causation requires the subject's intention about performing a causal event. For instance, in (99) the denial of the subject's intention to perform a causal event is contradictory with the first sentence asserting that the subject has an intention about the causation itself.

- (99) a. ku-nun Tom-ul cwuk-i-l uyto-ka iss-ess-ta. he-Top Tom-Acc dead-Cau-Rel intention-Nom exist-Pst-Dec #kulena ku-nun Tom-ul cwuk-i-l pangpep-ul he-Top Tom-Acc dead-Caus-Rel method-Acc but silhayngha-l uvto-nun eps-ess-ta. carrying.out-Rel intention-Top Neg-Pst-Dec 'He intended to kill Tom. #But he did not intend to carry out a method to kill Tom.'
 - b. ku-nun Tom-ul cap-ul uyto-ka iss-ess-ta.
 he-Top Tom-Acc catch-Rel intention-Nom exist-Pst-Dec
 #kulena ku-nun Tom-ul cap-ul pangpep-ul silhayngha-l
 but he-Nom Tom-Acc catch-Rel method-Acc carrying.out-Rel
 uyto-nun eps-ess-ta.
 intention-Top Neg-Pst-Dec
 'He intended to catch Tom. #But he did not intend to carry out a method to

catch Tom.'

In (99a), even if the subject desires Tom's death and knows how to kill him, the subject cannot intend to kill Tom if he does not intend to carry out a method to kill Tom. If the combination of desire and belief constitutes intention, then there must be many people who can be said to intend to kill somebody. But this is not the case. In this regard, (99b) is same as (99a). Thus the subject's intention about causing a result

requires his intention regarding performing a causing action. But note that the subject's intention to perform a causing action does not entail the subject's intention regarding a particular result state. Consider the following examples:

- (100) a. ku-un tok-ul Tom-eykey sayongha-l uyto-ka iss-ess-ta.
 he-Nom poison-Acc Tom-to use-Rel intention-Nom exist-Pst-Dec kulena Tom-ul cwuk-i-l uyto-nun eps-ess-ta.
 but Tom-Acc dead-Cau-Rel intention-Top not.exist-Pst-Dec
 'He intended to use the poison (just to make Tom unable to move). But he did not intend to kill Tom.'
 - b. ku-un pascwul-ul Tom-eykey sayongha-l uyto-ka iss-ess-ta.
 he-Nom rope-Acc Tom-to use-Rel intention-Acc have-Pst-Dec kulena Tom-ul cap-ul uyto-nun eps-ess-ta.
 but Tom-Acc catch-Rel intention-Top not.exist-Pst-Dec
 'He intended to use the rope (just to make Tom fall). But he did not intend to catch Tom.'

The embedding of an intention into another intention can also be verified, as in the following sentences modified by intention-related adverbs:

- (101) a. ku kay-lul uytocekulo ssoa-se uytocekulo cwuk-i-ess-ta.¹⁸
 the dog-Acc intentionally shoot-by intentionally dead-Cau-Pst-Dec
 'Jenny intentionally killed the dog by intentionally shooting it.'
 - b. #ku kay-lul uytohacianhkey ssoa-se uytocekulo cwuk-i-ess-ta.
 the dog-Acc unintentionally shoot-by intentionally dead-Cau-Pst-Dec
 #'Jenny intentionally killed the dog by unintentionally shooting it.'
 - c. ku kay-lul uytocekulo ssoa-se uytohacianhkey cwuk-i-ess-ta.
 the dog-Acc intentionally shoot-by unintentionally dead-Cau-Pst-Dec
 'Jenny unintentionally killed the dog by intentionally shooting it.'
 - d. ku kay-lul uytohacianhkey ssoa-se uytohacianhkey
 the dog-Acc unintentionally shoot-by unintentionally
 cwuk-i-ess-ta.

dead-Cau-Pst-Dec

'Jenny unintentionally killed the dog by unintentionally shooting it.'

Jenny's killing the dog denotes an instance of causation. Although the causative event denoted by the morphological causative verb *cwuk-i-* 'kill' does not specify a causing subevent in its lexical meaning, the sentences in (101) have PPs expressing the specific causing subevent (Jenny's shooting the dog). Only (101b) is unacceptable. It seems to be impossible to conceive of a plausible context for (101b). Thus we see with (101a) and (101b) that the subject's intention regarding the death of the object

¹⁸ Note that Korean is a *pro*-drop language. In the examples here, the subject is omitted, and it is assumed that Jenny is the recovered subject in the utterance context.

requires the subject's intention regarding the shooting. But as in (101c) and (101d), non-intentionality of the death does not require intentionality regarding the shooting. A possible scenario for (101c) is that Jenny intentionally shot the dog not to kill it, but to test a bulletproof vest the dog wore, but unexpectedly the vest was not strong enough to save the dog. The default reading of the sentence without the adverbs in (102) is the meaning of the sentence in (101a), and the interpretation of (101c) is the least likely reading that the sentence (102) can have.

(102) ku kay-lul ssoa-se cwuk-i-ess-ta.
the dog-Acc shoot-by dead-Cau-Pst-Dec
'Jenny killed the dog by shooting it.'

In sum, the notion of intention can be diagnosed by at least three meaning components: (i) desire for a state, (ii) belief that there is a possible causation relation between some causing event and the desired state, and (iii) intention regarding performing the causing event.

3.3 Interpretations and intention

Using the intention-related adverbs like *uytocekulo* 'intentionally' or *uytohacianhkey* 'unintentionally,' it was shown that failed-attempt interpretations require the subject's intention, but actual-result readings do not. I proposed that the notion of intention

itself has three meaning components: desire, belief, and embedded intention. If intention really is the combination of the three components, we should expect that these three components of intention should also be entailed by accomplishment predicates on failed-attempt and intentional actual-result interpretations, but one or more must be missing in non-intentional actual-result interpretations. In this section I show that these predictions are borne out.

3.3.1 Failed-attempt readings and intention

The failed-attempt reading of breaking the cup in (103) can be used in the context in (103) where Peter has a desire for the cup being broken, a belief that hitting the cup will break it, and an intention to hit the cup.

(103) [Context: Peter believed that hitting the cup could break it. Peter wanted the cup to be broken. Peter intentionally hit the cup.] *Peter-ka khep-ul kkay-ss-ciman, khep-i kkay-ci-ci*Peter-Nom cup-Acc break-Pst-but cup-Nom break-Pass-Comp *anh-ass-ta.*Neg-Pst-Dec
(lit.) 'Peter broke the cup, but it was not broken.'

The compatibility in (103) does not show that the three meaning components are

really necessary for a failed-attempt interpretation, of course, since it is possible that they are just irrelevant to the failed-attempt reading. However, I will argue that these three meaning components are obligatory on a failed-attempt interpretation in Korean, thus justifying that intention is involved.

First, in (104a) the sentence has a failed-attempt interpretation, yet denial of Peter's desire for the cup breaking in (104b) cannot follow (104a).

 (104) a. Peter-ka khep-ul kkay-ss-ciman, khep-i kkay-ci-ci
 Peter-Nom cup-Acc break-Pst-but cup-Nom break-Pass-Comp anh-ass-ta.
 Neg-Pst-Dec

(lit.) 'Peter broke the cup, but it was not broken.'

b. #kulentey Peter-nun khep-i kkay ci-nun kes-ul
by.the.way Peter-Top cup-Acc break.Comp Pass-Rel thing-Acc
wenha-ci anh-ass-ta.
want-Comp Neg-Pst-Dec
#'By the way Peter didn't want the cup to be broken.' (in the context of (104a))

The relation of the two sentences in (104) shows that the subject's desire for the result to obtain is necessary on the failed-attempt interpretation. Conversely, and more specifically, if Peter does not have desire for the cup to break, but believes hitting the cup will break it and intends to hit it, as illustrated in the context in (105), then the failed-attempt reading of the sentence in (105) is not possible in this context.

(105) [Context: Peter believed that hitting the cup could break it (since it had some cracks). Peter did not want the cup to be broken. Peter intentionally hit the cup slightly without any further purpose, since he was just bored.] *Peter-ka khep-ul kkay-ss-ciman, #khep-i kkay-ci-ci*Peter-Nom cup-Acc break-Pst-but cup-Nom break-Pass-Comp *anh-ass-ta.*

Neg-Pst-Dec

(lit.) 'Peter broke the cup, #but it was not broken.'

The context does not specify whether the cup was broken or not, so the second clause in (105) does not directly contribute to the infelicity of the whole sentence. Rather, it ensures that the first clause must have a failed-attempt interpretation. We can now contrast (103) and (105); the main difference is that Peter has no desire for brokenness in the context in (105) and the failed-attempt reading of the sentence in (105) is impossible with respect to the context in (105). Thus the infelicity of the sentence in (105) should be attributed to the lack of Peter's desire for brokenness in the context in (105). The incompatibilities in (104) and (105) in relation to (103) strongly indicate that the failed-attempt interpretation of breaking requires the subject's desire for brokenness. Second, Peter must have known that hitting the cup could break it, in the failedattempt scenario in (106a). This is shown by the infelicity of following up with (106b).

(106) a. Peter-ka khep-ul che-se kkay-ss-ciman, khep-i kkay-ci-ci
 Peter-Nom cup-Acc hit-by break-Pst-but cup-Nom break-Pass-Comp anh-ass-ta.

Neg-Pst-Dec

(lit.) 'Peter broke the cup by hitting it, but it was not broken.'

b. #kulentay Peter-nun khep-ul chi-nun kes-i khep-ul
by.the.way Peter-Top cup-Acc hit-Rel thing-Nom cup-Acc *kkay-l swu iss-ta-nun kes-ul moll-ass-ta.*break-Rel way exist-Dec-Rel thing-Acc not.know-Pst-Dec
#'By the way Peter didn't think that hitting the cup could break it.' (in the context of (106a))

This shows that the subject's belief about a possible causal relation is required also for the failed-attempt interpretation. When a context like (107) in which Peter does not have knowledge regarding a possible causal relation is given, the given sentence cannot have a failed-attempt interpretation. (107) [Context: Peter did not know that hitting the cup could break it. Peter wanted the cup to be broken. Peter intentionally hit the cup without any further purpose, since he was just bored.]

Peter-ka khep-ul kkay-ss-ciman, #khep-i kkay-ci-ci Peter-Nom cup-Acc break-Pst-but cup-Nom break-Pass-Comp anh-ass-ta.

Neg-Pst-Dec

(lit.) 'Peter broke the cup, #but it was not broken.'

The contrast in the contexts in (103) and (107) leads us to conclude that the subject's belief about a possible causal relation between the action and result is necessary for the failed-attempt reading of an accomplishment predicate.

Third, if Peter accidentally performs the causing action as in (108b), this is incompatible with the failed-attempt interpretation of the accomplishment in (108a).

 (108) a. Peter-ka khep-ul kkay-ss-ciman, khep-i kkay-ci-ci
 Peter-Nom cup-Acc break-Pst-but cup-Nom break-Pass-Comp anh-ass-ta.
 Neg-Pst-Dec

(lit.) 'Peter broke the cup, but it was not broken.'

b. #kulentay Peter-nun khep-ey silswulo pwuticchi-n
by.the.way Peter-Top cup-to by.mistake bump-Rel
kes-i-ess-ta.
thing-Cop-Pst-Dec
#'By the way he bumped on the cup by mistake.' (in the context of (108a))

So the failed-attempt interpretation in (108a) requires the subject's intention to perform the causing event. Conversely, in a context like (109) where Peter did not intend to hit the cup, a failed-attempt interpretation is unavailable.

- (109) [Context: Peter believed that hitting the cup could break it. Peter wanted the cup to be broken. Peter unintentionally hit the cup.] *Peter-ka khep-ul kkay-ss-ciman, #khep-i kkay-ci-ci*Peter-Nom cup-Acc break-Pst-but cup-Nom break-Pass-Comp *anh-ass-ta*.
 Neg-Pst-Dec
 - (lit.) 'Peter broke the cup, #but it was not broken.'

Again, based on the contrasts involving (103) and (109), we can see that the failedattempt interpretation of these accomplishments requires the subject's intention regarding performing the causing event. Summing up, failed-attempt interpretations require the subject's desire, belief, and intention to perform a causing action. This supports the notion of intention as a part of a failed-attempt reading in Korean.

3.3.2 Actual-result readings and intention

Actual-result interpretations of accomplishments do not require the subject's intention; they can be intentional or non-intentional. I show below that intentional actual-result interpretations also require the three meaning components of intention discussed above, and that at least one must not obtain in non-intentional actual-result interpretations.

Like failed-attempt interpretations, intentional actual-result interpretations are possible in a context where the subject has desire, belief, and intention to perform the causing action. However, non-intentional actual-result interpretations are not possible in the same context. Consider the following:

(110) [Context: Bruce believed that hitting the wall would break it. Bruce wanted the wall to be broken. Bruce intentionally hit the wall.]
Bruce-ka byek-ul uytocekulo/#uytohacianhkey kkay-se
Bruce-Nom wall-Acc intentionally/unintentionally break-since
byek-i cokum/wancenhi kkay-ci-ess-ta.
wall-Nom a.little/completely break-Pass-Pst-Dec
'Since Bruce intentionally/#unintentionally broke the wall, it was a little/completely broken.'

First, the lack of desire for the wall to break in (111a) is compatible only with a nonintentional actual-result reading in (111b).

(111) a. Bruce-nun byek-i kkay-ci-nun kes-ul
Bruce-Top wall-Nom break-Pass-Rel thing-Acc
wenha-ci anh-ass-ta.
want-Comp Neg-Pst-Dec
'Bruce didn't want the wall to be broken.'

b. Bruce-ka byek-ul uytohacianhkey/#uytocekulo kkay-se
Bruce-Nom wall-Acc unintentionally/intentionally break-since
byek-i cokum/wancenhi kkay-ci-ess-ta.
wall-Nom a.little/completely break-Pass-Pst-Dec
'Since Bruce unintentionally/#intentionally broke the wall, it was a
little/completely broken.' (in the context of (111a))

So intentional actual-result readings of accomplishments require the subject's desire for the result state, while non-intentional actual-result readings do not.

Second, the subject in (112a) has no knowledge that hitting the wall could cause it to be broken. Here only a non-intentional actual-result reading of (112b) is compatible with (112a).

- (112) a. Bruce-nun byek-ul chi-nun kes-i byek-ul
 Bruce-Top wall-Acc hit-Rel thing-Nom wall-Acc *kkay-l swu iss-ta-nun kes-ul moll-ass-ta.*break-Rel way exist-Dec-Rel thing-Acc not.know-Pst-Dec
 'Bruce didn't know that hitting the wall could break it.'
 - b. Bruce-ka byek-ul uytohacianhkey/#uytocekulo kkay-se
 Bruce-Nom wall-Acc unintentionally/intentionally break-since
 byek-i cokum/wancenhi kkay-ci-ess-ta.
 wall-Nom a.little/completely break-Pass-Pst-Dec
 'Since Bruce unintentionally/#intentionally broke the wall, it was a
 little/completely broken.' (in the context of (112a))

Thus intentional actual-result readings require the subject's knowledge about a possible causal relation between the action and the result state, but it is not necessary for a non-intentional actual-result reading.

Third, the non-intentional actual-result reading of (113b) is in accordance with Bruce's accidental bumping the wall as in (113a), but the intentional actual-result in (113b) is not.

(113) a. Bruce-nun byek-ey silswulo pwuticchi-ess-ta.
Bruce-Top wall-to by.mistake bump-Pst-Dec
'Bruce bumped on the wall by mistake.'

b. Bruce-ka byek-ul uytohacianhkey/#uytocekulo kkay-se
Bruce-Nom wall-Acc unintentionally/intentionally break-since
byek-i cokum/wancenhi kkay-ci-ess-ta.
wall-Nom a.little/completely break-Pass-Pst-Dec
'Since Bruce unintentionally/#intentionally broke the wall, it was a
little/completely broken.' (in the context of (113a))

Hence the subject's intention to perform the causing event is required for an intentional actual-result reading, but the non-intentional actual-result reading does not require this. In sum, intentional actual-result readings require the same three components of intentionality as the failed-attempt readings, but at least one must not obtain in non-intentional actual-result readings.

3.4 The agent's action

I have assumed in the examples illustrating the basic facts that the failed-attempt interpretation of accomplishment is roughly equivalent to the meaning of 'try to VP' (VP as an accomplishment). In the literature (e.g. Ikegami 1985, Tatevosov 2008), failed-attempt readings are also often translated into English sentences using the phrase 'try to VP.' In this section, I explicitly argue that based on the similarities and differences of failed-attempt and *-lye-ko nolyekha-* 'try to VP' constructions, failed-attempt readings actually do have a 'try to VP' interpretation, albeit with some

differences.

We have seen that the failed-attempt interpretation of an accomplishment predicate requires the subject's intention. A sentence headed by *nolyekha-* 'try' also requires the subject's intention, as shown below:

(114) ku-ka pwul-ul khi-lye-ko nolyekhay-ss-ta.
ku-Top light-Acc turn.on-to-Comp try-Pst-Dec
#kulena ku-un pwul-ul khi-l uyto-nun eps-ess-ta.
but he-Top light-Acc turn.on-Rel intention-Top not.exist-Pst-Dec
'He tried to turn on the light. #But he did not have an intention to turn on the light.'

In addition to the subject's intention, what is also required by a failed-attempt reading is the actual occurrence of the causing event. In the context given in (115), it is assumed that the only causing event of turning on the light is to flip the light switch. In the example in (115) the denial that this occurs is contradictory with the failedattempt reading. (115) [Context: The only way to turn on the light is to flip the switch.]

ku-kapwul-ulkhi-ess-ciman,pwul-ikhi-eci-ciku-Top light-Accturn.on-Pst-butlight-Nomturn.on-CompPass-Companh-ass-ta.#kulikosuwichi-lulol-li-ci-toanh-ass-ta.Neg-Pst-Decandswitch-Accrise-Cau-Comp-alsoNeg-Pst-Dec(lit.)'Heturned onthelight,but it was notturned on.flip the switch.'

However, a 'try to VP' construction does not require the occurrence of the causing event, but only the occurrence of an effort to achieve the result. For instance, the 'try to VP' construction in (116a) can be used with the context in (116) in which opening the door is not a causing subevent of turning on the light *per se*, but a necessary event to then go ahead and turn on the light (*#He turned on the light by opening the door*: vs. *He turned on the light by flipping the switch*.) By contrast, the failed-attempt reading of the regular accomplishment in (116b) is not available in the same context.

(116) [Context: Minho was opening the door to enter the room in order to turn on the light. But he failed to open the door and so failed to turn on the light.]
a. *ku-ka pwul-ul khi-lye-ko nolyekhay-ss-ciman*,
ku-Top light-Acc turn.on-to-Comp try-Pst-but *pwul-ul khi-l swu eps-ess-ta*.
light-Acc turn.on-Rel way not.exist-Pst-Dec
'He tried to turn on the light, but couldn't turn on the light.'

b. #ku-ka pwul-ul khi-ess-ciman,

ku-Top light-Acc turn.on-to-Comp
pwul-ul khi-l swu eps-ess-ta.
light-Acc turn.on-Rel way not.exist-Pst-Dec
(lit.) #'He turned on the light, but couldn't turn on the light.'

Intentionally performing a direct causing action counts as an effort required by 'try to VP.' However, the effort could be something else entirely, as shown in (116). Thus, if failed-attempt readings are possible in a certain context, a 'try to VP' reading is also possible in that context, but not the other way around. For example, if the context in (116) is changed to "Minho opened the door and entered the room. Then he flipped the light switch to turn on the light, but the light was not turned on, since there was a blackout," both the failed-attempt reading of the VP and 'try to VP' constructions in (116) are acceptable in this new context. The non-occurrence of any effort to turn on the light as in the context in (117) is not compatible with either the 'try to VP' construction in (117a) or the failed-attempt reading in (117b).

(117) [Context: Minho did not do any action to turn on the light.]
a. #ku-ka pwul-ul khi-lye-ko nolyekhay-ss-ta.
ku-Top light-Acc turn.on-to-Comp try-Pst-Dec
#'He tried to turn on the light.'

b. #ku-ka pwul-ul khi-ess-ciman,
ku-Top light-Acc turn.on-to-Comp
pwul-ul khi-l swu eps-ess-ta.
light-Acc turn.on-Rel way not.exist-Pst-Dec
(lit.) #'He turned on the light, but couldn't turn on the light.'

Finally, in a failed-attempt reading of an accomplishment the result state must not obtain, whereas with a 'try to VP' construction it is left open as to whether the result obtains or not. The properties of these two interpretations are summarized below:

	Accomplishments as	-lye-ko nolyekha-
Properties	failed-attempt	'try to VP'
	readings	constructions
Intention about result is	Yes	Yes
required		
Occurrence of efforts is	Yes	Yes
required		
Occurrence of direct	Yes	No
causing action is		
required		
Non-occurrence of	Yes	No
result is required		

(118) Properties of failed-attempt and 'try to VP' (VP as an accomplishment)

3.5 Intention-based analysis

Regarding the possible interpretations of accomplishment predicates, I propose an intention-based analysis building on intentional modality (Inman 1993). Inman (1993) proposed an analysis of intention based on the study of modality with a possible world semantics (Kratzer 1977, 1981). The intentional modality consists of an intentional modal base (the set of all worlds which conform to the intention of the relevant individual) and necessity modal force. For instance, the sentence 'John broke the plate and he intended to' is true if and only if the event described by 'John broke the plate' really occurred (i.e. the sentence is true at the actual world), and 'John broke the plate' is true at every possible world compatible with John's intentions. Conversely, the sentence 'John broke the plate and he did not intend to' is true if and only if 'John broke the plate' is true at the actual world, and 'John broke the plate' is false in some possible worlds that are compatible with John's intentions. This non-intentional modality has the intentional modal base, but a non-necessity modal force.

If we use Inman's analysis of intentionality, accomplishment event structures can be represented like (119), and this basically captures the three main interpretations (failed-attempt and (non-)intentional actual-result) of accomplishment predicates. In (119), Korean CAUSE (CAUSE_{Korean}) is differentiated from English CAUSE (CAUSE_{English}), which is equivalent to CAUSE (Dowty 1979); the former is built upon the latter:¹⁹

¹⁹ Here w_0 represents either the real world in a realis clause or the reference world under a modal in an irrealis clause. Either way I assume that modalities are introduced above the VP level by a higher

(119) $[[x ACT] CAUSE_{Korean} [y BECOME < STATE>]]$ is true at w_0 iff

i) [x ACT] is true at w₀, and

ii) [[x ACT] CAUSE_{English} [y BECOME <STATE>]] is true at

(a) w_0 , or

(b) all worlds w' in x's intention set, which is the non-empty set of possible worlds that are compatible with x's intention.

Based on (119), the sentence *Tom-i cepsi-lul kkay-ss-ta* 'Tom broke the plate' is true if and only if Tom performed a causing action, and the breaking of the plate really occurred or the breaking was intended by Tom. Because of the disjunction in ii) in (119), three possibilities arise. First, if only the first conjunct is satisfied, this is the non-intentional actual-result interpretation of *kkay*- 'break'. Second, if only the second conjunct is satisfied, then it is a failed-attempt interpretation of *kkay*- 'break'. Third, if the two conjuncts are both satisfied, then it is the intentional actual-result interpretation of *kkay*- 'break'.

3.6 Interpretations of lexical causatives

I defined the notion of intention with three meaning components. Using this definition and possible world semantics, I proposed the intention-based analysis of the interpretations of lexical accomplishments. In this section, I explicitly show how the interpretations of lexical accomplishments are derived from the intention-based scoping operator. analysis.

3.6.1 Accomplishments involving lexical causatives

The Korean verbs like *kkay*- 'break' and *khi*- 'turn on' have been assumed to be accomplishment predicates just like their English counterparts. Here I explicitly show that they are really accomplishment predicates based on some grammatical tests from English.

Accomplishments are understood to have a specific goal or task to be accomplished; they involve creating a certain state of affairs (see Ryle 1949, Kenny 1963, Dowty 1979, among many others). Some typical examples of English accomplishments are given below:

(120) paint a picture, paint a house, make a chair, draw (a circle), cook (a chicken), destroy (a building), build (a house)

First, English accomplishments are not homogeneous (Vendler 1957, Dowty 1979, Rothstein 2004). This can be represented like the following (Dowty 1979: 57):

(121) If ϕ is an accomplishment verb, then x is (now) ϕ ing entails that x has not (yet) ϕ ed.

The progressive sentences in (122) entail that Minji had not yet broken the window

and Minji had not yet turned on the light, respectively.

- (122) a. Minji-ka changmwun-ul kkay-ko iss-ess-ta.
 Minji-Nom window-Acc break-Comp exist-Pst-Dec
 'Minji was breaking the window.'
 - b. *Minji-ka pwul-ul khi-ko iss-ess-ta*.
 Minji-Nom light-Acc turn.on-Comp exist-Pst-Dec
 'Minji was turning on the light.'

In other words, a smaller part of Minji's breaking the window is not Minji's breaking the window; and similarly, a proper part of Minji's turning on the light is not Minji's turning on the light. This indicates that the Korean verbs are accomplishments.

Second, accomplishment verbs can appear with a temporal adverbial phrase having *in* (Dowty 1979: 56), and they are ambiguous between ingressive and telic readings. This is illustrated in (123).

(123) a. Tom broke the window in an hour. (ingressive or telic reading)

b. Tom turned on the light in an hour. (ingressive or telic reading)

In the ingressive reading of (123a), Tom started breaking the window in an hour, but in the telic reading of (123a), the window was broken in an hour, and similarly for (123b). This also holds for Korean verbs, as shown in (124).

- (124) a. *Tom-i han cikan maney changmwun-ul kkay-ss-ta*.
 Tom-Nom one hour in window-Acc break-Pst-Dec
 'Tom broke the window in an hour.' (ingressive or telic reading)
 - b. *Tom-i* han cikan maney pwul-ul khi-ess-ta.
 Tom-Nom one hour in light-Acc turn.on-Pst-Dec
 'Tom turned on the light in an hour.' (ingressive or telic reading)

Third, an accomplishment predicate modified by *again* is ambiguous between *repetitive* and *restitutive* readings (see McCawley 1968, Dowty 1979, von Stechow 1995, 1996, Beck & Johnson 2004, Pylkkänen 2002). In the repetitive interpretation of (125), Tom repeated the event of opening the door, but in the restitutive interpretation of (125), Tom opened the door for the first time and what is repeated is the state of the door being open.

- (125) Tom opened the door again.
 - 1. Repetitive interpretation: Entails that Tom opened the door and presupposes that Tom opened the door before.
 - 2. Restitutive interpretation: Entails that Tom opened the door and presupposes that the door was previously open.

The Korean verbs *khi*- 'turn on' and *yel*- 'open' are also ambiguous in the same manner:²⁰

²⁰ The verb *kkay*- 'break' can be also used in a repetitive or restitutive context, but the verb *yel*- 'open' can be more appropriately used in these contexts, since opening a door does not cause a change in the

(126) Tom-i mwun-ul taci yel-ess-ta.

Tom-Nom door-Acc again open-Pst-Dec

'Tom opened the door again.'

1. Repetitive interpretation: Entails that Tom opened the door and presupposes that Tom opened the door before.

2. Restitutive interpretation: Entails that Tom opened the door and presupposes that the door was previously open.

(127) Tom-i pwul-ul taci khi-ess-ta.

Tom-Nom light-Acc again turn.on-Pst-Dec

'Tom turned on the light again.'

1. Repetitive interpretation: Entails that Tom turned on the light and presupposes that Tom turned on the light before.

2. Restitutive interpretation: Entails that Tom turned on the light and presupposes that the light was previously turned on.

The availability of the restitutive readings suggests that *khi*- 'turn on' and *yel*- 'open' have a result part in their meanings.

These tests strongly indicate that the verbs in Korean entail an activity part (or process part) and a result part; that is, they are really accomplishment predicates. Their event structures can be then represented with the accomplishment event

structure of the door itself and so opening a door can naturally be repeated. However, when broken pieces of the window are put together, it is not clear if that thing is the same window as the original one.

structure like below (Dowty 1979, Levin & Rappaport Hovav 1995):

(128) a. kkay- 'break'

[[x ACT] CAUSE [y BECOME <broken>]]

b. khi- 'turn on'

[[x ACT] CAUSE [y BECOME < turned on>]]

c. yel- 'open'

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[[x ACT] CAUSE [y BECOME <opened>]]
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Then their accomplishment event structures can be subject to the intention-based analysis of accomplishments. For instance, consider *kkay*- 'break' in the following:

(129) [[x ACT] CAUSE_{Korean} [y BECOME <broken>]] is true at w₀ iff
i) [x ACT] is true at w₀, and
ii) [[x ACT] CAUSE_{English} [y BECOME <broken>]] is true at
(a) w₀, or
(b) all worlds w' in x's intention set, which is the non-empty set of possible worlds that are compatible with x's intention.

Actual-result readings can be partial-result or complete-result depending on whether the result of an accomplishment is gradable or non-gradable; gradable accomplishment allows both partial-result and complete-result readings, but nongradable accomplishment allows only a complete-result reading.²¹

3.6.2 The subject's intention in lexical causatives

I showed above that the failed-attempt reading of an accomplishment requires the agent's intention regarding the event denoted by the accomplishment. However, this is not enough; a syntactic constraint is also involved in failed-attempt readings. I argue that what is important is the subject's intention.

When the subject is not a human being, but instead an instrument, the actualresult reading of the accomplishment is obligatory:

(130) a. ku opun-i ppang-ul kwu-ess-ta.
the oven-Nom bread-Acc bake-Pst-Dec
#haciman, ppang-i kwu-e ci-ci anh-ass-ta.
but bread-Nom bake-Comp Pass-Comp Neg-Pst-Dec
'The oven baked the bread. #But bread was not baked.'

²¹ Strictly speaking, a complete-result reading (all of a result realized) is a kind of partial-result (some of a result realized), like a set is a subset of the set itself. But I assume that a partial-result reading is *proper* partial-result with only some and not all of a result realized.

b. ku limokhon-i pwul-ul khi-ess-ta.
the remote.control-Nom light-Acc turn.on-Pst-Dec
#haciman, pwul-i khi-e ci-ci anh-ass-ta.
but light-Nom turn.on-Comp Pass-Comp Neg-Pst-Dec
'The remote control turned on the light. #But the light was not turned on.'

There is an implicit agent involved in the events of the sentences in (130); the agents are the ones who used the instruments. However, even if we assume that the agents used the instruments intentionally to bake the bread or turn on the light, the denials of the results in (130) are still not acceptable. This leads me to propose the following generalization, whereby the subject must have the relevant intentions in a failed-attempt interpretation:

(131) Subject Intention Generalization (SIG):

Non-occurrence of an event requires the subject's intention regarding the event.

Following are more examples supporting the generalization in (131). First, when the subject is a natural force like thunder or an earthquake, as in (132), a failed-attempt reading is not possible; only an actual-result reading is available.

thunder-Nom window-Acc break-Pst-Dec *#haciman, changmwun-i kkay-ci-ci anh-ass-ta.*but window-Nom break-Pass-Comp Neg-Pst-Dec
'The thunder broke the window. #But the window did not break.'
b. *cicin-i pwul-ul kke-ss-ta.*earthquake-Nom light-Acc turn.off-Pst-Dec *#haciman, pwul-i kke ci-ci anh-ass-ta.*

(132) a. chentwung-i changmwun-ul kkay-ss-ta.

but light-Nom turn.off.Comp Pass-Comp Neg-Pst-Dec 'The earthquake turned off the light. #But the light was not turned off.'

The subjects are non-sentient and thus cannot have intentions. Therefore, failedattempt readings are not possible for the sentences, conforming to the Subject Intention Generalization (SIG). Second, in the following, Julia is sentient, but the subject DP refers to an action or state, and an actual-result reading is again obligatory:

(133) a. Julia-uy pwucwuuy-/silswu-ka pwul-ul kke-ss-ta.
Julia-Gen negligence-/mistake-Nom light-Acc turn.off-Pst-Dec
#kulena pwul-i kke ci-ci anh-ass-ta.
but light-Nom turn.off.Comp Pass-Comp Neg-Pst-Dec
'Julia's negligence/mistake turned off the light. #But it was not turned off.'

b. Julia-uy pwucwuuy-/silswu-ka taymwun-ul yel-ess-ta.
Julia-Gen negligence-/mistake-Nom front.door-Acc open-Pst-Dec
#kulena mwun-i yel-li-ci anh-ass-ta.
but door-Nom open-Pass-Comp Neg-Pst-Dec
'Julia's negligence/mistake opened the front door. #But it was not opened.'

Since the subject DP itself cannot have an intention in (133), a failed-attempt reading is not allowed, again conforming to the SIG. Alternatively, this could be accounted for by the lack of Julia's intention. Julia was just being careless. Recall that the notion of intention with regard to a causation requires an embedded intention about a causing event of the causation, but in (133) Julia has no intention regarding the causing event of turning off the light and opening the front door. So we can say that the failed-attempt reading, which requires intention regarding the causation, is not permitted.

However, in (134) Minji is sentient but the subject DP refers to an action, and a failed-attempt reading is still not permitted.

- (134) a. Minji-ka cencalaynci-lul thul-un hayngtong-i ku an-ey
 Minji-Gen microwave-Acc turn.on-Rel action-Nom the inside-in iss-ten mwul-ul kkulhi-ess-ta.
 exist-Rel water-Acc boil-Pst-Dec
 #haciman, mwul-i kkhulh-ci anh-ass-ta.
 but water-Nom boil-Comp Neg-Pst-Dec
 'Minji's action of turning on the microwave boiled the water in it. #But the water did not boil.'
 - b. *Minji-ka pwul-ul pwuthi-n hayngtong-i chayk-ul thaywu-ess-ta.*Minji-Nom fire-Acc put-Rel action-Nom book-Acc burn-Pst-Dec *#haciman, chayk-i tha-ci anh-ass-ta.*but book-Nom burn-Comp Neg-Pst-Dec
 'Minji's action of putting fire on the book burned the book. #But the book did not burn.'

In (134), the causing event can be unintentional: e.g. Minji unintentionally turned on the microwave or put fire on the book. In this situation, the causation is also unintentional. Then the unavailability of the failed-attempt reading might be attributed to the non-intentionality of the causation. But even when Minji intentionally performed the causing actions with intentions of boiling and burning in (134), the denials of the results are still unacceptable. This again suggests that the subject itself must have intention in order to license a failed-attempt reading.

3.6.3 Passives of lexical causatives

Unlike active lexical accomplishments, passive lexical accomplishments do not allow failed-attempt interpretations; only actual-result readings are possible:

(135) a. *Minji-eyuyhay pwul-i khi-e ci-ess-ta*.
Minji-by light-Nom turn.on-Comp Pass-Pst-Dec *#haciman, pwul-i kutaylo kke-ci-e iss-ta*.
but light-Nom same turn.off-Pass-Comp exist-Pst-Dec
'The light was turned on by Minji. #But the light is still turned off.'
b. *Minji-eyuyhay ppang-i kwu-e ci-ess-ta*.

Minji-by bread-Nom bake-Comp Pass-Pst-Dec #haciman, pancwuk-i kutaylo-ta. but dough-Nom same-Dec

'Bread was baked by Minji. #But the dough is the same as before.'

In (135), the agent is Minji, a sentient being, but the subject is non-sentient. So the fact that the passive sentences do not allow failed-attempt readings also supports the Subject Intention Generalization.

However, there are also some kinds of passive constructions in which the subject can have intentions, but failed-attempt readings are not still allowed. Consider the following passive sentences. In (136a), *mac*- 'hit.Pass' is an inherently passive

verb (Sohn 1999, Song and Choe 2007), and in (136b), the passive affix *hi* is attached to the verb.²² These passive sentences are being modified by *uytocekulo* 'intentionally':

- (136) a. Minho-ka Sekjin-eykey uytocekulo mac-ass-ta.
 Minho-Nom Sekjin-to intentionally hit.Pass-Pst-Dec
 (lit.) 'Minho was intentionally hit by Sekjin.'
 - b. Minho-ka Sekjin-eykey uytocekulo kkocip-hi-ess-ta.
 Minho-Nom Sekjin-to intentionally pinch-Pass-Pst-Dec (lit.) 'Minho was intentionally pinched by Sekjin.'
 - = 'Minho was pinched by Sekjin and this was what Minho intended.'

= 'Minho was hit by Sekjin and this was what Minho intended.'

In (136) the intentions regarding the events are attributed to the subject, Minho. However, the passives in (136) do not allow failed-attempt interpretations. In the following passive sentences without the adverb, in which Minho and Sekjin can have intention or not, the failed-attempt readings are not permitted either:

(137) a. Minho-ka Sekjin-eykey mac-ass-ta.

Minho-Nom Sekjin-to hit.Pass-Pst-Dec

'Minho was hit by Sekjin.'

²² Only if the affix *eykey* 'to' is used, instead of *eyuyhay* 'by,' can these passive sentences be modified by the adverb *uytocekulo* 'intentionally.'

b. Minho-ka Sekjin-eykey kkocip-hi-ess-ta. Minho-Nom Sekjin-to pinch-Pass-Pst-Dec 'Minho was pinched by Sekjin.'

This kind of passive construction is not a counterexample to the Subject Intention Generalization, but shows instead that this generalization is not enough to account for the obligatory actual-result interpretations of the passive constructions. Regarding this problem, one could hypothesize that the failed-attempt interpretation of an accomplishment requires that all intentional agents should be the subject of the sentence headed by the accomplishment; then in (136) since Sekjin is not in the subject position, the passive sentence cannot have a failed-attempt reading. However, in (138), although Jane is also an agent of the event, but not in the subject position, the failed-attempt reading is licensed:

(138) Tom-i Jane-kwa hamkkay changmwun-ul kkay-ss-ciman, Tom-Nom Jane-with together window-Acc break-Pst-but silphayhay-ss-ta. fail-Pst-Dec

(lit.) 'Tom broke the window together with Jane, but failed.'

The fundamental similarity between the active and passive accomplishment sentences is that the causing event must occur. Based on this pattern, I propose the following generalization:

(139) Subject Realization Generalization (SRG):

In the event structure of a verbal predicate, the (sub)event directly related to the predicate's subject (i.e. the subevent that includes the subject as the argument or the subevent that corresponds to the subject) must occur in the actual world.

This generalization plus the Subject Intention Generalization (SIG) serves as a basis of accounting for the accomplishment data discussed so far. When a person is the subject of an active accomplishment, that person is directly related to the causing event [x ACT] of the event structure of the accomplishment (rather than to the caused event or the whole event). Then the causing event must occur, and the caused event [y BECOME <STATE>] can occur or not according to the Subject Realization Generalization. If the result occurs, then the subject's intentions regarding the result are not necessary (by the SIG). But if the result does not occur, the subject must have intended for it to occur (by the SIG). When an instrument is the subject of an active accomplishment sentence, then the result also must occur since the instrumental subject cannot have an intention (by the SIG), and similarly if a natural force is the subject or if the subject is an action. In passive accomplishments, the patient is the subject, so the event directly related to the patient is the caused event ([y BECOME <STATE>]), and so it must occur (by the SRG). The occurrence of the result in turn entails the occurrence of a causing event, since a result cannot occur without the occurrence of a causing event according to real world knowledge. In this way, obligatory actual-result readings of passive accomplishments can be accounted for by the SRG. In addition, the SRG accounts for the obligatory occurrences of the causing events of active accomplishment sentences. In particular, because of the SRG, the causing events must occur in failed-attempt interpretations. As mentioned above, the occurrence of a result requires the occurrence of a causing event, but not the other way around. That is, the occurrence of a causing event does not require the occurrence of a possible result (e.g. kicking the door does not necessarily cause the door to be broken). Thus if the result in an accomplishment event structure does not occur, as in failed-attempt interpretations, in principle it is not necessary for the causing event to occur. But the causing event must occur in failed-attempt readings, which has just been assumed so far but is actually in need of an account. Now the SRG accounts for both this requirement in failed-attempt readings and the obligatory actual-result interpretations of passive constructions.

To derive these generalizations, we need to specify in accomplishment event structure that failed-attempt readings require the subject's intention. This can be done by adding a precondition that the x whose intentions are relevant must be the subject, as shown in the following:

(140) [[x ACT] CAUSE_{Korean} [y BECOME \langle STATE \rangle]] is true at w₀ iff

i) [x ACT] is true at w₀, and

ii) [[x ACT] CAUSE_{English} [y BECOME <STATE>]] is true at

(a) w₀, or

(b) all worlds w' in x's intention set, which is the non-empty set of possible worlds that are compatible with x's intention. (precondition: x is linked to the subject)

The Subject Realization Generalization is reflected in (140) with the specification that [x ACT] is at w₀ under the assumption that x is mapped to the subject and the patient y to the object by the Argument Realization Principle (ARC) (see the ARC in Sag *et al.* 2003). With regard to the Subject Intention Generalization, whenever the condition (b) in (140) is satisfied, x must be the subject. Thus intentional actual-result and failed-attempt interpretations require the subject's intention. When the subject is an instrument, natural force, negligence, mistake or action, the subject cannot have an intention; condition (b) in (140) cannot be satisfied, and a sentence with such a non-sentient subject can only have non-intentional actual-result reading.

Passive verbs can be licensed by a passive lexical rule in HPSG (Head-driven Phrase Structure Grammar) (see Sag *et al.* 2003, Kim 2004). According to the Argument Realization Principle in HPSG, the patient of the passive accomplishment predicate is mapped to the subject (Sag *et al.* 2003), and so the condition (b) in (140) can never be satisfied in passives.

3.7 Morphological causatives

In this section, the intention-based analysis is extended to morphological causative

constructions in Korean.

3.7.1 Accomplishments involving morphological causatives

Morphological causative verbs in Korean are combinations of a verb and a causative affix, as illustrated in the examples below.²³ Employing the grammatical tests used above, I first show that morphological causative verbs also belong to accomplishment. First, the morphological causative verbs are not homogeneous. The progressive sentences in (141), which refer to the process of boiling or burning, do not entail that Tom had boiled the water or that Tom had burned the book, respectively:

- (141) a. Julia-ka mwul-ul kkulh-i-ko iss-ess-ta.
 Julia-Nom water-Acc boil-Caus-Comp exist-Pst-Dec kulena mwul-i acik kkhulh-ci anh-ass-ta.
 but water-Nom yet boil-Comp Neg-Pst-Dec 'Julia was boiling the water. But it did not boil yet.'
 - b. Julia-ka chayk-ul thay-wu-ko iss-ess-ta.
 Julia-Nom book-Acc burn-Caus-Comp exist-Pst-Dec kulena chayk-i acik tha-ci anh-ass-ta.
 but book-Nom yet burn-Comp Neg-Pst-Dec 'Julia was burning the book. But it did not burn yet.'

²³ The causative affix -*i*, -*hi*, -*li*, or -*ki* can be also used as a passive affix.

In other words, a smaller part of the event of Tom boiling the water is not an event of Tom boiling the water; and a proper part of the event of Tom burning the book is not an event of Tom burning the book. However, the progressive sentences in (141) can also have the meanings that the water started boiling and Julia kept boiling it, and the book started burning and Julia kept burning it. In this case, the morphological causative verbs are not homogeneous down to instants (Rothstein 2004), but homogeneous down to intervals (Rothstein 2004). A smaller part of the event of Tom boiling the water can be counted as an event of Tom boiling the water only if the smaller part is beyond the temporal point in which the water started boiling, and similarly for the event of burning the book.

Second, morphological causative verbs can appear with the temporal adverbial *maney* 'in,' and they are ambiguous between ingressive and telic readings, as in (142).

(142) a. Julia-ka mwul-ul sam pwun maney kkulh-i-ess-ta.
Julia-Nom water-Acc three minute in boil-Caus-Pst-Dec
'Julia boiled the water in three minutes.' (ingressive or telic reading)
b. Julia-ka chayk-ul sam pwun maney thay-wu-ess-ta.
Julia-Nom book-Acc three minute in burn-Caus-Pst-Dec
'Julia burned the book in three minutes.' (ingressive or telic reading)

In the ingressive reading of the sentence in (142a), Julia started a causing action of boiling the water in three minutes. In the telic reading of (142a), the water started

boiling or it boiled to a certain point in the scale of boiledness in three minutes. In the ingressive reading of (142b), it took three minutes for Julia to start a causing action of burning the book, and in the telic reading of (142b), it took three minutes for the book to start burning or to burn to a certain point in the scale of burnedness. The difference between (142a) and (142b) is that the burnedness scale is closed due to the limited size of the book, but the boiledness scale seems to be open (see scale structures in Beavers 2011).

Third, morphological causative verbs modified by *taci* 'again' are ambiguous between repetitive and restitutive readings. In the repetitive interpretation of (143), Tom repeated the event of boiling the water, but in the restitutive interpretation, Tom boiled the water for the first time and what is repeated is the resultant state of boiling the water.

(143) Tom-i taci ku mwul-ul kkulh-i-ess-ta.

Tom-Nom again he water-Acc boil-Cau-Pst-Dec 'Tom boiled the water again.'

1. Repetitive interpretation: Entails that Tom boiled the water and presupposes that Tom boiled the water before.

2. Restitutive interpretation: Entails that Tom boiled the water and presupposes that the water boiled before.

In sum, these grammatical constructions strongly indicate that the morphological

causative verbs have accomplishment event structures.

3.7.2 Interpretations of morphological causatives

If morphological causative verbs are accomplishments, they should have the same event structure of lexical accomplishments. For instance, the event structure of the morphological causative verb *thay-wu-* 'burn-Cau-' can be represented like (144).

(144) Event structure of *thay-wu-* 'burn-Cau-':

[[x ACT] CAUSE_{Korean} [y BECOME < burned>]]

If *thay-wu-* 'burn-Cau-' has the accomplishment event structure in (144), we expect that they should have failed-attempt and actual-result readings. First, the following morphological causative construction allows the failed-attempt reading, and this reading requires the subject's intention:

- (145) Julia-ka chayk-ul (#uytohacianhkey/#silswulo) thay-wu-ess-ta.
 Julia-Nom book-Acc unintentionally/by.mistake burn-Caus-Pst-Dec kulena chayk-i acik kutaylo-yess-ta.
 - but book-Nom yet same-Pst-Dec
 - (lit.) 'Julia burned the book (#unintentionally/#by mistake). But it was still the same.'
 - = 'Julia tried to burn the book (#unintentionally/#by mistake). But it was still the same.'

Second, the morphological causative sentences in (146) have actual-result interpretations (i.e. partial-result or complete-result) and they can be intentional or non-intentional.

(146) Julia-ka chayk-ul uytocekulo/uytohacianhkey thay-wu-ess-ta.
Julia-Nom book-Acc intentionally/unintentionally burn-Caus-Pst-Dec kulayse chayk-i cokum/wancenhi tha-ss-ta.
so book-Nom a.little/completely burn-Pst-Dec
'Julia intentionally/unintentionally burned the book. So it burned a little/completely.'

In short, different interpretations of morphological causatives can be derived from their accomplishment event structures just like the lexical causatives.

3.7.3 The subject's intention in morphological causatives

According to the SIG, when the subject cannot have an intention with regard to the resulting state of an accomplishment, then the result state must occur. In other words, a failed-attempt interpretation should be impossible and only an actual-result interpretation should be available. In this section, I present some examples of morphological causative constructions conforming to the SIG.

In (147a), the subject is an instrument or natural force, and the actual-result reading is obligatory. This sentence with the actual-result readings cannot be modified by adverbs like *uytocekulo* 'intentionally' or *uytohacianhkey* 'unintentionally,' as shown in (147b).

(147) a. byeknanlo-ka/sanpwul-i ku chayk-ul thay-wu-ess-ta.
fireplace-Nom/forest.fire-Nom the book-Acc burn-Caus-Pst-Dec
#kulena chayk-i tha-ci anh-ass-ta.
but book-Nom burn-Comp Neg-Pst-Dec
'The fireplace/forest fire burned the book. #But it did not burn.'

b. opun-i/hwasan-i ku mwul-ul (#uytocekulo/#uytohacianhkey)
oven-Nom/volcano-Nom the water-Acc intentionally/unintentionally
kkulh-i-ess-ta. kulayse mwul-i cokum/wancehi kkulh-ess-ta.
boil-Caus-Pst-Dec so water-Nom a.little/completely boil-Pst-Dec
'The oven/volcano boiled the water (#intentionally/#unintentionally). So it boiled a little/completely.'

In (148a) the subject of the morphological causative sentence is negligence or a mistake, and it must have an actual-result reading. Such a morphological causative sentence cannot be modified by *uytocekulo* 'intentionally' or *uytohacianhkey* 'unintentionally,' although the agent, Julia, is a sentient being who is able to have intentions, as illustrated in (148b).

(148) a. Julia-uy pwucwuuy-/silswu-ka ku chayk-ul thay-wu-ess-ta.
Julia-Gen negligence-/mistake-Nom the book-Acc burn-Caus-Pst-Dec
#kulena chayk-i tha-ci anh-ass-ta.
but book-Nom burn-Comp Neg-Pst-Dec
'Julia's negligence/mistake burned the book. #But it did not burn.'

b. Julia-uy pwucwuuy-/silswu-ka chayk-ul (#uytocekulo/ Julia-Gen negligence-/mistake-Nom book-Acc intentionally/ #uytohacianhkey) thay-wu-ess-ta. kulese chayk-i unintentionally burn-Caus-Pst-Dec so book-Nom cokum/wancenhi tha-ss-ta.
a.little/completely burn-Pst-Dec
'Julia's negligence/mistake (#intentionally/#unintentionally) burned the book. So it burned a little/completely.'

When the subject is an action as in (149a), only actual-result interpretations are allowed. The morphological causative sentence with an actual-result reading cannot be modified by an intention-related adverb, as in (149b).

(149) a. Julia-uy kulehan hayngtong-i ku mwul-ul kkulh-i-ess-ta.
Julia-Gen such action-Nom the water-Acc boil-Caus-Pst-Dec
#kulena mwul-i kkulh-ci anh-ass-ta.
but water-Nom boil-Comp Neg-Pst-Dec
'Julia's action boiled the water. #But it did not boil.'

b. Julia-uy kulehan hayngtong-i ku chayk-ul (#uytocekulo/ Julia-Gen such action-Nom the book-Acc intentionally/ #uytohacianhkey) thay-wu-ess-ta. kuliko chayk-i cokum/ unintentionally burn-Caus-Pst-Dec and book-Nom a.little wancenhi tha-ss-ta.
completely burn-Pst-Dec
'Julia's action (#intentionally/#unintentionally) burned the book. And it burned a little/completely.'

In sum, the non-availability of the failed-attempt interpretation of the morphological causative constructions whose subject cannot have an intention conforms to the SIG.

3.7.4 Passives of morphological causatives

Finally, the passive counterparts of morphological causative sentences allow only actual-result interpretations, as illustrated in (150), where the result is not cancelable, and the subject need not necessarily be intentional.

(150) a. *ku chayk-i* Julia-eyuyhay thay-wu-e-ci-ess-ta. the book-Nom Julia-by burn-Cau-Comp-Pass-Pst-Dec *#haciman, chayk-i* tha-ci anh-ass-ta. but book-Nom burn-Comp Neg-Pst-Dec 'The book was burned by Julia. #But it did not burn.' Julia-eyuyhay ilpwule/silswulo b. *ku chayk-i* intentionally/by.mistake the book-Nom Julia-by thay-wu-e-ci-ess-ta. burn-Cau-Comp-Pass-Pst-Dec kulayse chayk-i cokum/wancenhi tha-ss-ta. book-Nom a.little/completely burn-Pst-Dec SO 'The book was burned by Julia intentionally/by mistake. So it burned a little/completely.'

The fact that passive forms of morphological causatives allow only actual-result readings conforms to the Subject Realization Generalization.

3.8 Summary

In this chapter, I proposed an intention-based analysis of different interpretations of lexical and morphological causatives with accomplishment event structures. Korean accomplishments, whether they are active or passive, conform to the Subject Realization Generalization. The difference between Korean and English can be attributed to whether the event structure of accomplishment includes the modality or not. In the two chapters to follow, I examine how far the intention-based analysis of accomplishments can be extended using accomplishments of complex constructions like *light verb constructions* (LVCs) and *serial verb constructions* (SVCs) in Korean.

Chapter 4

Ha-constructions

In this chapter the intention-based analysis of failed-attempt interpretations of lexical accomplishments proposed in the previous chapter is extended to derived accomplishments involving *light verb constructions* (LVCs) in Korean. If accomplishment event structures can have failed-attempt interpretations, we expect that any other linguistic forms that encode accomplishment event structures should also have failed-attempt readings and should therefore be subject to the same constraints as lexical accomplishments, as described in the previous chapter. I show that this prediction is borne out and that failed-attempt interpretations of derived accomplishments are also found and can be also accounted for by the same intention-based analysis. This result is interesting since it suggests that the intention-based account is not just restricted to a certain class of lexical verbs that project accomplishment predicates, but holds for a broader class of accomplishment predicates. Thus it applies to accomplishments more broadly in the language.

4.1 Background

Before I apply the intention-based analysis of accomplishments to light verb constructions, this section sets out some basic properties of light verbs. Light verbs have, as the name suggests, a light meaning in predicates headed by the verb (see light verbs in e.g. Grimshaw & Mester 1988, Kageyama 1977, 1991, Saito and Hoshi 2000). Some canonical light verb constructions in English (examples from Cattell 1984, Kearns 1989: 123) are given in the following:

(151) a. Jennifer made a dash across the road.

- b. Bill gave a cough.
- c. Sue *had/took* a look at the book.
- d. Peter *did* a dance on top of the piano.
- e. John gave a kiss to the dog.
- f. John gave permission to Mary to leave.
- g. John had a bite of the sandwich.
- h. John made an offer to buy the company.
- i. John *took* a walk.

The English light verb sentences in (151) are periphrastic expressions involving the heavy verbs *dash*, *cough*, *look*, *dance*, *kiss*, *permit*, *bite*, *offer*, and *walk*, respectively:

- (152) a. Jennifer dashed across the road.
 - b. Bill coughed.
 - c. Sue looked at the book.
 - d. Peter danced on top of the piano.

- e. John kissed the dog.
- f. John permitted Mary to leave.
- g. John bit the sandwich.
- h. John offered to buy the company.
- i. John walked.

Comparing (151) and (152), we can see that the verbs of the sentences in (151) do not contribute a significant meaning to the interpretations of the sentences. Rather, the objects (action nominal complements) are the main determinants of the semantics and syntax of the constructions. Consider the following sentences:

- (153) a. John took a walk (*at the book).
 - b. Sue took a look (at the book).

The two sentences in (153) are headed by the same verb *took*. The PP *at the book* must not appear in (153a), but can in (153b). This syntactic difference can be naturally ascribed to the difference of the objects, *a walk* and *a look*, since verbal counterparts of them behave in the same way: *John walked (*at the book)* vs. *Sue looked (at the book)*.

The light verb is said to be thematically light (Jespersen 1954), since they do not have an argument structure (see Diesing 1998, Grimshaw & Mester 1988, Kearns 1989) or have a deficient argument structure (see Isoda 1991, Kageyama 1991, Matsumoto 1993).²⁴ For example, the thematic structures of the following pair of Korean sentences are determined by the *verbal nouns* (VNs) (I discuss VNs in more detail below), rather than the light verb *ha* 'do':

- (154) a. ku-ka catongcha-lul kwuip-lul hay-ss-ta.
 he-Nom car-Acc buying-Acc do-Pst-Dec
 (lit.) 'He did buying a car.' = 'He bought a car.'
 - b. ku-ka pyenci-lul Jane-eykey cental-ul hay-ss-ta.
 he-Nom letter-Acc Jane-To delivery-Acc do-Pst-Dec (lit.) 'He did delivery of the letter to Jane.'
 - = 'He delivered the letter to Jane.'

If we assume that the argument structures of the sentences are determined by the verb ha 'do,' then we must posit multiple lexical items of ha 'do' in the lexicon, each of which has a different argument structure; that is, ha in (154a) is different from ha in (154b). This is stipulative, and the proliferation in the lexicon is not desirable theoretically (see a similar argument with respect to multiword expressions in Sag *et al.* 2002, Lee 2011a).

Although the light verb ha 'do' has little meaning contribution, it functions as the syntactic head of these constructions. The tense affix must be attached to ha 'do' as shown above. Mood is marked only on the light verb, as shown in (155).

²⁴ Some other scholars argue that light verbs have a complete argument structure (Hasegawa 1991, Jayaseelan 1988, Miyamoto 1997, Terada 1990, Uchida and Nakayama 1993, among others).

(155) a. ku-ka catongcha-lul kwuip-lul hay-ss-ni?
he-Nom car-Acc buying-Acc do-Pst-Que
'Did he buy a car?'

b. *ku-ka catongcha-lul kwuip-lul-ni hay-ss?
he-Nom car-Acc buying-Acc-Que do-Pst (int.) 'Did he buy a car?'

In addition, honorification, which canonically surfaces in the subject and verb together as an agreement in Korean, also appears only on the light verb, as illustrated in (156).

- (156) a. sensayng-nim-i catongcha-lul kwuip-lul ha-si-ess-ta.
 teacher-Hon-Nom car-Acc buying-Acc do-Hon-Pst-Dec
 'The teacher bought a car.'
 - b. *sensayng-nim-i catongcha-lul kwuip-lul-si hay-ss-ta.
 teacher-Hon-Nom car-Acc buying-Acc-Hon do-Pst-Dec (int.) 'The teacher bought a car.'

To summarize, the light verb *ha* 'do' serves as the syntactic head of light verb constructions, but contributes little meaning to them.

4.2 The VN-ha construction

4.2.1 Basic properties of VN-ha constructions

The first type of light verb construction to which I will apply the intention-based analysis is the construction which is the combination of a VN and the light verb *ha* 'do.' The examples are already shown above in (154), (155), and (156). I refer to these as VN-*ha* constructions to distinguish them from other types of light verb constructions I discuss below.

4.2.1.1 Verbal nouns

Generally VNs²⁵ have properties of both verb and noun (see e.g. Dubinsky 1994, Kageyama 1977, Saito and Hoshi 2000). As for nominal properties, VN can be marked with the accusative case -(l)ul as shown above, NPs with the genitive case -uy can precede VN, and an adjective can modify VN, as illustrated in (157).

- (157) a. Minji-uy muwlken-uy sinsokha-n wunpan
 Minji-Gen thing-Gen quick-Rel transporting
 'Minji's quick transporting of things'
 - b. *Minji-ka muwlken-uy sinsokha-n wunpan
 Minji-Nom thing-Gen quick-Rel transporting

²⁵ VNs are Sino-Korean.

- c. **Minji-uy muwlken-ul sinsokha-n wunpan* Minji-Gen thing-Acc quick-Rel transporting
- d. *Minji-uy muwlken-uy sinsokhakey wunpan
 Minji-Gen thing-Gen quickly transporting

As for verbal properties, VNs can take arguments and assign verbal cases (i.e. nominative or accusative) to their arguments and an adverb can modify VNs, as shown in (158a).

- (158) a. Minji-ka mwulken-ul sinsokhakey wunpan
 Minji-Nom thing-Acc quickly transporting
 'Minji's quickly transporting things'
 - b. *Minji-ka mwulken-uy sinsokhakey wunpan
 Minji- Nom thing-Gen quickly transporting
 - **Minji-uy mwulken-ul sinsokhakey wunpan²⁶* Minji- Gen thing-Acc quickly transporting
 - d. **Minji-ka mwulken-ul sinsokha-n wunpan* Minji-Gen thing-Acc quick-Rel transporting

Thus VNs either behave syntactically like nouns or verbs, but according to (157) and (158), nominal properties of case and modification cannot be mixed with verbal properties of case and modification in a single construction.

²⁶ This verbal noun phrase can have the meaning of 'sombody's quickly transporting Minji's things,' but it cannot have the meaning of (158a).

4.2.1.2 Two forms of VN-ha constructions

The Korean *light verb constructions* (LVCs) involving the combination of the light verb *ha* 'do' and a VN have been much studied (see Chae 1996, 2002, Choi and Wechsler 2001, *inter alia*, and similar Japanese examples in Miyagawa 1989, Matsumoto 1996, among others). VN-*ha* constructions have two forms: in (159a) the VN is marked with the accusative case, but in (159b) the VN is lexically incorporated onto *ha*.

- (159) a. ku-ka swuhak-ul kongpwu-lul hay-ss-ta.
 he-Nom math-Acc studying-Acc do-Pst-Dec
 (lit.) 'He did studying math.' = 'He studied math.'
 - b. ku-ka swuhak-ul kongpwuhay-ss-ta.
 he-Nom math-Acc studying.do-Pst-Dec
 (lit.) 'He did studying math.' = 'He studied math.'

These two forms seem to have no significant meaning difference. Japanese VN-*suru* constructions also have two forms; the following examples are from Shimida and Kordoni (2001). In (160a), VN has the accusative case marker *-o*, the object (*eigo* 'English') of the VN has the genitive case marker *-no*. In (160b) VN has no case marker and the accusative case marker is attached to the object of the VN.

- (160) a. Taroo-ga eigo-no BENKYOO-o sita. Taro-Nom English-Gen study-Acc did 'Taro studied English.'
 - b. *Taroo-ga eigo-o BENKYOO sita*.
 Taro-Nom English-Acc study did
 'Taro studied English.'

Although light verbs are the syntactic heads of VN-*ha* constructions, the core meanings of these sentences come from the verbal nouns. The mixed properties of VNs in the construction have attracted much research on these constructions (see Grimshaw & Mester 1988, Manning 1993, Cho and Sells 1995, Choi and Wechsler 2001, among others). For instance, in (161a) the arguments have verbal cases, which are presumably assigned by the VN, but at the same time the VN can be modified by the adjective. However, in (161b), the subject cannot have the genitive *-uy*, while in (161c) the object has *-uy*. And in (161d), only verbal properties of case and modification appear.

- (161) a. ku-ka chenmwunhak-ul [[cisokceki-n yenkwu-lul] hay-ss-ta].
 he-Nom astronomy-Acc consistent-Rel research-Acc do-Pst-Dec
 'He did consistent research in astronomy.'
 - b. **ku-uy chenmwunhak-ul cisokceki-n yenkwu-lul hay-ss-ta*. he-Nom astronomy-Acc consistent-Rel research-Acc do-Pst-Dec

- c. ku-ka [[chenmwunhak-uy cisokceki-n yenkwu-lul] hay-ss-ta].
 he-Nom astronomy-Gen consistent-Rel research-Acc do-Pst-Dec
 'He did consistent research in astronomy.'
- d. *ku-ka chenmwunhak-ul cisokcekiulo [[yenkwu-lul] hay-ss-ta]*.
 he-Nom astronomy-Acc consistently research-Acc do-Pst-Dec
 'He consistently did research in astronomy.'

When the VN is overtly accusative as in (161), there are basically two options for how the VN combines syntactically with the light verb: the VN or VNP (verbal noun phrase) (e.g. *cisokceki-n yenkwu-lul* 'consistent research') first combines with the accusative object and the resulting phrase is then combined with the light verb, or the VN or VNP combines directly with the light verb first and then the resulting phrase combines with the accusative object. This is an interesting syntactic problem *per se*, but since its exact syntactic structure is irrelevant for the interpretations of the VN-*ha* constructions, I assume that, as represented in (161), the VN or VNP and the light verb directly form a constituent in the syntactic form of VN-*ha* constructions. As already seen in (157) and (158), nominal and verbal properties in terms of case and modification cannot be mixed in a single construction. The mixed properties appearing in (161), but not in (157) and (158). A possible hypothesis for (161) is that the arguments of the VN or VNP (e.g. *cisokceki-n yenkwu-lul* 'consistent research') are passed up to the light verb when the light verb combines with it, the combination

consistently assigns the nominative case -i/-ka to the subject, and the object is assigned the accusative case -ul/-lul by the combination, as in (161a) and (161d), or the genitive case -uy by the VN or VNP, as in (161c).

However, in the following lexical forms of VN-*ha* constructions, only verbal properties of case and modification are available:

- (162) a. ku-ka chenmwunhak-ul (*cisokceki-n) yenkwuhay-ss-ta.
 he-Nom astronomy-Acc consistent-Rel research.do-Pst-Dec
 'He did research in astronomy.'
 - b. **ku-uy chenmwunhak-ul yenkwuhay-ss-ta*. he-Gen astronomy-Acc research.do-Pst-Dec
 - c. **ku-ka chenmwunhak-uy yenkwuhay-ss-ta.* he-Nom astronomy-Gen research.do-Pst-Dec
 - d. *ku-ka chenmwunhak-ul cisokcekiulo yenkwuhay-ss-ta*.
 he-Nom astronomy-Acc consistently research.do-Pst-Dec
 'He consistently did research in astronomy.'

So the lexical forms behave like a single verb. Rather than listing the individual verbs in the lexicon, it is presumably better to license them via a lexical rule. Through this, we can capture the generalizations regarding the relations between VNs and the light verb.

What does the light verb ha 'do' correspond to in the event structures of the

VN-*ha* constructions? The light verb seems to be able to be stacked, as shown in the following, although this stacking is marked:

- (163) a. ku-ka swuhak-ul kongpwu-lul ha-ki-lul hay-ss-ta.
 he-Nom math-Acc studying-Acc do-Nmz-Acc do-Pst-Dec
 (lit.) 'He did doing studying math.' = 'He studied math.'
 - b. ku-ka Mary-wa tayhwa-lul ha-ki-lul hay-ss-ta.
 he-Nom Mary-with talking-Acc do-Nmz-Acc do-Pst-Dec
 (lit.) 'He did doing talking with Mary.' = 'He talked with Mary.'
 - c. ku-ka toci-lul kensel-ul ha-ki-lul hay-ess-ta.
 he-Nom city-Acc construction-Acc do-Nmz-Acc do-Pst-Dec (lit.) 'He did doing the construction of the city.'
 - = 'He constructed the city.'

Even though the light verb is stacked in these examples, they have no significant meaning difference from those without the stacking. The light verb can be also stacked in the lexical forms of VN-*ha* constructions:

(164) a. ku-ka swuhak-ul kongpwuha-ki-lul hay-ss-ta.
he-Nom math-Acc studying.do-Nmz-Acc do-Pst-Dec
(lit.) 'He did doing studying math.' = 'He studied math.'

- b. ku-ka Mary-wa tayhwaha-ki-lul hay-ss-ta.
 he-Nom Mary-with talking.do-Nmz-Acc do-Pst-Dec
 (lit.) 'He did doing talking with Mary.' = 'He talked with Mary.'
- c. ku-ka toci-lul kenselha-ki-lul hay-ss-ta.
 he-Nom city-with construction.do-Nmz-Acc do-Pst-Dec (lit.) 'He did doing the construction of the city.'
 - = 'He constructed the city.'

This suggests that the light verb in VN-*ha* constructions contributes no (significant) meaning. Rather, in the syntactic forms of VN-*ha* constructions the light verb functions as the syntactic head of the constructions; in the lexical forms of the constructions, it restricts the lexical combination of the VN and the light verb to have only verbal properties. In other words, its contributions are entirely syntactic.

4.2.2 Accomplishments involving VN-ha constructions

It seems evident that some VN-*ha* constructions (e.g. headed by *phakwoyha*-'destroying.do' or *kenselha*- 'construction.do') are accomplishments, since the corresponding English verbs are canonical accomplishments. But in this section, I explicitly show that such VN-*ha* constructions are really accomplishments based on the grammatical properties of typical Korean accomplishments. If it is grammatically verified that VN-*ha* constructions are accomplishments, we can then ask if they also allow failed-attempt interpretations. Before I show that this prediction is borne out, some pieces of evidence in favor of the categorization of some VN-*ha* constructions as accomplishments are presented below.

First, VN-*ha* constructions in the progressive entail non-completion of the events denoted by the constructions.

(165) a. ku-ka kenmwul-ul phakwoyha-ko/ phakwoy-lul he-Nom building-Acc destroying.do-Pst-Dec/destroying-Acc ha-ko iss-ess-ko, #ku ttay imi kenmwul-i do-Comp exist-Pst-Dec the time already building-Nom phakwoy-toy-ess-ta.

destroying-do.Pass-Pst-Dec

'He was destroying the building, and #at that time the building was already destroyed.'

b. ku-ka taym-uy swumwun-ul kaypangha-ko/ kaypang-ul
he-Nom dam-Gen sluice-Acc opening.do-Comp/opening-Acc
ha-ko iss-ess-ko, #ku ttay imi swumwun-i
do-Comp exist-Pst-Dec the time already sluice-Nom
kaypang-toy-ess-ta.

opening-do.Pass-Pst-Dec

'He was opening of the sluice of the dam, and #at that time the sluice was already opened.'

Second, when the VN-*ha* constructions appear with a *maney*-phrase (*in*-phrase), they are ambiguous between ingressive and telic readings:

(166) a. ku-ka kenmwul-ul sip pwun maney phakwoyhay-ss-ta/
he-Nom building-Acc ten minute in destroying.do-Pst-Dec/
phakwoy-lul hay-ss-ta.
destroying-Acc do-Pst-Dec
(lit.) 'He did the destroying of the building in 10 minutes.'

= 'He destroyed the building in 10 minutes.'

(ingressive or telic reading)

b. ku-ka taym-uy swumwun-ul sip pwun maney
he-Nom dam-Gen sluice-Acc ten minute in
kaypanghay-ss-ta/kaypang-ul hay-ss-ta.
opening.do-Pst-Dec/opening-Acc do-Pst-Dec
(lit.) 'He did the opening of the sluice of the dam in 10 minutes.'
= 'He opened the sluice of the dam in 10 minutes.'

(ingressive or telic reading)

Third, the VN-*ha* construction with *again* is ambiguous between repetitive and restitutive readings:

(167) ku-ka taci kenmwul-ul phakwoyhay-ss-ta/
he-Nom again building-Acc destroying.do-Pst-Dec/
phakwoy-lul hay-ss-ta.
destroying-Acc do-Pst-Dec
'He destroyed the building again.'
1. Repetitive interpretation: Entails that he destroyed the building and

presupposes that he destroyed it before.

2. Restitutive interpretation: Entails that he destroyed the building and presupposes that it was in a destroyed state before.

(168) ku-ka taci taym-uy swumwun-ul kaypanghay-ss-ta/

he-Nom again dam-Gen sluice-Acc opening.do-Pst-Dec/

kaypang-ul hay-ss-ta.

opening-Acc do-Pst-Dec

'He opened the sluice of the dam again.'

1. Repetitive interpretation: Entails that he opened the sluice of the dam and presupposes that he opened it before.

2. Restitutive interpretation: Entails that he opened the sluice of the dam and presupposes that it was open before.

These grammatical constructions lead us to conclude that the predicates of the VN-*ha* constructions are accomplishments.

4.2.3 Interpretations of VN-ha constructions

Based on the intention-based analysis of accomplishments, if a VN-*ha* construction is an accomplishment, it should allow actual-result or failed-attempt readings. This prediction is borne out. First, in (169), failed-attempt readings of VN-*ha* constructions are illustrated.

- (169) a. ku-ka kenmwul-ul phakwoy-hay-ss-ta.
 he-Nom building-Acc destroying.do-Pst-Dec kulena kenmwul-i cenye phakwoy-toy-ci anh-ass-ta.
 but building-Nom at.all destroying-Pass-Comp Neg-Pst-Dec (lit.) 'He did destroying the building, but it was not destroyed at all.'
 = 'He tried to destroy the building, but it was not destroyed at all.'
 - b. ku-ka kenmwul-ul phokpha-hay-ss-ta.
 he-Nom building-Acc exploding-do-Pst-Dec
 kulena kenmwul-i cenye phokpha-toy-ci anh-ass-ta.
 but building-Nom at.all exploding-Pass-Comp Neg-Pst-Dec
 (lit.) 'He did exploding the building, but it was not exploded at all.'
 = 'He tried to explode the building, but it was not exploded at all.'

The clause beginning with *kulena* 'but' is contradictory with the actual-result readings, leaving only the failed-attempt readings. The sentences in (170a) and

(170b), which deny the subject's intention, cannot follow (169a) and (169b), respectively. These contradictions show that failed-attempt readings require the subject's intention.

- (170) a. ...#kuliko kenmwul-ul phakwoyha-l uyto-ka eps-ess-ta.
 and building-Acc destroy-Rel intention-Nom not.exist-Pst-De
 '...And he did not have an intention of destroying the building.'
 (in the context of (169a))
 - b. ...#kuliko kenmwul-ul phokphaha-l uyto-ka eps-ess-ta.
 and building-Acc exploding-Rel intention-Nom not.exist-Pst-Dec
 '...And he did not have an intention of exploding the building.'
 (in the context of (169b))

When the events are unintended, the VN-*ha* constructions must be interpreted as nonintentional actual-result readings, as shown in the following:

(171) a. ku-ka uytohacianhkey kenmwul-ul phakwoy-hay-ss-ta.
he-Nom unintentionally building-Acc destroying-do-Pst-Dec
#kulena kenmwul-i phakwoy-toy-ci anh-ass-ta.
but building-Nom destroying-Pass-Comp Neg-Pst-Dec
'He unintentionally destroyed the building, #but it was not destroyed.'

b. ku-ka uytohacianhkey kenmwul-ul phokpha-hay-ss-ta.
he-Nom unintentionally building-Acc exploding-do-Pst-Dec
#kulena kenmwul-i phokpha-toy-ci anh-ass-ta.
but building-Nom exploding-Pass-Comp Neg-Pst-Dec
'He unintentionally exploded the building, #but it was not exploded.'

The first sentence in (171a) cannot be felicitously used in, for instance, the context where Tom accidentally pushed the button connected to the dynamite set up in the building for its destruction, but the dynamite did not explode due to problems in the electrical wiring between the button and the dynamite, and so the building was intact, and similarly for (171b).

The interpretations of the VN-*ha* constructions are also restricted to actualresult readings when they are modified by a degree adverb like *cokum* 'a little' or *wancenhi* 'completely.' Among the actual-result readings, the complete-result reading is the unmarked reading. In the following examples, the second sentence explicitly describes the partial or complete realization of the inherent result of the accomplishment VN-*ha* construction. (172) a. ku-ka kenmwul-ul phakwoy-hay-ss-ko,
he-Nom building-Acc destroying-do-Pst-Dec kenmwul-i cokum/wancenhi sonsang-toy-ess-ta.
building-Nom a.little/completely damage-Pass-Pst-Dec (lit.) 'He destroyed the building, and it was a little/completely damaged.'
b. ku-ka say kenmwul-ul selkyey-hay-ss-ko,

he-Nom new building-Acc design-do-Pst-and *toan-i* cokum/wancenhi wanseng-toy-ess-ta.
design-Nom a.little/completely completion-do.Pass-Pst-Dec
(lit.) 'He designed a new building, and the design was a little/completely done.'

In the English translations for (172), the second clauses may be redundant. Since the English accomplishment verb *destroyed* or *designed* entails the realization of the result state, it is not necessary to confirm the occurrence of the result state using the second clause. But the first Korean clauses themselves can be interpreted as actual-result or failed-attempt readings, and the second clauses following them ensure the realization of the result states. That is, this forces the first clauses to be interpreted as having actual-result readings.

When a VN-*ha* construction is interpreted as an actual-result reading, it can be either intentional or non-intentional. This fact is shown by explicit modification by adverbs like *uytohacianhkey* 'unintentionally' or *uytocekulo* 'intentionally':

(173) a. ku-ka uytohacianhkey/uytocekulo kenmwul-ul
he-Nom unintentionally/intentionally building-Acc
phakwoy-hay-ss-ko kenmwul-i cokum/wancenhi
destroying-do-Pst-and building-Nom a.little/completely
sonsang-toy-ess-ta.
damage-Pass-Pst-Dec
(lit.) 'He unintentionally/intentionally destroyed the building, and it was a

little/completely damaged.'

b. ku-ka uytohacianhkey/uytocekulo kenmwul-ul
he-Nom unintentionally/intentionally building-Acc
phokpha-hay-ss-ko kenmwul-i cokum/wancenhi
exploding-do-Pst-and building-Nom a.little/completely
phokpha-toy-ess-ta.
exploding-do.Pass-Pst-Dec
(lit.) 'He unintentionally/intentionally exploded the building, and it was a
little/completely exploded.'

Thus VN-*ha* accomplishments can have either an actual-result or failed-attempt interpretation. The examples above are the lexical forms of the VN-*ha* constructions; the corresponding syntactic forms of the VN-*ha* constructions have the same property. Other verbs associated with accomplishment VN-*ha* constructions include *kenselha*-'building.do', *ceyponha*- 'bookbinding.do', *poksaha*- 'copying.do', *selchihay*- 'setting.up.do', *chupangha-* 'banishment.do', *chehyengha-* 'execution.do', *honhapha-*'mixing.do', *celtanha-* 'cutting.do', *yenkyelha-* 'connecting.do', *chatanha-*'disconnecting.do', *caksengha-* 'writing.do', and *cakkokha-* 'composing.do.' They are very productive in Korean.

4.2.4 The subject's intention in VN-ha constructions

Based on the Subject Intention Generalization for lexical accomplishments, we expect that if the subject of a VN-*ha* construction cannot have intentions, then failed-attempt interpretations are not possible and only actual-result interpretations are permitted. In the following VN-*ha* construction, the subject is a natural force, and the actual-result readings are obligatory:

(174) kangpwung-i ku cip-ul phakwoy-hay-ss-ta.
strong.wind-Nom the house-Acc destroying-do-Pst-Dec
#haciman cip-i cokumto phakwoy-toy-ci anh-ass-ta.
but house at.all destroying-do.Pass-Comp Neg-Pst-Dec
'The strong wind destroyed the house. #But the house was not destroyed at all.'

VN-*ha* constructions furthermore cannot be modified by adverbs like *uytocekulo* 'intentionally' or *uytohacianhkey* 'unintentionally':

(175) kangpwung-i ku cip-ul (#uytocekulo/#uytohacianhkey) strong.wind-Nom the house-Acc intentionally/ unintentionally phakwoy-hay-ss-ta. kulayse cip-i cokum/wancehi destroying-do-Pst-Dec so house-Nom a.little/completely phakwoy-toy-ess-ta. destroying-do.Pass-Pst-Dec

'The strong wind destroyed the house. So the house was destroyed a little/completely.'

The natural force *kangpwung* 'strong wind' has the physical power to destroy the house, but this force of nature cannot have intentions, so failed-attempt interpretations are not available for the sentence.

In (176), the subject is an instrument that can destroy the house. Although the instrument can be used by people, the instrument itself cannot have intentions. So the VN-*ha* construction in (176) again cannot have a failed-attempt reading.

(176) [Context: The soldiers intentionally used the tank to destroy the house.] *tayngkhu-ka ku cip-ul phakwoy-hay-ss-ta.*tank-Nom the house-Acc destroying-do-Pst-Dec *#kulena cokumto phakwoy-toy-ci anh-ass-ta.*but at.all destroying-do.Pass-Comp Neg-Pst-Dec
'The tank destroyed the house. #But the house was not destroyed at all.'

In (176) a failed-attempt reading is not available for the VN-*ha* construction even in the context in which the soldiers have an intention to destroy the house by using the tank. Also the VN-*ha* construction cannot be modified by an intention-related adverb:

(177) tayngkhu-ka ku cip-ul (#uytocekulo/#uytohacianhkey)
tank-Nom the house-Acc intentionally/ unintentionally
phakwoy-hay-ss-ta. kulayse cip-i cokum/wancehi
destroying-do-Pst-Dec so house-Nom a.little/completely
phakwoy-toy-ess-ta.
destroying-do.Pass-Pst-Dec
'The tank destroyed the house. So the house was destroyed a

little/completely.'

In (178), the subject is not Jane, but her negligence or mistake. It seems nonsensical to say that an attitude or event itself can have an intention. Thus an intention cannot be ascribed to the subject, *Jane's carelessness* or *Jane's mistake*, in the VN-*ha* construction in (178). Consequently, as expected, it cannot have a failed-attempt interpretation:

(178) Jane-uy pwucwuuy-/silswu-ka cip-ul phakwoy-hay-ss-ta.
Jane-Gen carelessness-/mistake-Nom house-Acc destroying-do-Pst-Dec
#haciman cip-i cokumto phakwoy-toy-ci anh-ass-ta.
but house at.all destroying-do.Pass-Comp Neg-Pst-Dec
'Jane's negligence/mistake destroyed the house. #But it was not destroyed at all.'

Furthermore, an intention-related adverb such as *uytocekulo* 'intentionally' or *uytohacianhkey* 'unintentionally' cannot modify the VN-*ha* construction:

(179) Jane-uy pwucwuuy-/silswu-ka cip-ul (#uytocekulo/ Jane-Gen negligence-/mistake-Nom house-Nom intentionally/ #uytohacianhkey) phakwoy-hay-ss-ta. #haciman cip-i cokumto unintentionally destroying-do-Pst-Dec but house-Nom at.all phakwoy-toy-ci anh-ass-ta.
destroying-do.Pass-Comp Neg-Pst-Dec
'Jane's negligence/mistake destroyed the house. #But the house was not destroyed at all.'

We sometimes see that in cartoons or fantasy movies, non-sentient objects are described as sentient. In such a context, then, failed-attempt readings are permitted:

(180) [Context: In a fantasy, the strong wind and tank are sentient beings.]

kangpwung-nim-i/tayngkhu-nim-iku cip-ulstrong.wind-Hon-Nom/tank-Hon-Nomthe house-Accphakwoy-hay-ss-ta.kulena cokumtophakwoy-toy-cidestroying-do-Pst-Decbutat.alldestroy-do.Pass-Companh-ass-ta.

Neg-Pst-Dec

(lit.) 'The strong wind/tank destroyed the house. But it was not destroyed at all.'

The subjects in (180) are marked with the honorific morpheme *-nim*, which is generally attached to expressions of humans in Korean. This facilitates interpreting the subjects as sentient beings in fantasy contexts.

When the subject of a VN-*ha* construction is *hayngtong* 'action,' only actualresult interpretations are allowed:

(181) Jane-uy nanphokha-n hayngtong-i ku cip-ul phakwoy-hay-ss-ta.
Jane-Gen violent-Rel action-Nom the house-Acc destroying-do-Pst-Dec
#haciman cip-i cokumto phakwoy-toy-ci anh-ass-ta.
but house at.all destroying-do.Pass-Comp Neg-Pst-Dec
'Jane's violent action destroyed the house. #But it was not destroyed at all.'

This VN-ha construction cannot be modified by uytocekulo 'intentionally' or

uytohacianhkey 'unintentionally':

(182) Jane-uy nanphokha-n hayngtong-i ku cip-ul (#uytocekulo/ Jane-Gen violent-Rel action-Nom the house-Acc intentionally/ #uytohacianhkey) phakwoy-hay-ss-ta. #haciman cip-i cokumto unintentionally destroying-do-Pst-Dec but house at.all phakwoy-toy-ci anh-ass-ta. destroying-do.Pass-Comp Neg-Pst-Dec
'Jane's violent action destroyed the house. #But it was not destroyed at all.'

Summarizing, the subject's intention is required for failed-attempt interpretations of VN-*ha* constructions just as with lexical accomplishments. As for actual-result (i.e. partial-result or complete-result) interpretations of VN-*ha* constructions, the subject's intention is not necessary, again like lexical accomplishments. These conform to the Subject Intention Generalization.

4.2.5 Passives of VN-ha constructions

The passive form of the light verb *ha* 'do' is *toy*. Like its active counterpart, the passive counterpart of the active VN-*ha* construction has two forms, syntactic and lexical:

- (183) a. kenmwul-i ku-eyuyhay phakwoy-ka/*lul toy-ess-ta.
 building-Nom he-by destroying-Nom/Acc do.Pass-Pst-Dec
 'The building was destroyed by him.'
 - b. *kenmwul-i ku-eyuyhay phakwoy-toy-ess-ta*.
 building-Nom he-by destroying-do.Pass-Pst-Dec
 'The building was destroyed by him.'

In (183a), the nominative case marker *-ka* is attached to the VN *phakwoy* 'destroying' and the passive light verb *toy* is syntactically related to the nominative VN. However, in (183b) the VN and the passive light verb *toy* are combined lexically as a single word. Like the two forms of active VN-*ha* constructions, I see no significant meaning difference between the two forms of the passive counterparts. The passive VN-*ha* constructions furthermore have only actual-result readings, as illustrated in (184).

(184) a. kenmwul-i ku-eyuyhay phakwoy-toy-ess-ta/
building-Nom he-by destroying-do.Pass-Pst-Dec
phakwoy-ka toy-ess-ta.
destroying-Nom do.Pass-Pst-Dec
#kulena kenmwul-i kutaylo-i-ta.
but building-Nom same-Cop-Dec
'The building was destroyed by him. #But it was the same.'

b. kenmwul-i ku-eyuyhay kensel-toy-ess-ta/
building-Nom he-by construction-do.Pass-Pst-Dec
kensel-i toy-ess-ta.
construction-Nom do.Pass-Pst-Dec
#kulena kenmwul-i cenhye ci-e ci-ci anh-ass-ta.
but building-Nom at.all make-Comp Pass-Comp Neg-Pst-Dec
'The building was constructed by him. #But it was not made at all.'

The cancellation of the result of destroying or constructing in (184) is contradictory with the first sentence. This indicates that the occurrences of the results are required in the passive VN-*ha* sentences.

Passive VN-*ha* constructions are also unspecified regarding the actor's intention. Either *uytohacianhkey* 'unintentionally' or *uytocekulo* 'intentionally' can modify the passive VN-*ha* constructions, as shown in the following:

(185) kenmwul-i ku-eyuyhay uytohacianhkey/uytocekulo
building-Nom he-by unintentionally/intentionally
phakwoy-toy-ess-ta.
destroying-do.Pass-Pst-Dec
kulayse kenmwul-i cokum/wancenhi sonsang-toy-ess-ta.
so building-Nom a.little/completely damage-Pass-Pst-Dec
'The building was destroyed by him unintentionally/intentionally, so it was a little/completely damaged.'

The passive construction in (186) has a sentient subject who can have an intention. Like the other passive constructions above, however, it disallows the failed-attempt interpretation: (186) [Context 1: Jane intentionally helped Tom to bind her.]

[Context 2: Jane tried to avoid being bound by Tom.]Jane-iTom-eyuyhayuytohacianhkey/uytocekuloJane-Nom Tom-byunintentionally/intentionallyphopak-toy-ess-ta.#kulena Jane-imwukk-i-cibinding-do.Pass-Pst-DecbutJane-Nom tie-Pass-Companh-ass-ta.Image: Complex comple

Neg-Pst-Dec

'Jane was bound by Tom unintentionally/intentionally. #But Jane was not tied.'

The intention-related adverbs explicitly appearing in the passive construction in (186) are construed as only applying to the demoted agent, Tom. However, the patient subject can also have (non-)intention regarding the binding event, if the sentence is used in the contexts given in (186). In either case, though, failed-attempt readings are not available for passive constructions. By contrast, in the following active counterpart (187), the agent subject must have intention about the binding event for the failed-attempt interpretation no matter whether the patient object has intention about the binding event or not; the sentences in (187) can be used only in Context 1 and 2 given in (187).

(187) [Context 1: Tom tried to bind Jane, and Jane tried to be bound by Tom.]
 [Context 2: Tom tried to bind Jane, and Jane tried to avoid being bound by Tom.]

[Context 3: Tom unintentionally pushed a button for binding Jane, and Jane tried to be bound by Tom.]

[Context 4: Tom unintentionally pushed a button for binding Jane, and Jane tried to avoid being bound by Tom.]

Tom-iJane-ulphopak-hay-ss-ta.kulenaJane-iTom-NomJane-Accbinding-do-Pst-DecJane-Nommwukk-i-cianh-ass-ta.tie-Pass-CompNeg-Pst-Dec(lit.) 'Tom boundJane.ButJane was nottied.'

These data show again that passives have only actual-result interpretations, which can be accounted for by the Subject Realization Generalization: in (187), the patient subject is directly related to the caused event of the binding event, and so the caused event must occur, which requires the occurrence of the causing event in the event structure of the construction.

4.3 Qualia light verb ha 'do'

In the previous section, I showed that VN-ha constructions, whose predicates are

accomplishments, can have failed-attempt interpretations; these failed-attempt readings require the subject's intention. But actual-result interpretations of VN-*ha* constructions do not require the subject's intention. In this section, I show that another type of light verb construction (namely, qualia-*ha* constructions) are parallel to the VN-*ha* constructions regarding the properties of failed-attempt and actual-result interpretations. Unlike VN-*ha* constructions, qualia-*ha* constructions must have common nouns as the object of the light verb *ha* 'do' but a common property they share is that the core meanings of the constructions come from the nominal complement of the light verb rather than the light verb itself.

4.3.1 Basic properties of the qualia-ha construction

The light verb ha 'do' in a light verb construction can have a specific meaning according to its common noun object. For example, in the following minimal pairs, we see that the light verb ha 'do' receives a specific meaning depending on its common noun object (cf. Im and Lee 2004, and see Lee 2011a, 2012).

(188) ku-ka pap-ul hay-ss-ta/pap-hay-ss-ta.²⁷
ku-Nom rice-Acc do-Pst-Dec/rice-do-Pst-Dec
(lit.) 'He did the rice.' = 'He cooked the rice.'

²⁷ The common noun pap 'rice' means cooked rice. Uncooked rice is ssal in Korean.

- (189) ku-ka khephi-lul hay-ss-ta/khephi-hay-ss-ta.
 ku-Nom coffee-Acc do-Pst-Dec/coffee-do-Pst-Dec
 (lit.) 'He did the coffee.' = 'He brewed/ drank the coffee.'
- (190) ku-ka nokcha-lul hay-ss-ta/nokcha-hay-ss-ta.
 ku-Nom green.tea-Acc do-Pst-Dec/green.tea-do-Pst-Dec
 (lit.) 'He did the green tea.' = 'He brewed/ drank the green tea.'
- (191) ku-ka panchan-ul hay-ss-ta/panchan-hay-ss-ta.
 ku-Nom side.dish-Acc do-Pst-Dec/side.dish-do-Pst-Dec
 (lit.) 'He did the side dish.' = 'He made the side dish.'
- (192) ku-ka khemphywuthe-lul hay-ss-ta/khemphywuthe-hay-ss-ta.
 ku-Nom computer-Acc do-Pst-Dec/computer-do-Pst-Dec
 (lit.) 'He did the computer.' = 'He used the computer.'
- (193) ku-ka moca-lul hay-ss-ta/moca-hay-ss-ta.
 ku-Nom hat-Acc do-Pst-Dec/hat-do-Pst-Dec
 (lit.) 'He did the hat.' = 'He put on the hat.'

For example, in (189), when the object is *khephi* 'coffee,' the light verb *ha* 'do' is interpreted as having the meaning of *brew* or *drink*.²⁸

²⁸ The common noun *khephi* 'coffee' has the two associated meanings, *brew* and *drink*, but the former seems to be more frequently used than the latter: without a context, the default interpretation is *brew*. But if a certain context is given, *drink* is selected as the associated meaning for *khephi* 'coffee.' For instance, assume that Susan always drinks coffee after dinner. Bill knows this, and after Bill ate the

The common noun objects in the above examples can be marked with the accusative case -(l)ul, or they can be incorporated onto the light verb. Generally, if a common noun has an associated meaning in relation to the light verb, then the light verb construction has two forms, a syntactic form and a lexical form. Note that VNha constructions discussed in the previous section also have two forms. These variants have no significant meaning difference. Thus I stick to the syntactic form in the discussion of the common noun light verb constructions below.

The use of the light verb in these constructions is very productive in Korean (e.g. *kwukswu-lul ha-ta* (lit.) 'does noodle' = 'cook noodle,' *sutheikhu-lul ha-ta* (lit.) 'does steak' = 'bake steak,' *kimchi-lul ha-ta* (lit.) 'does Kimchi' = 'make Kimchi,' *mokkeli-lul ha-ta* (lit.) 'does necklace' = 'put on necklace,' *nekthai-lul ha-ta* (lit.) 'does necklace' = 'put on necklace,' *nekthai-lul ha-ta* (lit.) 'does necklace' = 'put on necklace,' *nekthai-lul ha-ta* (lit.) 'does necktie' = 'put on necktie,' *kwikeli-lul ha-ta* (lit.) 'does earrings' = 'wear earring,' *kicekwi-lul ha-ta* (lit.) 'does diaper' = 'put on diaper'). However, not every common noun can appear as the object in the construction:

(194) #ku-ka mwul-lul hay-ss-ta.

ku-Nom water-Acc do-Pst-Dec

(195) #ku-ka kawi-lul hay-ss-ta.

ku-Nom scissors-Acc do-Pst-Dec

dinner with Susan, he asked the following question:

ⁱ⁾ *khephi-ha-le ka-l-kka-yo*?
coffee-do-to go-Fut-Que-Hon
(lit.) 'Would you go to do a coffee?' = 'Would you go to drink a coffee?'

(196) #ku-ka yenphil-ul hay-ss-ta. ku-Nom pencil-Acc do-Pst-Dec

(197) #ku-ka sinpal-ul hay-ss-ta.

ku-Nom show-Acc do-Pst-Dec

Comparing the grammatical and ungrammatical sentences, we see that the common noun objects are basically responsible for the (un)grammaticality. Alternatively, we may hypothesize that the light verb ha 'do' is ambiguous and has multiple meanings each of which is separately listed in the lexicon (e.g. ha-1 'cook,' ha-2 'brew,' ha-3 'drink,' ha-4 'use,' ha-5 'put on,' etc.), but this assumption again requires unwanted and unmotivated proliferation in the lexicon, is not compatible with the basic assumption that the verb ha 'do' is light, and misses the generalization that the meanings of the constructions are derived primarily from the common noun objects.

Rather, based on the my previous work (Lee 2011a, 2011b, 2012), we can instead say that certain common nouns lexically have information about predicates that can apply to them. Pustejovsky (1991) refers to this relation as cospecification; just as a verb can select for its argument type (e.g. *kick* selects arguments like *ball*, but not *happiness*), an argument also can select a particular associated predicate to apply to it (e.g. *ball* may select a predicate like *kick*, but not *read*). The associated predicate information forms the Qualia Structure of a lexical item (Pustejovsky 1991). In the Qualia Structure, the Telic Role consists of values about the purpose and function of

an object (e.g. *read* for novel), and the Agentive Role has values on factors involved in the origin of an object (e.g. *write* for novel). I thus call the common noun light verb constructions qualia-*ha* constructions.

If the light verb really receives the meaning of an associated predicate from the common noun object, we predict that the different interpretations of *ha* 'do' should behave differently regarding aspect. This is verified in the following sentences modified with the temporal adverbial involving *maney* 'in':

- (198) Olson-i pap-ul han sikan maney hay-ss-ta.
 Olson-Nom rice-Acc one hour in do-Pst-Dec
 'Olson cooked the rice in an hour.' (telic or ingressive reading)
- (199) Olson-i khemphwuthe-lul han sikan maney hay-ss-ta.
 Olson-Nom computer-Acc one hour in do-Pst-Dec
 'Olson used the computer in an hour.' (ingressive reading)

In (198), since the associated verbal meaning of *pap* 'rice' is *cook*, it is ambiguous between the ingressive and telic readings with the *maney*-phrase (*in*-phrase). But in (199), the related verbal meaning of *khemphwuthe* 'computer' is *use*, different from *cook*, and it has only the ingressive reading with the *maney*-phrase (*in*-phrase). Thus the lexical aspect of the overall predicate is contingent on the choice of common noun.

Another piece of evidence for distinct associated predicates with different

common nouns can be shown with NP-coordination constructions. We can hypothesize that the two NP conjuncts in (200) cannot be conjoined, since they have different associated predicates (*cook* for *panchan* 'side dish' and *use* for *khemphywuthe* 'computer').

(200) #Jenny-ka panchan-kwa (kuliko) khemphuthe-lul hay-ss-ta.
Jenny-Nom side.dish-and and computer-Acc do-Pst-Dec (int.) 'Jenny cooked the side dish and used the computer.'

If NP conjuncts have the same associated predicates, the NP conjuncts should be conjoinable. This prediction is borne out in (201).

(201) Jenny-ka panchan-kwa (kuliko) pap-ul hay-ss-ta.
Jenny-Nom side.dish-and and rice-Acc do-Pst-Dec
'Jenny cooked the side dish and the rice.'

As shown above, both *khephi* 'coffee' and *nokcha* 'green.tea' have *brew* as their agentive role and *drink* as their telic role. Thus two nouns can be conjoined in NP-coordination constructions headed by the light verb only if the light verb is interpreted in terms of the same qualia role of the common noun conjuncts:²⁹

²⁹ Interestingly, in (202) if the second conjunct, *nokcha* 'green.tea,' is replaced with *pap* 'rice,' then the sentence is interpreted as 'Jenny brews coffee and cooks rice every morning.' Even though *brew* and *cook* are different predicates, the NP-coordination construction is acceptable. Then in general the light verb in the NP-coordination constructions should be interpreted as having the same type of qualia role as the common noun conjuncts. I have been working on this phenomenon in another paper on coordination, and do not go into details here.

(202) Jenny-nun mayil achim khephi-wa (kuliko) nokcah-lul ha-n-ta.
Jenny-Top every morning coffee-and and green.tea-Acc do-Pnt-Dec
'Jenny brews coffee and green tea every morning.'
'Jenny drinks coffee and green tea every morning.'
#'Jenny brews coffee and drinks green tea every morning.'
#'Jenny drinks coffee and brews green tea every morning.'

These pieces of grammatical evidence support the idea that some common nouns in Korean have lexically associated predicates (i.e. qualia) that the meaning of the overall LVC is headed on.

In earlier work (Lee 2011a, 2011b, 2012), I argued that Korean common nouns have dual semantic components, the first of which is the meaning of the common noun itself (e.g. rice relation for *pap* 'rice') and the second of which are the associated predicate meanings (e.g. cook relation for *pap* 'rice') (see Copestake and Briscoe 1995 for qualia roles in feature structure). However, common nouns like *mwul* 'water' have no value for their qualia roles. Although the predicate *masi-* 'drink' appears to be a good candidate for the telic role of *mwul* 'water,' there seems to be no grammatical evidence suggesting that *masi-* 'drink' is really used as a telic role for *mwul* 'water.' Even if a very specific context is given, *mwul* 'water' cannot have *drink* as its telic role (see Lee 2011a):

(203) [Context: Everybody is supposed to drink water. Then Jane asked Tom "Did you drink water?" Tom answered:]
#ung, na-to muwl-ul hay-ss-e.
yes I-also water-Acc do-Pst-Dec
(int.) 'Yes, I also drank water.'

Thus *masi-* 'drink' seems to not yet be conventionalized as an associated predicate of the common noun *mwul* 'water.' Similarly, *calu-* 'cut' is a reasonable candidate for the telic role of *kawi* 'scissors' (although a pair of scissors can be used for other purposes depending on the situation), yet it cannot have *calu-* 'cut' as its telic role:

(204) [Context: Everybody is supposed to use a pair of scissors to cut tape. So Jane asked Tom "Did you use your scissors to cut tape?" Tom answered:]
#ung, na-to kawi-lul hay-ss-e.
yes I-also scissor-Acc do-Pst-Dec
(int.) 'Yes, I also used a pair of scissors to cut tape.'

The common noun *pap* 'rice' already has *cis*- 'cook' as its agentive role. But it cannot have *mek*- 'eat' as a telic role, even though a very specific context is given as in the following:

(205) [Context: Everybody is supposed to eat rice for lunch. So Jane asked Tom "Did you eat rice?" Tom answered:]
#ung, na-to pap-ul hay-ss-e.
yes I-also rice-Acc do-Pst-Dec
(int.) 'Yes, I also ate rice.'

Thus some associated meanings of those common nouns cannot be inferred from the contexts. Rather, they are idiosyncratic. Thus it is better to see the qualia roles as part of lexical meanings of common nouns (see Lee 2011a, 2012 and similar argumentation for the case of English in Asher 2011).

Interestingly, however, there are some cases in which the light verb can receive a specific predicate meaning from a context. Consider the following examples:

(206) [Context: Jane asked "What do you want to put in the salad? Apples or oranges?" Bill answered:]
sakwa hay.
apple do.Imp
(lit.) 'Do the apple' = 'Put the apple in the salad.'

(207) [Context: In a pub Jane asked "What did you order?" Bill answered:] *na-nun wain hay-ss-e*.
I-Top wine do-Pst-Dec
(lit.) 'I did wine.' = 'I ordered wine.'

In (206) the light verb has the meaning of *neh*- 'put,' but it can never have this meaning without such a context, and similarly for (207). Thus in such the cases, pragmatics plays an important role in determining the proper interpretations of the light verb *ha* 'do.' So there are at least two options for assigning a specific meaning to the light verb: i) a qualia role of the common noun object, or ii) the utterance context. Based on the given data above, the generalization is that a qualia role (i.e. a telic or agentive role) is provided from common noun objects, but other non-qualia predicates may be provided from contexts. That is, contexts do not provide a qualia role to the light verb, and common noun objects do not provide a non-qualia predicate to the light verb.

If a phrase expressing a quantity of the common noun object appears as in the following, the sentences become acceptable:

(208) ku-ka mwul-lul #(han can) hay-ss-ta.

he-Nom water-Acc one cup do-Pst-Dec'He drank a cup of water.'#'He bought/threw away a cup of water.'

(209) ku-ka yenphil-ul #(yel paksu) hay-ss-ta.
he-Nom pencil-Acc ten box do-Pst-Dec
'I made ten boxes of pencils.'
#'I bought/broke/threw away ten boxes of pencils.'

(210) ku-ka sinpal-ul #(yel kyelley) hay-ss-ta.
he-Nom shoe-Acc ten pair do-Pst-Dec
'He made ten pairs of shoes.'
#'He bought/burned/threw away ten pairs of shoes.'

However, only a certain predicate meaning is associated with the light verb in each of the examples; other plausible predicate meanings are not acceptable for the meaning of the light verb. Although how to account for the data is an interesting puzzle, I will not discuss it further. What is relevant here is the fact that some common nouns have associated verbal meanings.

In syntax, an adverb can appear in between the common noun object and the light verb, which indicates that the verb phrases of the qualia-*ha* constructions should be analyzed syntactically rather than lexically (Lee 2011a, 2011b):

- (211) Minji-ka pap-ul ppalli/chenchenhi hay-ss-ta.
 Minji-Nom rice-Acc quickly/slowly do-Pst-Dec
 'Minji quickly/slowly cooked the rice.'
- (212) Minji-ka khemphyuthe-lul achim-ey/cenyek-ey hay-ss-ta.
 Minji-Nom computer-Acc morning-in/evening-in do-Pst-Dec
 'Minji used the computer in the morning/evening.'

Summarizing, the associated verbal meanings of the common nouns serve as the

predicates of the qualia-ha constructions.

4.3.2 Accomplishments involving qualia-ha constructions

I show that a qualia predicate of a qualia-*ha* construction can be an accomplishment. First, in (213a) the first clause entails that the rice was not cooked, and in (213b) the first clause entails that the necktie was not tied.

(213) a. Mary-ka pap han kongki-lul ha-ko iss-ess-ko, #ku ttay Mary-Nom rice one bowl-Acc do-Comp exist-Pst-and the time pap-i imi toy-ess-ta. rice-Nom already do.Pass-Pst-Dec
'Mary was cooking a bowl of rice, and #at that time it was already cooked.'
b. Mary-ka nekthai-lul ha-ko iss-ess-ko, #ku ttay

Mary-Nom necktie-Acc do-Comp exist-Pst-and the time *nekthai-ka imi may-e ci-e iss-ess-ta*.³⁰ necktie-Nom already tie-Comp Pass-Comp exist-Pst-Dec 'Mary was putting on the necktie, and #at that time it was already tied.'

The contradictions in (213) show that the qualia predicates in the progressive entail

³⁰ The first clause *Mary-ka nekthai-lul ha-ko iss-ess-* 'Mary was putting on the necktie,' can denote the result state of tying the necktie, but I assume that it denotes an ongoing action of tying the necktie in this example.

that their relevant results did not obtain yet.

Second, the qualia-*ha* constructions with a *maney*-phrase (*in*-phrase) are ambiguous between ingressive and telic readings:

- (214) a. Mary-ka pap-ul o pwun maney hay-ss-ta.
 Mary-Nom rice-Acc five minute in do-Pst-Dec
 'Mary cooked rice in five minutes.' (ingressive or telic reading)
 - b. Mary- ka nekthai-lul o pwun maney hay-ss-ta.
 Mary-Nom necktie-Acc five minute in do-Pst-Dec
 'Mary put on the necktie in five minutes.' (ingressive or telic reading)

Third, the qualia-*ha* construction in (215) with *taci* 'again' is ambiguous between repetitive and restitutive readings.

(215) Mary-ka taci neykthai-lul hay-ss-ta.

Mary-Nom again necktie-Acc do-Pst-Dec

(lit.) 'Mary did the necktie again.' = ' Mary put on the necktie again.'

1. Repetitive interpretation: Entails that Mary put on the necktie and presupposes that Mary put it on before.

2. Restitutive interpretation: Entails that Mary put on the necktie and presupposes that it was put on before.

This set of the grammatical constructions strongly supports the categorization of the

associated predicates of the qualia-ha constructions as accomplishments.

4.3.3 Interpretations of qualia-ha constructions

The accomplishment denoted by the qualia-*ha* construction in the following allows a failed-attempt interpretation.

- (216) ku-ka pap-ul hay-ss-ta. kulena pap-i toy-ci
 he-Nom rice-Acc do-Pst-Dec but rice-Nom do.Pass-Comp anh-ass-ta.
 Neg-Pst-Dec
 - (lit.) 'He cooked the rice, but the rice was not cooked.'
 - = 'He tried to cook the rice, but the rice was not cooked (probably because the cooker was malfunctioning).'

The accomplishment interpreted in this way must be an intentional action. Thus the sentence in (217), which denies the subject's intention of cooking the rice, is contradictory with (216).

(217) ...#kuliko ku-nun pap-ul ha-l uyto-ka eps-ess-ta.
and he-Top rice-Acc do-Rel intention-Nom not.exist-Pst-Dec
'...And he did not have an intention of cooking rice.' (in the context of (216))

When adverbs like *uytohacianhkey* 'unintentionally' or *wuyenhi* 'accidentally' modify the qualia-*ha* construction, as in (218), a failed-attempt reading is impossible.

(218) ku-ka uytohacianhkey/wuyenhi pap-ul hay-ss-ta.
he-Nom unintentionally/accidentally rice-Acc do-Pst-Dec
#kulena pap-i toy-ci anh-ass-ta.
but rice-Nom do.Pass-Comp Neg-Pst-Dec
'He unintentionally/accidentally cooked the rice, # but the rice was not cooked.'

Qualia-ha constructions also allow actual-result interpretations, as illustrated below:

(219)	ku-ka	phica-lul	hay-ss-ta.		
	he-Nom	pizza-Acc	do-Pst-Dec		
	kulayse	phica-ka	cokum/wancenhi	kwu-e	ci-ess-ta.
	SO	pizza-Nom	a.little/ completely	bake-Comp	Pass-Pst-Dec
	(lit.) 'He baked the pizza, so it was a little/completely baked.'				

When a qualia-*ha* construction has an actual-result reading, the subject can be either intentional or non-intentional, as in (220).

(220) ku-ka uytohacianhkey/uytocekulo phica-lul hay-ss-ta.
he-Nom unintentionally/intentionally pizza-Acc do-Pst-Dec kuliko phica-ka cokum/wancenhi kwu-e ci-ess-ta.
and pizza-Nom a.little/completely bake-Comp Pass-Pst-Dec
'He unintentionally/intentionally baked the pizza, and it was a little/completely baked.'

In short, an accomplishment denoted by a qualia-*ha* construction can have both the failed-attempt and actual-result readings; the former entails the subject's intention and the latter does not.

4.3.4 The subject's intention in qualia-ha constructions

In the following qualia-*ha* construction, the subject is an instrument, and actual-result readings are necessary:

(221) a. *khephimesin-i khephi-lul hay-ss-ta*.
coffee.machine-Nom coffee-Acc do-Pst-Dec *#kulena khephi-ka matul-e ci-ci anh-ass-ta*.
but coffee-Nom make-Comp Pass-Comp Neg-Pst-Dec
'The coffee machine brewed a coffee. #But a coffee was not made.'

b. papsoth-i pap-lul hay-ss-ta.
rice.cooker-Nom rice-Acc do-Pst-Dec
#kulena pap-i matul-e ci-ci anh-ass-ta.
but rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
'The rice cooker cooked the rice. #But the rice was not made.'

Similarly, when the subject is a natural force, actual-result readings are again required, as shown in (222).

(222) a. ttukewun tol-i kyeylanhulai-lul hay-ss-ta.
hot stone-Nom fried.egg-Acc do-Pst-Dec
#kulena kyeylanhulai-ka matul-e ci-ci anh-ass-ta.
but fried.egg-Nom make-Comp Pass-Comp Neg-Pst-Dec
'The hot stone made a fried egg. #But a fried egg was not made.'

b. hwasan-i pap-lul hay-ss-ta.
volcano-Nom rice-Acc do-Pst-Dec
#kulena pap-i matul-e ci-ci anh-ass-ta.
but rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
'The volcano cooked the rice. #But the rice was not made.'

In (223) below, *Tom-uy pwucwuuy* 'Tom's negligence' or *Tom-uy silswu* 'Tom's mistake' is the subject, and as expected only actual-result readings are possible.

- (223) a. Tom-uy pwucwuuy-/silswu-ka khephi-lul hay-ss-ta.
 Tom-Gen carelessness-/mistake-Nom coffee-Acc do-Pst-Dec
 #kulena khephi-ka matul-e ci-ci anh-ass-ta.
 but coffee-Nom make-Comp Pass-Comp Neg-Pst-Dec
 'Tom's negligence/mistake brewed a coffee. #But a coffee was not made.'
 - b. Tom-uy pwucwuuy-/silwu-ka pap-lul hay-ss-ta.
 Tom-Gen carelessness-/mistake-Nom rice-Acc do-Pst-Dec
 #kulena pap-i matul-e ci-ci anh-ass-ta.
 but rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
 'Tom's negligence/mistake cooked the rice. #But the rice was not made.'

Finally, in (224), Tom's action is the subject and again as expected only actual-result readings are available:

(224) a. Tom-uy kulehan hayngtong-i phica-lul hay-ss-ta.
Tom-Gen such action-Nom pizza-Acc do-Pst-Dec
#kulena phica-ka matul-e ci-ci anh-ass-ta.
but pizza-Nom make-Comp Pass-Comp Neg-Pst-Dec
'Tom's action baked a pizza. #But a pizza was not made.'

b. Tom-uy kulehan hayngtong-i pap-lul hay-ss-ta.
Tom-Gen such action-Nom rice-Acc do-Pst-Dec
#kulena pap-i matul-e ci-ci anh-ass-ta.
but rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
'Tom's action cooked the rice. #But the rice was not made.'

These actual-result interpretations all accord with the Subject Intention Generalization, since the subject cannot have an intention and thus a failed-attempt interpretation is not allowed.

4.3.5 Passives of qualia-ha constructions

The passive form of the light verb *ha* 'do' is *toy* 'do.Pass,' and so the passive counterparts of qualia-*ha* constructions have the following forms (see Lee 2011b):

(225) a. pap-i/phica-ka toy-ess-ta.
rice-Nom/pizza-Nom do.Pass-Pst-Dec
'The rice was cooked/pizza was baked.'
b. khephi-ka/nokcha-ka toy-ess-ta.
coffee-Nom/green.tea-Nom do.Pass-Pst-Dec

'The coffee was brewed/*drunk.'

In (225b), however, toy cannot have the passive meaning of masi- 'drink.' So it seems

that passive qualia-*ha* constructions only admit agentive roles, but not telic roles. Note that the verb *toy* also has another use with the lexical meaning of *become*, as shown in the following:

- (226) a. *Jane-i phailles-i toy-ess-ta.* Jane-Nom pilot-Nom become-Pst-Dec 'Jane became a pilot.'
 - b. ssias-i yelmay-ka toy-ess-ta.
 seed-Nom fruit-Nom become-Pst-Dec
 'The seed became a fruit.'

A question thus arises as to whether *toy* in (225) is really passive, since it could arguably be the *become* sense. A nominative NP can actually precede the subjects in (225) resulting in the sentences in (227).

- (227) a. pancwuk-i phica-ka toy-ess-ta.dough-Nom pizza-Nom become-Pst-Dec'The dough became pizza.'
 - b. ku iph-tul-i nokcha-ka toy-ess-ta.
 the leaves-Nom green.tea-Nom become-Pst-Dec
 'The leaves became green tea.'

When toy is used as become, the adverb cal 'well' cannot modify toy, as shown in the

following. However, toy can be modified by other adverbs like ppalli 'quickly':

(228) a. Jane-i phailles-i (ppalli/#cal) toy-ess-ta.
Jane-Nom pilot-Nom quickly/well become-Pst-Dec
'Jane became a pilot quickly/#well.'

b. ssias-i yelmay-ka (ppalli/#cal) toy-ess-ta.
seed-Nom fruit-Nom quickly/well become-Pst-Dec
'The seed became a fruit quickly/#well.'

By contrast, in canonical passive constructions, the adverb *cal* 'well' can modify passive verbs:

(229) a. pap-i Tom-eyuyhay ppalli/cal ci-e ci-ess-ta.
rice-Nom Tom-by quickly/well cook-Comp Pass-Pst-Dec
'The rice was cooked quickly/well by Tom.'

b. nokcha-ka Tom-eyuyhay ppalli/cal wuli-e ci-ess-ta.
gree.tea-Nom Tom-by quickly/well brew-Comp Pass-Pst-Dec
'The green tea was brewed well.'

Thus we can use the distribution of *cal* 'well' as a diagnostic to determine if the sentences in (225) are really passive or a kind of inchoative construction. The adverb *cal* 'well' can modify the verbs in the sentences:

(230) a. *pap-i/phica-ka ppalli/cal toy-ess-ta*. rice-Nom/pizza-Nom quickly/well do.Pass-Pst-Dec 'The rice was cooked/pizza was baked quickly/well.'

b. *khephi-ka/nokcha-ka ppalli/cal toy-ess-ta*.
coffee-Nom/green.tea-Nom quickly/well do.Pass-Pst-Dec
'The coffee/green tea was brewed quickly/well.'

This suggests that *toy* used in (225) is a passive verb (i.e. the qualia passive light verb), rather than *become*.

Returning to the main point of this section, the passive qualia-*ha* constructions do not allow failed-attempt readings, as shown in (231).

(231) a. phica-ka toy-ess-ta.

pizza-Nom do.Pass-Pst-Dec #kulena phica-ka kwu-e ci-ci anh-ass-ta. but pizza-Nom bake-Comp Pass-Comp Neg-Pst-Dec 'The pizza was baked, #but it was not baked.'

b. khephi-ka toy-ess-ta.

coffee-Nom do.Pass-Pst-Dec

#kulena khephi-ka mantul-e ci-ci anh-ass-ta.
but coffee-Nom make-Comp Pass-Comp Neg-Pst-Dec
'The coffee was brewed, #but it was not made.'

This is consistent with the Subject Realization Generalization: the patient subject is directly related to the caused event, and so the whole event should be realized. In other words, the passive qualia-*ha* constructions have actual-result readings: for instance, in (231a) the pizza can be baked a little or completely. Since actual-result interpretations are basically insensitive to intentionality, either *uytohacianhkey* 'unintentionally' or *uytocekulo* 'intentionally' can modify the passive qualia-*ha* constructions. Consider the following sentences:

- (232) [Context: The rice was cooked a little or completely by Sarah.]
 - a. *pap-i* uytohacianhkey/silswulo/wuyenhi toy-ess-ta.
 rice-Nom unintentionally/by.mistake/accidentally do.Pass-Pst-Dec
 'The rice was cooked unintentionally/by mistake/accidentally.'
 - b. *pap-i* uytocekulo toy-ess-ta.
 rice-Nom intentionally do.Pass-Pst-Dec
 'The rice was cooked intentionally.'

The sentences in (232a,b) used in the given context must have actual-result interpretations.

In summary, if the associated predicate of a qualia-*ha* construction is an accomplishment, and is subject to the same analysis as in the previous chapter, the prediction is that it should be ambiguous between a failed-attempt interpretation, which requires the subject's intention regarding the event that the accomplishment refers to, and an actual-result interpretation, which does not require the subject's

intention. These predictions are borne out.

4.4 Causative light verb ha 'do'

In this section, I discuss a use of the light verb *ha* 'do' as marking causative constructions like the use of *make* in English causative constructions, and the ambiguity of the secondary predicate in the causative constructions.

4.4.1 Basic properties of causative-ha construction

Causative constructions can be classified into two types: morphological causatives and periphrastic (syntactic) causatives (see Comrie 1981, among others). For instance, in the Korean morphological causative (233a), the causative dependent morpheme -i is attached to the verb stem, and in the Korean periphrastic causative in (233b), the result XP with *-key* appears with the light verb.

(233) a. *Tom-i ku os-ul mal-i-ess-ta*. Tom-Nom the clothes-Acc dry-Caus-Pst-Dec 'Tom dried the clothes.' b. *Tom-i* ku os-ul malu-key hay-ss-ta.
Tom-Nom the clothes-Acc dry-Key do-Pst-Dec
(lit.) 'Tom did the clothes dry.' = 'Tom made the clothes dry.'

The morphological causative describes an event of direct causation: i.e. the subject is necessarily the agent who dried the clothes, e.g. by operating a dryer or hanging the clothes on a drying rack. In contrast, the periphrastic causative does not entail direct causation, although the interpretation of direct causation is possible; Tom can make someone else dry the clothes (i.e. indirect causation) (see more about the notions of direct and indirect causation in Cruse 1972, Nedjalkov and Silnitsky 1973, Masica 1976, Shibatani 1976, Comrie 1981, Dixon 2000, among others). Here I focus on the direct causation reading of the Korean periphrastic causative construction, which I call the causative-*ha* construction in accordance with the names of other light verb constructions (e.g. the VN-*ha* construction and qualia-*ha* construction).

4.4.2 Accomplishments involving causative-ha constructions

I first show that a causative-*ha* construction can have an accomplishment event structure. First, the causative-*ha* constructions in the progressive in (234) entail non-completion of the events denoted by the constructions:

(234) a. Tom-i ku os-ul malu-key ha-ko iss-ess-ko,
Tom-Nom the clothes-Acc dry-Key do-Comp exist-Pst-Dec ku ttay os-i imi mal-lass-ta.
the time clothes-Nom already dry-Pst-Dec 'Tom was making the clothes dry, and #at that time they were already dry.'

b. Mary-ka chayksang-lul kkaykkusha-key ha-ko iss-ess-ta.
Mary-Nom desk-Acc clean-Key do-Comp exist-Pst-Dec ku ttay chayksang-i imi kkaykkushay-ss-ta.
the time desk-Nom already clean-Pst-Dec 'Mary was making the desk clean, and #at that time it was already clean.'

Second, the causative-*ha* constructions with a *maney*-phrase (*in*-phrase) are ambiguous between ingressive and telic readings:

(235) a. *Tom-i ku os-ul o pwun maney malu-key hay-ss-ta*.
Tom-Nom the clothes-Acc five minute in dry-Key do-Pst-Dec
'Tom made the clothes dry in five minutes.' (ingressive and telic readings)

b. Tom-i chayksang-ul o pwun maney kkaykkusha-key
Tom-Nom desk-Acc five minute in clean-Key
hay-ss-ta.
do-Pst-Dec

'Tom made the desk clean in five minutes.' (ingressive and telic readings)

Third, the causative-*ha* construction in (236) with *taci* 'again' is ambiguous between repetitive and restitutive readings.

(236) Tom-i ku os-ul taci malu-key hay-ss-ta.
Tom-Nom the clothes-Acc again dry-Key do-Pst-Dec
'Tom made the clothes dry again.'

1. Repetitive interpretation: Entails that he made the clothes dry and presupposes that he made them dry before.

2. Restitutive interpretation: Entails that he made the clothes dry and presupposes that they were dry before.

(237) Tom-i ku chayksang-ul taci kkaykkusha-key hay-ss-ta.
Tom-Nom the desk-Acc again clean-Key do-Pst-Dec
'Tom made the desk clean again.'

1. Repetitive interpretation: Entails that he made the desk clean and presupposes that he made it clean before.

2. Restitutive interpretation: Entails that he made the desk clean and presupposes that it was clean before.

This set of the grammatical constructions shows that the causative-*ha* constructions have accomplishment event structures.

4.4.3 Interpretations of causative-ha constructions

Failed-attempt readings of causative-*ha* constructions are allowed, as illustrated in (238).

(238) a. Tom-i ku os-ul malu-key hay-ss-ta.
Tom-Nom the clothes-Acc dry-Key do-Pst-Dec kulena os-i malu-ci anh-ass-ta.
but clothes-Nom dry-Comp Neg-Pst-Dec
(lit.) 'Tom did the clothes dry, but they were not dry.'
= 'Tom tried to make the clothes dry, but they were not dry.'

b. Tom-i chayksang-ul kkaykkusha-key hay-ss-ta.
Tom-Nom desk-Acc clean-Key do-Pst-Dec kulena chayksang-i kkaykkusha-ci anh-ass-ta.
but desk-Nom clean-Comp Neg-Pst-Dec (lit.) 'Tom did the desk clean, but it was not clean.'
= 'Tom tried to make the desk clean, but it was not clean.'

The failed-attempt readings of causative-*ha* constructions must involve intentional action on the part of the subject, which is shown by the fact that denial of the subject's intention in (239) is not compatible with causative-*ha* constructions on the failed-attempt readings in (238).

(239) a. ...#kuliko Tom-un os-ul mal-li-l uyto-ka
and Tom-Top clothes-Acc dry-Cau-Rel intention-Nom eps-ess-ta.
not.exist-Pst-Dec
'...And he did not have an intention of drying the clothes.' (in the context of (238a))

b. ...#kuliko Tom-un chayksang-ul kkaykkusha-key ha-l
and Tom-Top desk-Acc clean-Key do-Rel *uyto-ka eps-ess-ta.*intention-Nom not.exist-Pst-Dec
'...And he did not have an intention of making the desk clean.' (in the context of (238b))

If the events of causative-*ha* constructions are not intended, the reading must not be failed-attempt:

- (240) a. ku-ka uytohacianhkey/wuyenhi/silswulo os-ul malu-key he-Nom unintentionally/accidentally/by.mistake clothes-Acc dry-Key hay-ss-ta. #kulena os-i malu-ci anh-ass-ta.
 do-Pst-Dec but clothes-Nom dry-Comp Neg-Pst-Dec 'He made the clothes dry unintentionally/accidentally/by mistake, #but they were not dry.'
 - b. ku-ka uytohacianhkey/wuyenhi/silswulo chayksang-ul
 he-Nom unintentionally/accidentally/by.mistake desk-Acc *telep-key hay-ss-ta. #kulena chayksang-i telep-ci anh-ass-ta.*dirty-Key do-Pst-Dec but desk-Nom dirty-Comp Neg-Pst-Dec
 'He made the desk dirty unintentionally/accidentally/by mistake, #but it
 was not dirty.'

The first sentence in (240a) can be used in the following context: the subject accidentally pushed the button on the dryer in which her wet clothes are placed, and then the clothes became dry. If the clothes did not become dry, say, due to a malfunction of the dryer (all else being the same), we cannot use the first sentence in (240a). Although the speaker knows that the primary function of a dryer is to dry clothes, and the dryer could have dried the clothes if it was not malfunctioning, a failed-attempt interpretation cannot be assigned to the first sentence in (240a). Similarly the first sentence in (240b) can be used, for instance, in a context in which the subject accidentally hit the bottle of ink on the desk, and the desk became dirty because of the ink spilled on the desk.

The accomplishment events of causative-*ha* constructions can also have the actual-result (i.e. partial-result or complete-result) interpretations, as in (241).

(241) a. ku-ka ku os-ul malu-key hay-ss-ta.

He-Nom the clothes-Acc dry-Key do-Pst-Dec *kulese os-i cokum/wancenhi malu-ess-ta.*so clothes-Acc a.little/completely dry-Pst-Dec
'He made his clothes dry. So the clothes were a little/completely dry.'

b. Tom-i chayksang-ul kkaykkusha-key hay-ss-ta.
Tom-Nom desk-Acc clean-Key do-Pst-Dec kulayse chayksang-i cokum/wancenhi kkaykkushay-ss-ta.
but desk-Nom a.little/completely clean-Pst-Dec 'Tom made the desk clean. So the desk was a little/completely clean.'

When causative-*ha* constructions have actual-result readings, the events can be intentional or unintentional:

(242) ku-ka uytohacianhkey/uytocekulo os-ul malu-key hay-ss-ta.
he-Nom unintentionally/intentionally clothes-Acc dry-Key do-Pst-Dec kulese ku os-i cokum/wancenhi malu-ess-ta.
so the clothes-Acc a.little/completely dry-Pst-Dec 'He unintentionally/intentionally made the clothes dry. So the clothes were a little/completely dry.'

(243) Tom-i uytohacianhkey/uytocekulo chayksang-ul
Tom-Nom unintentionally/intentionally desk-Acc
kkaykkusha-key hay-ss-ta.
clean-Key do-Pst-Dec
kulayse chayksang-i cokum/wancenhi kkaykkushay-ss-ta.
but desk-Nom a.little/completely clean-Pst-Dec
'Tom unintentionally/intentionally made the desk clean. So the desk was a little/completely clean.'

The causative-*ha* constructions have accomplishment event structures, and accordingly they are ambiguous between intentional or non-intentional actual-result and intentional failed-attempt readings, as expected.

4.4.4 The subject's intention in causative-ha constructions

According to the Subject Intention Generalization (SIG), if the subject of a causativeha construction cannot have an intention, failed-attempt interpretations should be impossible and only actual-result interpretations should be allowed. In the following causative-ha construction, the subject is an instrument, and the actual-result readings are obligatory, as expected: (244) a. kencoki-ka os-ul malu-key hay-ss-ta. drying.machine-Nom clothes-Acc dry-Key do-Pst-Dec #kulena os-i malu-ci anh-ass-ta. but clothes-Nom dry-Comp Neg-Pst-Dec 'The dryer the clothes dry. #But the clothes were not dry.' b. chengsoki-ka patak-ul kkaykkusha-key hay-ss-ta. cleaner-Nom floor-by clean-Key do-Pst-Dec #kulena patak-i kkaykkusha-ci anh-ass-ta. floor-Nom clean-Comp but Neg-Pst-Dec

'The cleaner made the floor clean. #But the floor was not clean.'

Similarly, when the subject is a natural force, actual-result readings are required, as shown in (245).

(245) a. *ttattusha-n hayssal-i os-ul malu-key hay-ss-ta*.
warm-Rel sunlight-Nom clothes-Acc dry-Key do-Pst-Dec *#kulena os-i malu-ci anh-ass-ta*.
but clothes-Nom dry-Comp Neg-Pst-Dec
'Warm sunlight made the clothes dry. #But the clothes were not dry.'

b. palam-i patak-ul kkaykkusha-key hay-ss-ta.
wind-Nom floor-by clean-Key do-Pst-Dec
#kulena patak-i kkaykkusha-ci anh-ass-ta.
but floor-Nom clean-Comp Neg-Pst-Dec
'The wind made the floor clean. #But the floor was not clean.'

Still further, in (246), *Tom-uy pwucwuuy* 'Tom's carelessness' or *Tom-uy silswu* 'Tom's mistake' is the subject of the sentences, and again as expected they cannot have failed-attempt interpretations; only actual-result readings are available.

- (246) a. Tom-uy pwucwuuy-/silswu-ka os-ul cec-key hay-ss-ta.
 Tom-Gen negligence-/mistake-Nom clothes-Acc wet-Key do-Pst-Dec
 #kulena os-i cec-ci anh-ass-ta.
 but clothes-Nom wet-Comp Neg-Pst-Dec
 'Tom's negligence/mistake made the clothes wet. #But the clothes were not wet.'
 - b. Tom-uy pwucwuuy-/silwu-ka patak-ul telep-key hay-ss-ta.
 Tom-Gen negligence-/mistake-Nom floor-by dirty-Key do-Pst-Dec
 #kulena patak-i telep-ci anh-ass-ta.
 but floor-Nom dirty-Comp Neg-Pst-Dec
 'Tom's negligence/mistake made the floor dirty. #But it was not dirty.'

Finally, in (247), Tom's action is the subject and only actual-result readings are

possible.

(247) a. Tom-uy kulehan hayngtong-i os-ul cec-key hay-ss-ta.
Tom-Gen such action-Nom clothes-Acc wet-Key do-Pst-Dec
#kulena os-i cec-ci anh-ass-ta.
but clothes-Nom wet-Comp Neg-Pst-Dec
'Tom's action made the clothes wet. #But the clothes were not wet.'

b. Tom-uy kulehan hayngtong-i patak-ul telep-key hay-ss-ta.
Tom-Gen such action-Nom floor-Acc dirty-Key do-Pst-Dec
#kulena patak-i telep-ci anh-ass-ta.
but floor-Nom dirty-Comp Neg-Pst-Dec
'Tom's action made the floor dirty. #But the floor was not dirty.'

These examples support the idea that the Subject Intention Generalization is applicable here as well, as expected if this holds for all accomplishments in Korean, both lexical and derived.

4.4.5 Passives of causative-ha constructions

The passive counterparts of the causative-ha constructions are given in the following:

(248) a. os-i Tom-eyuyhay (chenchenhi/cal) malu-key toy-ess-ta.
clothes-Nom Tom-by slowly/well dry-Key do.Pass-Pst-Dec
'The clothes were made dry (slowly/well) by Tom.'

b. takca-ka Tom-eyuyhay (chenchenhi/cal) kkaykkusha-key
table-Nom Tom-by slowly/well clean-Key
toy-ess-ta.
do.Pass-Pst-Dec

'The table was made clean (slowly/well) by Tom.'

The passives of causative-*ha* constructions do not permit failed-attempt interpretations, as in (249).

(249) a. os-i Tom-eyuyhay malu-key toy-ess-ta.
clothes-Nom Tom-by dry-Key do.Pass-Pst-Dec
#kulena os-i malu-ci anh-ass-ta.
but clothes-Nom dry-Comp Neg-Pst-Dec
'The clothes were made dry by Tom. #But they were not dry.'
b. takca-ka Tom-eyuyhay kkaykkusha-key toy-ess-ta.

taked ka Tom cyaynay kaykasha key toy ess ta.
table-Nom Tom-by clean-Key do.Pass-Pst-Dec
#kulena takca-ka kkaykkusha-ci anh-ass-ta.
but table-Nom clean-Comp Neg-Pst-Dec
'The table was made clean by Tom, #but it was not clean.'

The passives of the causative-*ha* constructions instead have only actual-result interpretations, as in (250).

(250) a. os-i Tom-eyuyhay malu-key toy-ess-ta.
clothes-Nom Tom-by dry-Key do.Pass-Pst-Dec
kulayse os-i cokum/wancenhi malu-ess-ta.
so clothes-Nom a.little /completely dry-Pst-Dec
'The clothes were made dry by Tom. So the clothes were a little/completely dry.'

b. patak-i Tom-eyuyhay kkaykkusha-key toy-ess-ta.
floor-Nom Tom-by clean-Key do.Pass-Pst-Dec
kulayse patak-i cokum/wancenhi kkaykkushay-ss-ta.
so floor-Nom a.little/completely clean-Pst-Dec
'The floor was made clean by Tom. So the floor was a little/completely clean.'

Passive causative-ha constructions do not require the subject's intention:

(251) a. os-i uytocekulo/wuyenhi malu-key toy-ess-ta.
clothes-Nom intentionally/accidentally dry-Key do.Pass-Pst-Dec
kulayse os-i cokum/wancenhi malu-ess-ta.
so clothes-Nom a.little /completely dry-Pst-Dec
'The clothes were made dry intentionally/accidentally. So the clothes
were a little/completely dry.'

b. patak-i uytocekulo/wuyenhi kkaykkusha-key toy-ess-ta.
floor-Nom intentionally/accidentally clean-Key do.Pass-Pst-Dec kulayse patak-i cokum/wancenhi kkaykkushay-ss-ta.
so floor-Nom a.little/ completely clean-Pst-Dec
'The floor was made clean intentionally/accidentally. So the floor was little/ completely clean.'

In summary, a causative-*ha* construction, which has an accomplishment event structure, allows either the relevant failed-attempt interpretation (entailing the subject's intention) or actual-result interpretations (not entailing the subject's intention). Again, these are consistent with the two generalizations, SRG and SIG, suggesting again that these generalizations cover all accomplishment types in Korean.

4.5 Qualia-Causative Light Verb ha 'do'

In this section, I discuss a more complex construction, namely, the qualia-causative-

ha construction, which is headed by *ha* 'do' being used both as a qualia predicate and causative light verb (Lee 2014). Based on the grammatical properties of qualia-causative-*ha* constructions, I provide more support for the Subject Intention Generalizations and Subject Realization Generalizations.

4.5.1 Basic properties of qualia-causative-ha constructions

The Korean light verb *ha* 'do' is very ambiguous, as shown above. It can be either a qualia light verb or causative light verb, each of which then has an actual-result or failed-attempt reading. In this section, I discuss a sort of mixed use of the light verb in a single construction, and then its theoretical implications for the syntactic analysis of the construction in question.

In (252), the light verb *ha* 'do' can be interpreted as the normal causative light verb or the qualia-causative light verb (the quasi-depictive reading with the telic role *drink* 'Jane drank the coffee hot' is not discussed here).

- (252) a. *Jane-i khephi-lul ttukep-key hay-ss-ta*. Jane-Nom coffee-Acc hot-Key do-Pst-Dec 'Jane made the coffee hot.'
 - (lit.) 'Jane brewed the coffee hot.'

- b. Jane-i pap-ul ttukep-key hay-ss-ta.
 Jane-Nom rice-Acc hot-Key do-Pst-Dec
 'Jane made the rice hot.'
 - (lit.) 'Jane cooked the rice hot.'

In the normal causative reading of (252a), the only relevant result is that the coffee becomes hot. However, in the qualia-causative reading, two results are involved (i.e. the creation of a coffee and the coming about of the property of the coffee being hot). In other words, here the qualia-causative light verb *ha* 'do' gets its meaning from both the common noun object and the XP with *-key*; the light verb *ha* 'do' here corresponds to the combination of the event of brewing a coffee and the unspecified causing subevent of making the object hot. In the event structure of the construction, if the associated results are all realized, then the sentence has the actual-result reading, which is the default interpretation of the construction. However, if either hotness or the production of coffee is not realized, but only intended, the sentence has a kind of failed-attempt reading 'Jane tried to brew a coffee hot' with the following three possible situations: (i) a cold coffee was made, (ii) a hot something (but not coffee) was made, and (iii) a cold something (but not coffee) is not realized.

On a side note, according to a small clause analysis of periphrastic (syntactic) causative constructions, the object and the secondary predicate are syntactically grouped together to form a small clause (i.e. a predication relation), and then the

causative verb combines with the small clause. This analysis seems to have no problem for the normal causative reading of the sentences in (252). However, for the sentences in (252) with the qualia-causative interpretations, the small clause analysis appears to not be relatively perspicuous (although it is not impossible), since the XP with *-key* (i.e. the presumed head of the small clause) would somehow have to "transmit" the qualia meaning from the common noun object (i.e. the subject of XP) up to the light verb *ha* 'do' when the light verb *ha* 'do' combines with the small clause in syntax, a somewhat unusual semantic property of a predicate. Rather than this transmission mechanism of the small clause analysis, it is more perspicuous for the light verb *ha* 'do' to combine directly with the NP and the XP in syntax, and thus gets its qualia meaning directly from the NP. For the sake of theoretical consistency, it is also better to analyze the constructions in (252) with the normal causative interpretations in much the same way.

When the common noun object is not *khephi* 'coffee' or *pap* 'rice' (having an agentive role) but *khemphyuthe* 'computer' (having only telic role) as in the following, the light verb denotes the specific causing subevent (i.e. using) of the event denoted by the construction:

(253) Jane-i khemphyuthe-lul phal-i aphu-key hay-ss-ta.
Jane-Nom computer-Acc arm-Nom painful-Key do-Pst-Dec
(lit.) 'Jane did the computer so that her arm was in pain.'
= 'Jane used the computer so that her arm was in pain.'

In the next section, I examine these qualia-causative-*ha* constructions in terms of accomplishment properties.

4.5.2 Accomplishments involving qualia-causative-ha constructions

I show that a qualia predicate of a qualia-*ha* construction can be an accomplishment. First, as in the following, the qualia-causative-*ha* constructions in the progressive entail non-completion of the events of the constructions.

- (254) a. Jane-i khephi-lul ttukep-key ha-ko iss-ess-ko,
 Jane-Nom coffee-Acc hot-Key do-Comp exist-Pst-Dec
 ku ttay imi ttukewun khephi-ka mantul-e ci-ess-ta.
 the time already hot coffee-Nom make-Comp Pass-Pst-Dec
 'Jane was brewing the coffee hot, and #at that time a hot coffee was already made.'
 - b. Jane-i pap-ul ttukep-key ha-ko iss-ess-ta.
 Jane-Nom rice-Acc hot-Key do-Comp exist-Pst-Dec ku ttay imi ttukewun pap-i mantul-e ci-ess-ta.
 the time already hot rice-Nom make-Comp Pass-Pst-Dec 'Jane was cooking the rice hot, and #at that time a hot rice was already made.'

Interestingly, the qualia-causative-*ha* constructions with a *maney*-phrase (*in*-phrase) seem to allow only telic readings, as shown in the following:

- (255) a. Jane-i khephi-lul o pwun maney ttukep-key hay-ss-ta.
 Jane-Nom coffee-Acc five minute in hot-Key do-Pst-Dec
 (lit.) 'Jane brewed the coffee hot in five minutes.' (only telic reading)
 - b. Jane-i pap-ul o pwun maney ttukep-key hay-ss-ta.
 Jane-Nom rice-Acc five minute in hot-Key do-Pst-Dec (lit.) 'Jane cooked the rice hot in five minutes.' (only telic reading)

Third, the qualia-causative-*ha* constructions in (256) and (257) with *taci* 'again' are ambiguous between repetitive and restitutive readings.

(256) Jane-i taci khephi-lul ttukep-key hay-ss-ta.
Jane-Nom again coffee-Acc hot-Key do-Pst-Dec
(lit.) 'Jane brewed the coffee hot again.'
1. Repetitive interpretation: Entails that Tom brewed the coffee hot and presupposes that Tom brewed the coffee hot before.
2. Restitutive interpretation: Entails that Tom brewed the coffee hot and

presupposes that it was previously brewed and hot.

(257) Jane-i taci pap-ul ttukep-key hay-ss-ta.
Jane-Nom again rice-Acc hot-Key do-Pst-Dec
(lit.) 'Jane cooked the rice hot again.'
1. Repetitive interpretation: Entails that Tom cooked the rice hot and

presupposes that Tom cooked the rice hot before.

2. Restitutive interpretation: Entails that Tom cooked the rice hot and presupposes that the rice was previously cooked and hot.

Although the qualia-causative-*ha* constructions with a temporal *maney*-phrase (*in*-phrase) allow only telic readings, unlike typical accomplishments, the other two properties indicate that the qualia-causative-*ha* construction has an accomplishment event structure. Thus, rather than ignoring the two typical accomplishment properties that they have, I assume that the qualia-causative-*ha* constructions are accomplishments.

4.5.3 Interpretations of qualia-causative-ha constructions

If the qualia-causative-*ha* constructions are accomplishments, then failed-attempt readings should be allowed. In (258a), the creation of a coffee is denied, and in (258b) the coming about of a state of hotness is denied.

- (258) a. Jane-i khephi-lul ttukep-key hay-ss-ta. Jane-Nom coffee-Acc hot-Key do-Pst-Dec kulena khephi-ka mantul-e ci-ci anh-ass-ta. but coffee-Nom make-Comp Pass-Comp Neg-Pst-Dec (lit.) 'Jane brewed a coffee hot, but a coffee was not made.'
 b. Jane-i khephi-lul ttukep-key hay-ss-ta.
 - Jane-Nom coffee-Acc hot-Key do-Pst-Dec *kulena khephi-ka ttukep-ci-ka anh-ass-ta.* but coffee-Nom hot-Comp-Nom Neg-Pst-Dec (lit.) 'Jane brewed a coffee hot, but the coffee was not hot.'

The interpretations of the qualia-causative-*ha* sentences in (258) are not actual-result readings, but failed-attempt readings, since one of the two relevant results did not occur. In (258), only one result is explicitly denied, but all the relevant results can be denied, as shown in (259).

(259) Jane-i khephi-lul ttukep-key hay-ss-ta.
Jane-Nom coffee-Acc hot-Key do-Pst-Dec kulena chaka-wun nokcha-ka mantul-e ci-ess-ta.
but cold-also green.tea-Nom make-Comp Pass-Pst-Dec 'Jane brewed a coffee hot, but a cold green tea was made.'

In short, since two results are involved in the construction, three logically possible

failed-attempt interpretations are available.

A failed-attempt reading of the qualia-causative-*ha* construction must furthermore entail the subject's intention regarding the result of the construction. Both (260a) (the denial of the subject's intention of making a coffee) and (260b) (the denial of the subject's intention of making a hot thing) are incompatible with (258a), (258b), and (259).

(260) a. ...#kuliko khephi-lul mantul-l uyto-ka eps-ess-ta. and coffee-Acc make-Key intention-Nom not.exist-Pst-Dec

'...And she did not have an intention of brewing a coffee.'

(in the context of (258a), (258b), and (259))

b. ...#kuliko ttuke-wun kes-lul mantul-l uyto-ka
and hot-Rel thing-Acc make-Key intention-Nom eps-ess-ta.
not.exist-Pst-Dec
'...And she did not have an intention of making something hot.'

(in the context of (258a), (258b), and (259))

If the event described by the qualia-causative-*ha* construction is unintended, the reading must be actual-result:

- (261) ku-ka uytohacianhkey/silswulo khephi-lul ttukep-key hay-ss-ta.
 he-Nom unintentionally/by.mistake coffee-Acc hot-Key do-Pst-Dec
 #kulena ttuke-wun nokcha-ka mantul-e ci-ess-ta.
 but hot-Rel green.tea-Nom make-Comp Pass-Pst-Dec
 'He brewed a coffee hot unintentionally/by mistake, #but a hot green tea was made.'
- (262) ku-ka uytohacianhkey/silswulo khephi-lul ttukep-key hay-ss-ta.
 he-Nom unintentionally/by.mistake coffee-Acc hot-Key do-Pst-Dec
 #kulena chaka-wun khephi-ka mantul-e ci-ess-ta.
 but cold-Rel coffee-Nom make-Comp Pass-Pst-Dec
 'He brewed a coffee hot unintentionally/by mistake, #but a cold coffee was made.'
- (263) ku-ka uytohacianhkey/silswulo khephi-lul ttukep-key hay-ss-ta.
 he-Nom unintentionally/by.mistake coffee-Acc hot-Key do-Pst-Dec
 #kulena chaka-wun nokcha-ka mantul-e ci-ess-ta.
 but cold-also green.tea-Nom make-Comp Pass-Pst-Dec
 'He brewed a coffee hot unintentionally/by mistake, #but a cold green tea was made.'

The accomplishment of the qualia-causative-*ha* construction can also have an actual-result interpretation, as in (264).

(264) ku-ka khephi-lul ttukep-key hay-ss-ta.
he-Nom coffee-Acc hot-Key do-Pst-Dec kulese ku ttuke-wun khephi-lul masi-ess-ta.
so the hot-Rel coffee-Acc drink-Pst-Dec 'He brewed a coffee hot. So he drank the hot coffee.'

If the first sentence in (264) is interpreted as a failed-attempt reading (i.e. a hot coffee was not made), the second sentence would be contradictory with the first sentence. The compatibility in (264) forces the interpretation of the first sentence to be the actual-result. When the qualia-causative-*ha* construction is interpreted as actual-result, the event can be intentional or unintentional. The adverbs *uytohacianhkey* 'unintentionally' or *uytocekulo* 'intentionally' can modify the first sentence in (264) resulting in (265).

(265) ku-ka uytohacianhkey/uytocekulo khephi-lul ttukep-key
he-Nom unintentionally/intentionally coffee-Acc hot-Key
hay-ss-ta. kulayse ku ttuke-wun khephi-lul masi-ess-ta.
do-Pst-Dec so the hot coffee-Acc drink-Pst-Dec
'He unintentionally/intentionally brewed a coffee hot. So he drank the hot coffee.'

In short, the various interpretations of the qualia-causative-*ha* constructions are again consistent with the two generalizations above. According to the Subject Realization

Generalization, at least the causing subevent of the qualia-causative-*ha* constructions must occur in any interpretation. If the caused event in the accomplishment event structure is not realized at all, the subject's intention is required (the Subject Intention Generalization), and if the caused event in the accomplishment event structure is partially or completely realized, the subject's intention is not necessary (the Subject Intention Generalization). This once again supports the claim that all accomplishments, lexical or derived, are subject to the same conditions in Korean.

4.5.4 The subject's intention in qualia-causative-ha constructions

In the following qualia-causative-*ha* construction, the subject is an instrument, and actual-result readings are obligatory, as expected:

(266) a. khephimesin-i khephi-lul ttukep-key hay-ss-ta.
coffee.machine-Nom coffee-Acc hot-Key do-Pst-Dec
#kulena ttukewun khephi-ka matul-e ci-ci anh-ass-ta.
but hot coffee-Nom make-Comp Pass-Comp Neg-Pst-Dec
'The coffee machine brewed a coffee hot. #But a hot coffee was not made.'

b. papsoth-i pap-lul ttukep-key hay-ss-ta.
rice.cooker-Nom rice-Acc hot-Key do-Pst-Dec
#kulena ttukewun pap-i matul-e ci-ci anh-ass-ta.
but hot rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
'The rice cooker cooked the rice hot. #But hot rice was not made.'

Even though a person intentionally used the coffee machine to brew a coffee hot in (266a), the sentence cannot have the failed-attempt interpretation. Similarly, when the subject is a natural force, an actual-result reading is required, as shown in (267).

- (267) a. hwasan-i khephi-lul ttukep-key hay-ss-ta.
 volcano-Nom coffee-Acc hot-Key do-Pst-Dec
 #kulena ttukewun khephi-ka matul-e ci-ci anh-ass-ta.
 but hot coffee-Nom make-Comp Pass-Comp Neg-Pst-Dec
 'The volcano brewed a coffee hot. #But a hot coffee was not made.'
 - b. hwasan-i pap-lul ttukep-key hay-ss-ta.
 volcano-Nom rice-Acc hot-Key do-Pst-Dec
 #kulena ttukewun pap-i matul-e ci-ci anh-ass-ta.
 but hot rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
 'The volcano cooked the rice hot. #But hot rice was not made.'

Furthermore, in (268), *Tom-uy pwucwuuy* 'Tom's negligence' or *Tom-uy silswu* 'Tom's mistake' is the subject, and only actual-result readings are possible.

(268) a. Tom-uy pwucwuuy-/silswu-ka khephi-lul ttukep-key
Tom-Gen negligence-/mistake-Nom coffee-Acc hot-Key
hay-ss-ta. #kulena ttukewun khephi-ka matul-e ci-ci
do-Pst-Dec but hot coffee-Nom make-Comp Pass-Comp
anh-ass-ta.

Neg-Pst-Dec

'Tom's negligence/mistake brewed a coffee hot. #But a hot coffee was not made.'

b. Tom-uy pwucwuuy-/silwu-ka pap-lul ttukep-key hay-ss-ta.
Tom-Gen negligence-/mistake-Nom rice-Acc hot-Key do-Pst-Dec
#kulena ttukewun pap-i matul-e ci-ci anh-ass-ta.
but hot rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
'Tom's negligence/mistake cooked the rice hot. #But hot rice was not made.'

Finally, in (269), Tom's action is the subject, and only actual-result readings are possible:

- (269) a. Tom-uy kulehan hayngtong-i khephi-lul ttukep-key hay-ss-ta.
 Tom-Gen such action-Nom coffee-Acc hot-Key do-Pst-Dec
 #kulena ttukewun khephi-ka matul-e ci-ci anh-ass-ta.
 but hot coffee-Nom make-Comp Pass-Comp Neg-Pst-Dec
 'Tom's action brewed a coffee hot. #But a hot coffee was not made.'
 - b. Tom-uy kulehan hayngtong-i pap-lul ttukep-key hay-ss-ta.
 Tom-Gen such action-Nom rice-Acc hot-Key do-Pst-Dec
 #kulena ttukewun pap-i matul-e ci-ci anh-ass-ta.
 but hot rice-Nom make-Comp Pass-Comp Neg-Pst-Dec
 'Tom's action cooked the rice hot. #But hot rice was not made.'

When DPs that cannot have intentions about the results are the subject of accomplishments, the results must occur, again as expected on the proposed analysis.

4.5.5 Passives of qualia-causative-ha constructions

The passive counterparts of the active qualia-causative-*ha* constructions have the following forms:

(270) a. *Minji-eyuyhay khephi-ka ttukep-key cal/chenchenhi toy-ess-ta*.
Minji-by coffee-Nom hot-Key well/slowly do.Pass-Pst-Dec
'A coffee was brewed hot well/slowly by Minji.'

b. *Minji-eyuyhay pap-i masiss-key cal/chenchenhi toy-ess-ta*.
Minji-by rice-Nom delicious-Key well/slowly do.Pass-Pst-Dec
'The rice was cooked delicious well/slowly by Minji.'

The passive counterparts of qualia-causative-*ha* constructions do not allow failed attempt interpretations. The denial of a result cannot follow the passive qualia-causative-*ha* construction, as illustrated in the following:

- (271) a. *Minji-eyuyhay khephi-ka ttukep-key toy-ess-ta*.
 Minji-by coffee-Nom hot-Key do.Pass-Pst-Dec
 'A coffee was brewed hot by Minji.'
 - b. #kulena ttuke-wun nokcha-ka mantul-e ci-ess-ta.
 but hot-Rel green.tea-Nom make-Comp Pass-Pst-Dec
 #'But a hot green tea was made.' (in the context of (271a))
 - c. #kulena chaka-wun khephi-ka mantul-e ci-ess-ta.
 but cold-Rel coffee-Nom make-Comp Pass-Pst-Dec
 #'But a cold coffee was made.' (in the context of (271a))
 - d. #kulena chaka-wun nokcha-ka mantul-e ci-ess-ta.
 but cold-also green.tea-Nom make-Comp Pass-Pst-Dec
 #'But a cold green tea was made.' (in the context of (271a))

Passive qualia-causative-*ha* constructions have only actual-result interpretations and do not require the subject's intention, as shown in (272).

(272) a. Minji-eyuyhay uytocekulo/wuyenhi khephi-ka ttukep-key
Minji-by intentionally/accidentally coffee-Nom hot-Key
toy-ess-ta. kulayse Marcus-ka ttukewun khephi-lul
do.Pass-Pst-Dec so Marcus-Nom hot coffee-Acc
masi-ess-ta.
drink-Pst-Dec

'A coffee was brewed hot intentionally/accidentally by Minji. So Marcus drank the hot coffee.'

b. *Minji-eyuyhay uytocekulo/wuyenhi pap-i masiss-key*Minji-by intentionally/accidentally rice-Nom delicious-Key *toy-ess-ta. kulayse Marcus-ka masiss-nun pap-ul*do.Pass-Pst-Dec so Marcus-Nom delicious-Rel rice-Acc *mek-ess-ta.*eat-Pst-Dec
'The rice was cooked delicious intentionally/accidentally by Minji. So
Marcus ate the delicious rice.'

Once again, these passive qualia-causative-*ha* constructions are consistent with the Subject Realization Generalization.

To summarize, if a light verb construction (i.e. VN-*ha* construction, qualia-*ha* construction, causative-*ha* construction, and qualia-causative-*ha* construction) has an accomplishment event structure, it is ambiguous between actual-result and failed-

attempt interpretations. Actual-result readings of those constructions do not require the subject's intention, but failed-attempt readings of them require the intention on the part of the subject. This confirms that the light verb constructions can be subsumed under the same analysis as the lexical accomplishments in the previous chapter.

Chapter 5

Serial Verb Constructions

In the previous chapter, I analyzed accomplishments involving light verb constructions in Korean. In this chapter I investigate more complex constructions involving *serial verb constructions* (SVCs) in Korean and show that failed-attempt readings of SVCs denoting accomplishments can also be explained by the same analysis. This again shows that the failed-attempt interpretation phenomenon is not a lexical fact about verbs, but more broadly a fact about accomplishment event structures. Interestingly, however, non-final verbs of SVCs do not allow failed-attempt interpretations, which does not follow from the analysis at present. This issue is taken up in section 5.2.2.

5.1 Background

Before I discuss the application of the intention-based analysis to accomplishments of SVCs, I present in this section some basic properties of SVCs as background.

5.1.1 Typical examples of SVCs

Complex predicates consist of multiple words, but behave as one predicate. SVCs

have been an important kind of complex predicate in the linguistic literature. The core function of a typical SVC is to serialize the verbs of the construction and to conceptualize the component events as a single, unified event (see Baker 1989, Chung 1993, Collins 1997, Aikhenvald 2006, Müller and Lipenkova 2009, Kim 2010, Lee 2012, 2014, *inter alia*). For example, in the canonical Korean SVC exemplified in (273a), the event of grabbing the rope and the event of pulling the rope are conceptualized as a single bigger event, although the English translation in the form of a coordination only roughly corresponds to what the SVC really means. I will discuss more about some important differences between SVCs and coordinations later. The other example in (273b) shows the same pattern, i.e. the event denoted by the first verb (V1) and the event denoted by the second verb (V2) are together taken as a single event.

- (273) a. Bill-i ku cwul-ul cap-a tangki-ess-ta.
 Bill-Nom the rope-Acc grab-Comp pull-Pst-Dec
 'Bill grabbed the rope, and then pulled it.'
 b Bill-i ku cwul-ul tangki-e cap-ass-ta.
 - b. *Bill-i ku cwul-ul tangki-e cap-ass-ta*.
 Bill-Nom the rope-Acc pull-Comp grab-Pst-Dec
 'Bill pulled the rope, and then grabbed it.'

SVCs in Korean are very productive. For example, as we see in (274), various verbs can appear as V1 with the same verb *mek-ess-ta* 'ate' in V2 position.

- (274) a. Jane-i ku sayngsen-ul kwu-e mek-ess-ta.
 Jane-Nom the fish-Acc bake-Comp eat-Pst-Dec
 'Jane baked the fish, and then ate it.'
 - b. Jane-i ku sayngsen-ul cap-a mek-ess-ta.
 Jane-Nom the fish-Acc catch-Comp eat-Pst-Dec
 'Jane caught the fish, and then ate it.'
 - c. Jane-i ku sakwa-lul kkakk-a mek-ess-ta.
 Jane-Nom the apple-Acc peel-Comp eat-Pst-Dec
 'Jane peeled the apple, and then ate it.'
 - d. Jane-i ku sakwa-ul cip-e mek-ess-ta.
 Jane-Nom the apple-Acc grasp-Comp eat-Pst-Dec
 'Jane grasped the apple, and then ate it.'
 - e. Jane-i ku sakwa-ul tta mek-ess-ta.
 Jane-Nom the apple-Acc pick.Comp eat-Pst-Dec
 'Jane picked the apple, and then ate it.'

Similarly, in the SVCs in (275), the same verb *cip-e* 'grasp-Comp' is used as V1 and different verbs are used as V2.

(275) a. Tom-i ku kong-ul cip-e tenci-ess-ta.
Tom-Nom the ball-Acc grasp-Comp throw-Pst-Dec
'Tom grasped the ball, and then threw it.'

- b. Tom-iku kong-ul cip-etul-ess-ta.Tom-Nom the ball-Accgrasp -Comp lift-Pst-Dec'Tom grasped the ball, and then lifted it.'
- c. *Tom-i* ku kong-ul sangca-ey cip-e neh-ess-ta.
 Tom-Nom the ball-Acc box-to grasp-Comp put-Pst-Dec
 'Tom grasped the ball, and then put it into the box.'
- d. *Tom-i* ku yak-ul cip-e samkhi-ess-ta.
 Tom-Nom the medicine-Acc grasp -Comp swallow-Pst-Dec
 'Tom grasped the medicine, and then swallowed it.'

Kim (2010) presents various types of Korean SVCs found in the Sejong POS-tagged Corpus:³¹ The following table is taken from Kim (2010).

³¹ The Sejong Corpus is a balanced Korean corpus consisting of about 12 million words with 311,048 sentences.

V1	V2	#of	#of	Percentage	Examples
		type	token		
intr	intr	3566	14658	32.07%	<i>kel-e ka-ta</i> 'go on foot'
intr	tran	1794	5217	11.41%	ttwi-e nem-ta 'jump over'
intr	ditran	86	180	0.39%	nayli-e pat-ta 'download'
tran	intr	2501	9651	21.11%	cip-e ka-ta 'pick up and go'
tran	tran	3902	14499	31.72%	cap-a tangki-ta 'catch and draw'
tran	ditran	142	359	0.79%	<i>cip-e cwu-ta</i> 'pick up and give'
ditran	intr	82	350	0.77%	ponay-e o-ta 'send to me'
ditran	tran	127	756	1.65%	pat-a mek-ta 'receive'
ditran	ditran	6	43	0.09%	pat-a kalochay-ta 'usurp'
sum		122066	45713	100.00%	

(276) Frequency of VV Sequences by Transitivity

SVCs are generally found in many languages of West Africa, Southeast Asia, Amazonia, Oceania, and New Guinea (Aikhenvald 2006: 1). Some canonical SVCs in other serializing languages are presented in the following. First, consider some Yoruba SVCs in (277).

```
(277) a. ó mú iwé wá
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he took book come

'He brought a book.' (Bamgbose 1974: 17)

b. mo mú iwé wá fún e

I took book came gave you

'I brought you a book.' (Stahlke 1970: 63)

Some SVCs in other African languages are given in (278). The examples are from Bamgbose (1974: 17):

(278) a. ú kpá kíyzjèé mòng ówl he took knife cut meat 'He cut the meat with a knife.' (Vagala)
b. ô shiá 'jí érí she cooked yam is-eating 'She cooked yam and is eating it (now).' (Izi)

Mandarin Chinese also have SVCs (examples from Müller and Lipenkova 2009: 239, 243):

(279) a. *Tal qi3 chuang2 chuan1 yi1fu4*.
he get.up bed dress clothes
'He gets up and puts on his clothes.'
b. *Tal na2 zhe kuai4zi chi1 fan4*.

he take DUR.ASP chopsticks eat meal 'He eats with chopsticks.'

The following Thai SVCs are extracted from Sudmuk (2005: 47):

(280) a. ka:nda: ?aw mî:t hàn kày

Kanda take knife cut chicken

(i) 'Kanda took the knife (and) cut the chicken.' (sequential)

(ii) 'Kanda takes/ took the knife to cut the chicken.' (purposive)

b. ka:nda: Paw phâ: sày tàkrâ:
Kanda take cloth put basket
'Kanda put the cloth into the basket.'

SVCs are productive in Korean and in many other languages. The SVCs given above can be categorized as sequential SVCs, since the SVCs denote temporal sequences of the component subevents. In addition to sequential SVCs, we have other types of SVCs in Korean. I introduce some examples of them in the following.

5.1.2 Other types of SVCs

I do not attempt to discuss all kinds of SVCs here, but only some frequently used types of SVCs are presented.

First, as shown in the following SVCs, a manner of motion verb can be used as V1. This verb specifies the manner of the event denoted by V2 (see also Kim 2010):

- (281) a. ku-ka ophisu-ey kel-e ka-ss-ta/wa-ss-ta.
 he-Nom office-to walk-Comp go-Pst-Dec/come-Pst-Dec
 'He went/came to the office by walking.'
 - b. *ku-ka ophisu-ey ttwi-e ka-ss-ta/wa-ss-ta*.
 he-Nom office-to run-Comp go-Pst-Dec/come-Pst-Dec
 'He went/came to the office by running.'
 - c. ku-ka ophisu-ey ki-e ka-ss-ta/wa-ss-ta.
 he-Nom office-to walk-Comp go-Pst-Dec/come-Pst-Dec
 'He went/came to the office by crawling.'

Other serializing languages also have this type of SVC. A Thai example is given in (282).

(282) súri dxn pay (directional) Sudmuk (2005: 17)
Suri walk go
'Suri walked away (from the speaker's center of attention).

Unlike the sequential SVCs, in which the event of V1 occurs before the event of V2 (see the iconicity constraint on SVCs below), the events of V1 and V2 of the manner SVCs in (281) and (282) seem to occur simultaneously. But the V2 event appears to be the result of the V1 event; for instance, since the subject walked, he went or came to the office, although walking is not a necessary means for going or coming to the office. If the two subevents of the manner SVCs occur simultaneously, then a

prediction is that the V1 and V2 of the SVCs should be able to switch positions in the sentence and this switching should bring about no meaning difference. In other constructions in which two different events occur simultaneously, such a switching does not cause a different interpretation:

- (283) a. Jane-i nolay-lul pwulu-myense chayk-ul po-ass-ta.
 Jane-Nom song-Acc sing-while book-Acc see-Pst-Dec
 'Jane saw a book while singing a song.'
 - b. Jane-i chayk-ul po-myense nolay-lul pwul-less-ta.
 Jane-Nom book-Acc see-Pst-while song-Acc sing-Pst-Dec
 'Jane sang a song while seeing a book.'

The two sentences in (283) have different nuances; the main event of (283a) is seeing a book and the main event in (283b) is singing a song. Nonetheless, they have the same truth-conditions. But the manner SVCs, if the constituent verbs are switched, do not have the same truth-conditions. Consider the following examples:

(284) a. *ku-ka ophisu-ey ka/wa kel-ess-ta*.
he-Nom office-at go.Comp/come.Comp walk-Pst-Dec
'He went/came to the office and then walked (there).'
(NOT 'He went/came to the office by walking.')

- b. ku-ka ophisu-ey ka/wa ttwi-ess-ta.
 he-Nom office-at go.Comp/come.Comp run-Pst-Dec
 'He went/came to the office and then ran (there).'
 (NOT 'He went/came to the office by running.')
- c. *ku-ka ophisu-ey ka/wa ki-ess-ta*.
 he-Nom office-at go.Comp/come.Comp crawl-Pst-Dec
 'He went/came to the office and then crawled (there).'
 (NOT 'He went/came to the office by crawling.')

The SVCs in (284) clearly have different interpretations from those of (281). In manner SVCs, in which the component events occur simultaneously, the manner verb must precede the verbs like ka- 'go.' When the manner verb follows ka- 'go,' we have a sequential SVC instead.

Second, in (285a) the SVC has multiple interpretations; the second verb *peliess-ta* 'threw away' is interpreted literally or as an aspect marker having the meaning of *finish* or *done*.³² In (285b), the same verb is used only as the aspect marker.

(285) a. *ku-ka congi-lul ccic-e peli-ess-ta*.
he-Nom paper-Acc tear-Comp throw.away-Pst-Dec
'He tore the paper, and then threw it away.'
'He was done with tearing the paper.'

³² Japanese *sutsu* (*utsu*, *tsu*), whose lexical meaning is 'throw away,' can be also used as a completive marker (Heine and Kuteva 2002: 297).

b. *ku-ka sakwa-lul mek-e peli-ess-ta*he-Nom apple-Acc eat-Comp throw.away-Pst-Dec
(lit.) 'He ate the apple, and then threw it away.'
= 'He was done eating the apple.'

In the aspectual SVC (285b), the second verb cannot have the literal meaning, unlike (285a), since it is infelicitous to throw away what is already eaten. The same verb *peli*- 'throw away' can be used in V1 and V2 at the same time, as shown in the following:

(286) ku-ka congi-lul peli-e peli-ess-ta.
he-Nom paper-Acc throw.away-Comp throw.away-Pst-Dec
'He was done with throwing away the paper.'

In (287a), the second verb has a literal meaning of *to place* (or *to connect*). But in (287b), the same verb has the aspectual meaning of repetition.

- (287) a. ku-ka elum-ul ima-ey kacyewa tay-ss-ta.
 he-Nom ice-Acc forehead-Comp bring.Comp place-Pst-Dec
 'He brought the ice, and then placed it on his forehead.'
 - b. *ku-ka* chong-lul sso-a tay-ss-ta.
 he-Nom gun-Acc shoot-Comp place-Pst-Dec
 'He kept shooting the gun (over and over again).'

The aspectual verbs must appear in the V2 position. If they come in a non-final verb position, their aspectual meanings disappear:

(288) a. ku-ka congi-lul peli-e cwu-ess-ta.
he-Nom paper-Acc throw.away-Comp give-Pst-Dec
'He gave the service of throwing the paper away to somebody.'
b. ku-ka elum-ul ima-ey tay cwu-ess-ta.
he-Nom ice-Acc forehead-Comp place-Comp give-Pst-Dec

'He gave the service of placing the ice on forehead to somebody.'

In (288), the V1s have only their literal meanings.

Third, a typical sequential SVC is given in (289a), but if the object *sakwa* 'apple' is replaced with *yaksok* 'promise,' as in (289b), then the SVC comes to have an idiomatic interpretation.

- (289) a. ku-ka sakwa-lul kka mek-ess-ta.
 he-Nom apple-Acc peel-Comp eat-Pst-Dec
 'He peeled the apple, and then ate it.'
 - b. ku-ka yaksok-ul kka mek-ess-ta.
 he-Nom promise-Acc peel-Comp eat-Pst-Dec
 (lit.) 'He peeled the promise, and then ate it.' = 'He forgot the promise.'

In the SVC (289b), it is implausible to peel or eat a promise. So in such a context, the

serialized verbs are interpreted as the available idiomatic meaning of *forget*.

In summary, Korean has at least four major types of SVCs: sequential SVC, manner SVC, aspectual SVC, and idiomatic SVC.³³ While the main focus of this chapter is on the typical sequential SVCs, I will also discuss the other types of SVCs whenever relevant for the issues in question.

5.1.3 Basic properties of SVCs

It is not easy to precisely define SVCs for all serializing languages, and scholars have different ideas about what is an SVC and what is not. For example, Van Valin (2005) classifies English resultatives and English obligatory control constructions as SVCs. Resultative constructions in Thai are arguably a kind of SVC (Thepkanjana and Uehara 2009). Coordination, subordination, and auxiliary constructions share some grammatical properties in common with typical SVCs. I here discuss a unique set of properties of Korean SVCs, on the basis of which we can distinguish SVCs from the other related but distinct constructions. These properties will be used later to test whether a complex construction under discussion is really an SVC or not.

5.1.3.1 Negation with an

The negative marker an must appear right before the predicate that it negates, as

³³ Arguably, idiomatic "SVCs" are not a true SVC and they can be just listed in the lexicon as single lexical items. By contrast, other types of SVCs are productive and it is better to analyze them as syntactic combinations.

shown in (290).

(290) a. ku-ka kong-ul an cha-ss-ta. he-Nom ball-Acc Neg kick-Pst-Dec 'He did not kick the ball.'

b. *ku-ka an kong-ul cha-ss-ta.
he-Nom Neg ball-Acc kick-Pst-Dec (int.) 'He did not kick the ball.'

In (290a), the negative marker *an* negates the verb, which is right next to *an*. The sentence in (290b) is ungrammatical, since the object is placed in between *an* and the verb, preventing *an* from modifying the verb. Because the negative marker *an* can modify an adverb as well as a verb, the following sentence (291) can have two syntactic structures according to the position of *an*: it can modify the adverb or the verb phrase (i.e. *ppalli cha-ss-ta* 'quickly kicked').

(291) ku-ka kong-ul an ppalli cha-ss-ta.
he-Nom ball-Acc Neg quickly kick-Pst-Dec
'He kicked the ball not quickly.'
'It is not the case that he kicked the ball quickly.'

In SVCs, however, the negative marker *an* that immediately precedes V1 distributes over V1 and V2, as in (292) (see Lee 2012, 2014, among others).

- (292) a. ku-ka sakwa-lul an [kka mek-ess-ta].
 he-Nom apple-Acc Neg peel-Comp eat-Pst-Dec
 'He did not peel the apple, and did not eta it.'
 - b. *ku-ka hakkyo-ey an [kel-e wa-ss-ta]*.
 he-Nom school-To Neg walk-Comp come-Pst-Dec
 'He did not walk and did not come to the school.'
 - c. ku-ka sakwa-lul an [mek-e tay-ss-ta].
 he-Nom apple-Acc Neg eat-Comp place-Pst-Dec
 'He did not keep eating an apple (over and over again).'
 - d. ku-ka yaksok-ul an [kka mek-ess-ta].
 he-Nom promise-Acc Neg peel-Comp eat-Pst-Dec
 'He did not forget the promise.'

Since the component verbs of an SVC behave as a single predicate, it is natural that the negative marker can combine with the complex predicate.

By contrast, the negative marker *an* can only modify the predicate that it immediately precedes in the coordination (293a), subordination (293b), and resultative construction (293c). That is, the eating, thinking, and hammering must occur in (293a,b,c), respectively. But the auxiliary construction (293d) behaves like SVCs.³⁴

³⁴ The negative marker *an* can directly modify the main verb in the auxiliary construction. In this case, the sentence has the meaning 'Bob wanted not to drink water.' If it modifies the combination of the main verb and the auxiliary verb, as in (293d), then the sentence has the meaning 'Bob did not want to drink water,' or equivalently 'It is not the case that Bob wanted to drink water,' which 'Bob wanted not to drink water.' entails, but not the other way around.

- (293) a. *Tom-i sakwa-lul [an kka-ko] mek-ess-ta*.
 Tom-Nom apple-Acc Neg peel-and eat-Pst-Dec
 'Tom did not peel the apple and ate it.'
 - b. Jane-i Mary-lul [an yeyppu-ta-ko] sayngkakhay-ss-ta.
 Jane-Nom Mary-Acc Neg pretty-Dec-Comp think-Pst-Dec
 'Jane thought that Mary was not pretty.'
 - c. Hank-ka soy-lul [an pyengpyengha-key] twutulki-ess-ta.
 Hank-Nom metal-Acc Neg flat-Key hammer-Pst-Dec (lit.) 'Hank hammered the metal not flat.'
 - d. Bob-i mwul-lul an [masi-ko siph-ess-ta].
 Bob-Nom water-Acc Neg drink-Comp want-Pst-Dec
 'It is not the case that Bob wanted to drink water.'

The examples in (293) suggest that the predicates in coordination, subordination, and resultative constructions are not complex predicates in the same way as SVCs. However, in the auxiliary construction, the combination of the main verb and the auxiliary verb behaves like a single predicate.

In short, the negative marker *an* can modify the combination of multiple predicates only in SVCs and auxiliary constructions among the constructions under discussion.

5.1.3.2 Argument sharing

Generally, the component verbs of an SVC share some argument. The constituent verbs of SVCs in (294a) share both the subject *akma-ka* 'demon-Nom' and the object *wenswungi-lul* 'monkey-Acc.' In (294b), only the subject is shared by the constituent verbs (contra Baker 1989, Collins 1997) (see Lee 2014).

- (294) a. akma-ka wenswungi-lul cap-a mek-ess-ta.
 demon-Nom monkey-Acc catch-Comp eat-Pst-Dec
 'The demon caught the monkey and then eat it.'
 - b. Jane-i hakkyo-ey Tom-ul chac-a ka-ss-ta.
 Jane-Nom school-to Tom-Acc search.for-Comp go-Pst-Dec
 'Jane went to the school searching for Tom.'

Interestingly, if we examine the canonical SVC (294a) more carefully, we can find that it has its passive counterparts in (295) below which violate subject- and object-sharing, and also argument saturation. Only the passive verb with *hi* (a passive affix in Korean) in (295) can take the NPs as its subject and complement, whose CASE values are compatible only with it; the other active form of the verb does not share them in the sentences. That is, in (294a), the V1 *cap-a* 'catch-Comp' shares the nominative subject and accusative object with the V2 *mek-ess-ta* 'eat-Pst-Dec,' but in (295a), the same V1 *cap-a* 'catch-Comp' does not have its nominative subject and accusative

object (which should be *akma-ka* 'demon-Nom' and *wenswungi-lul* 'monkey-Acc,' respectively) in the sentence. This entails no subject or complement sharing and also no argument saturation in the SVC. The same kind of problems apply to the V2 *mek-ess-eyo* 'eat-Pst-Dec' in (295b). Interestingly, in the passive counterpart of (295a), the passive morpheme appears on only one of the two verbs, V2 as in (295a), or V1 as in (295b). The two arguments are still shared by V1 and V2.

- (295) a. wenswungi-ka akma-eykey cap-a mek-hi-ess-ta.³⁵
 monkey-Nom demon-by catch-Comp eat-Pass-Pst-Dec
 'The monkey was caught, and then eaten by the demon.'
 - b. wenswungi-ka akma-eykey cap-hi-e mek-ess-eyo.
 monkey-Nom demon-by catch-Pass-Comp eat-Pst-Dec
 'The monkey was caught, and then eaten by the demon.'

Based on data like (295), I argued in Lee (2014) that SVCs in Korean are broadly classified into two types: subject-sharing SVCs like (294) and index-sharing SVCs

- i) *wenswungi-nim-i* akma-eykey cap-a mek-hi-si-ess-ta. monkey-Hon-Nom demon-by catch-Comp eat-Pass-Hon-Pst-Dec 'The monkey was caught, and then eaten by the demon.'
- ii) **wenswungi-ka akma-nim-eykey cap-a mek-hi-si-ess-ta.* monkey-Nom demon-Hon-by catch-Comp eat-Pass-Hon-Pst-Dec (int.) 'The monkey was caught, and then eaten by the demon.'

³⁵ The subject in this sentence is the monkey. This can be grammatically verified by the honorification. In Korean, if the honorification marker *si* is attached to the verb, then another honorification marker *nim* should be attached to the subject of the verb. In the following, *nim* cannot be attached to *akma* 'demon,' but to *wenswungi* 'monkey.'

Also, in sentence (295b), only *wenswungi* 'monkey' can combine with *nim* when *si* is attached to V1, and thus *wenswungi* 'monkey' is the subject.

like (295). In short, V1 and V2 (i.e. component verbs) of Korean SVCs must share a semantic argument (an argument index) rather than the subject, an object, or an internal argument. Note also that the SVCs in (295) are largely compositional, since the lexical semantics of the verbs compose the basic meanings of the verbal serializations (with the constructional meaning of the SVCs, a sequence of the subevents denoted by the verbs). They are not idiomatic or metaphorical: the verb *mek-* 'eat' has many metaphorical uses in Korean, as shown in (296), but the SVCs in (295) denote the event of the monkey being caught and then literally eaten by the demon.

(296) ku-ka noymwul-ul/ton-ul mek-ess-ta. he-Nom bribe-Acc/money-Acc eat-Pst-Dec 'He received the bribe/money.'

Conversely, in coordination (297a), each clause has a different subject and object. Also in subordination (297b), the main clause and embedded clause do not share an argument.

(297) a. Bill-i chayk-ul ilk-ko Tom-i khephi-lul masi-ess-ta.
Bill-Nom book-Acc read-and Tom-Nom coffee-Acc drink-Pst-Dec
'Bill read a book and Tom drank a coffee.'

b. Mary-ka Tom-i ttokttokha-ta-ko mit-ess-ta.
Mary-Nom Tom-Nom smart-Dec-Comp believe-Pst-Dec
'Mary believed that Tom is smart.'

It has been generally assumed that in Korean resultative constructions, the object is co-indexed with what is predicated of the secondary predicate (XP with *-key*).³⁶ However, in fact the subject of the secondary predicate can be different from the object, as shown in the following:

- (298) a. Mary-ka soy-lul kkuth-i napcakha-key twutulki-ess-ta.
 Mary-Nom metal-Acc tip-Nom flat-Key hammer-Pst-Dec
 'Mary hammered the metal so that/to the extent that the tip of the metal became flat.'
 - b. Mary-ka soy-lul ai-ka nolla-key twutulki-ess-ta.
 Mary-Nom metal-Acc child-Nom startle-Key hammer-Pst-Dec
 'Mary hammered the metal so that/to the extent that the child became startled.'
 - c. Jane-i khemphyuthe-lul phal-i aphu-key sayonghay-ss-ta.
 Jane-Nom computer-Acc arm-Nom painful-Key use-Pst-Dec
 'Jane used the computer so that/to the extent that her arm hurt.'

³⁶ Instead of *-key*, *-tolok* can be used in the same resultative constructions. These two types of resultatives seem to basically have the same meaning in general. So I here focus on the resultative constructions with *-key*.

In (298a), the subject of the secondary predicate *napcakha-key* 'flat-Key' is a part of the object *soy-lul* 'metal-Acc.' So they can arguably be co-indexed. But in (298b), it is clear that the object of the main verb is different from the subject of the secondary predicate. Similarly for (298c), as a result of using the computer (maybe for a long time in a bad position), her arm began to hurt. It is obvious that her arm cannot be co-indexed with the object *khemphyuthe* 'computer.'

In an auxiliary construction as a kind of subject control, the subject must be shared by the main verb and the auxiliary verb:

- (299) a. Jane-i cancenke-lul tha-ko (*Jane-/*Mary-ka) siph-ess-ta.
 Jane-Nom bicycle-Acc ride-Comp Jane-/Mary-Nom want-Pst-Dec
 'Jane wanted to ride the bicycle.'
 - b. Jane-i chayk-ul ilk-ko (*Jane-/*Mary-ka) siph-ess-ta.
 Jane-Nom book-Acc ride-Comp Jane-/Mary-Nom want-Pst-Dec
 'Jane wanted to read the book.'

The auxiliary verb cannot have a separate expression of the same subject or a distinct subject. The object of the main verb is not shared in the auxiliary constructions, since what the subject wanted is an action (e.g. riding the bicycle), but not the referent of the object itself.

Summarizing, a semantic argument must be shared in SVCs, and the subject must be shared in auxiliary constructions. However, coordinations, subordinations,

and resultative constructions do not have such a constraint on sharing.

5.1.3.3 Iconicity

SVCs generally obey iconicity constraint, i.e. the subevent denoted by the first verb must occur before the subevent denoted by the second verb (see e.g. Aikhenvald 2006: 35-36). Thus the sequential order of the component verbs and their corresponding subevents are parallel. The iconicity constraint is what explains the unacceptability of (300b).

- (300) a. kunye-ka kheik-ul cip-e mek-ess-ta.
 she-Nom cake-Acc pick.up-Comp eat-Pst-Dec
 'She picked up the cake, and then ate it.'
 - b. *kunye-ka kheik-ul mek-e cip-ess-ta.
 she-Nom cake-Acc eat-Comp pick.up-Pst-Dec (int.) 'She picked up the cake, and then ate it.'

In (300b), the meaning of picking up a cake which is already eaten is pragmatically implausible based on the assumption that the SVC in (300b) is constrained by iconicity. If iconicity is not relevant (so that it is possible for the first verb to represent an event that happens after the event of the second verb), the SVC should be fine, on the intended reading; but it is not. Another set of examples that clearly shows the

existence of an iconicity constraint is given in the following. If the component verbs of the SVC in (301a) (repeated from (273a)) are switched, then we get the SVC in (301b) (repeated from (273b)), which is grammatical. According to the iconicity, we predict that the meaning of the SVC in (301b) must be different from that of the SVC in (301a), i.e. the temporal order of the subevents of (301b) must be the opposite of the temporal order of the subevents of (301a). This is indeed the case:

- (301) a. *Bill-i ku cwul-ul cap-a tangki-ess-ta*.
 Bill-Nom the rope-Acc grab-Comp pull-Pst-Dec
 'Bill grabbed the rope, and then pulled it.'
 - b. *Bill-i ku cwul-ul tangki-e cap-ass-ta*.
 Bill-Nom the rope-Acc pull-Comp grab-Pst-Dec
 'Bill pulled the rope, and then grabbed it.'

In (301a), the event of grabbing the rope occurred first, and then the pulling event happened, but in (301b) the pulling event occurred first, and then the grabbing event followed it.

By contrast, coordinations do not obey any iconicity constraints. In (302a) the iconic interpretation (throwing and then kicking) is the default reading, but the non-iconic reading is also possible in a certain context, i.e. the denial of the default interpretation in (302b) can follow (302a).

- (302) a. Mary-ka kong-ul tenci-ko cha-ss-ta.
 Mary-Nom ball-Acc throw-and kick-Pst-Dec
 'Mary threw the ball and kicked the ball.'
 - b. kulentey kong-ul cha-n kes-i mence-ta.
 but ball-Acc kick-Rel thing-Nom early-Dec
 'But she first kicked the ball.'

In the following subordination, the predicate in the embedded clause is in future tense but the main verb is in past tense:

(303) Tom-i chayk-ul sa-keyss-ta-ko sayngkakhay-ss-ta.
Tom-Nom book-to buy-Fut-Dec-Comp think-Pst-Dec
'Tom thought that he would buy the book.'

The thinking event occurs before the buying, but the subordinate clause appears before the main verb in the sentence. Hence, there is no iconicity in the sentence.

In the canonical resultative construction in (304), the secondary predicate with *-key* appears before the main verb:

(304) Hank-ka soy-lul pyengpyengha-key twutulki-ess-ta.
Hank-Nom metal-Acc flat-Key hammer-Pst-Dec
'Hank hammered the metal flat.'

Yet since the caused event of being flat must happen after the causing event of hammering, iconicity is again not a constraining principle here.

In the auxiliary construction in (305a), Jane has a desire to drink water. If her desire is satisfied, this occurs after Jane's having the desire, and thus again there is no iconicity. Furthermore, as shown in (305b), switching the verbs is not allowed.

- (305) a. Jane-i mwul-ul masi-ko sip-ess-ta.
 Jane-Nom water-Acc drink-Comp want-Pst-Dec
 'Jane wanted to drink water.'
 - b. *Jane-i mwul-ul sip-ess-ta masi-ko.
 Jane-Nom water-Acc want-Pst-Dec drink-Comp (int.) 'Jane wanted to drink water.'

In sum, SVCs obey some type of iconicity constraint, but this is not required for the other constructions.

5.1.3.4 Tense marking

SVCs have a tense marker attached only to the final verbs. The non-final verbs must not have a tense marking affix, as illustrated in (306).

- (306) a. ku-ka sakwa-lul kkakk-a mek-ess-ta.
 ku-Nom apple-Acc peel-Comp eat-Pst-Dec
 'He peeled the apple, and then ate it.'
 - b. *ku-ka sakwa-lul kkakk-ass-e mek-ta.
 ku-Nom apple-Acc peel-Pst-Comp eat-Dec (int.) 'He peeled the apple, and then ate it.'
 - c. *ku-ka sakwa-lul kkakk-ass-e mek-ess-ta.
 ku-Nom apple-Acc peel-Pst-Comp eat-Pst-Dec (int.) 'He peeled the apple, and then ate it.'

It is generally assumed that the tense marker attached to the final verb in an SVC is shared by the non-final verbs. So in (306a), the first verb *kkakk-a* 'peel-Comp' is also interpreted as having the past tense. However, we can alternatively hypothesize that the past tense interpretation of the first verb in the SVC (306a) is derived from the combination of the iconicity constraint and the explicit past tense marking on the second verb. In other words, the event denoted by the first verb must occur prior to the event denoted by the second verb according to the iconicity, and this second verb is in past tense. Thus the first verb event is automatically interpreted as occurring in the past. If this is correct, then in an SVC whose second verb is marked with the present tense, the event of the first verb should be interpreted as though in past tense. This is not borne out, as in the following:

(307) ku-ka cikum sakwa-lul kkakk-a mek-nun-ta.
ku-Nom now apple-Acc peel-Comp eat-Pres-Dec
'He now peels the apple, and then eats it.'

Both V1 and V2 should be in the present tense in (307), although there is a temporal precedence relation between V1 and V2 events. Other types of SVCs are parallel to typical SVCs in terms of the tense marking. Only the last verb is tense marked:

- (308) a. ku-ka hakkyo-ey kel-(*ess)-e wa-ss-ta.
 he-Nom school-Acc walk-Pst-Comp come-Pst-Dec
 'He walked to the school.'
 - b. ku-ka sakwa-lul mek-(*ess)-e tay-ss-ta.
 he-Nom apple-Acc eat-Pst-Comp place-Pst-Dec
 'He kept eating apples.'
 - c. ku-ka yaksok-ul kka(*ss)-e mek-ess-ta.
 he-Nom promise-Acc peel-Pst-Comp eat-Pst-Dec
 'He forgot the promise.'

Coordinations are different from SVCs with respect to tense marking. In coordinations, a tense marker is required for the final verb (i.e. the verb that appears in the second conjunct), and the other verbs can also have a separate tense marker:

- (309) a. ku-ka sakwa-lul kkakk-ko (kuliko) mek-ess-ta.
 ku-Nom apple-Acc peel-and and eat-Pst-Dec
 'He peeled the apple and ate it.'
 - b. *ku-ka sakwa-lul kkakk-ass-ko (kuliko) mek-ta.
 ku-Nom apple-Acc peel-Pst-and and eat-Dec (int.) 'He peeled the apple and ate it.'
 - c. *ku-ka* sakwa-lul kkakk-ass-ko (kuliko) mek-ess-ta.
 ku-Nom apple-Acc peel-Pst-and and eat-Pst-Dec
 'He peeled the apple and ate it.'

Similarly, in subordination, the main clause and the embedded clause can separately have a tense marker:

- (310) a. ku-ka ku aki-ka yeyppu-ta-ko sayngkakhay-ss-ta.
 ku-Nom the baby-Acc beautiful-Dec-Comp think-Pst-Dec
 'He thought that the baby is beautiful.'
 - b. *ku-ka ku aki-ka yeyppu-ess-ta-ko sayngkakha-ta*.
 ku-Nom the baby-Acc beautiful-Pst-Dec-Comp think-Dec
 'He thinks that the baby was beautiful.'
 - c. ku-ka ku aki-ka yeyppu-ess-ta-ko sayngkakhay-ss-ta.
 ku-Nom the baby-Acc beautiful-Pst-Dec-Comp think-Pst-Dec
 'He thought that the baby was beautiful.'

Conversely, the secondary predicate *pyengpyengha-key* 'flat-Key,' which appears before the verb in the following resultative construction, cannot have tense marking:

(311) Hank-ka soy-lul pyengpyengha(*-ss)-key twutulki-ess-ta.
Hank-Nom metal-Acc flat-Pst-Key hammer-Pst-Dec
'Hank hammered the metal flat.'

Finally, auxiliary constructions have the same property as SVCs in terms of tense marking:

(312) Jane-i mwul-lul masi(*-ess)-ko siph-ess-ta. Jane-Nom water-Acc drink-Pst-Comp want-Pst-Dec 'Jane wanted to drink water.'

Thus SVCs, resultatives, and auxiliary constructions have the same property of tense marking; when an explicit tense affix appears in a sentence, only one predicate can bear the tense marking. But in coordinations and subordinations, all predicates can have a separate tense marking.

Summarizing, the four grammatical properties of the constructions discussed here are presented in the following table (1 = Yes, 0 = No):

		Negation on	Argument	Iconicity	Separate
		multiple	sharing		tense
		predicates			marking
SVC	Typical SVCs	1	1	1	0
	Manner SVCs	1	1	1	0
	Aspectual SVCs	1	NA	NA	0
	Idiomatic SVCs	1	NA	NA	0
Coordinations		0	0	0	1
Subordinations		0	0	0	1
Resultative construction		0	0	0	0
Auxiliary construction		1	1 (subject)	0	0

(313) Grammatical properties of the constructions

In the table we see that some properties are shared by some constructions. Particularly, the auxiliary constructions have many properties shared with the SVCs. So the auxiliary constructions can arguably be a type of SVC. However, I assume here that they are a kind of complex predicate, but not an SVC, since another important property of SVCs is that the component verbs can be used on their own with their lexical meaning in other sentences, but the final verb of auxiliary constructions is simply a dependent auxiliary verb (see Zwicky 1990, Aikhenvald 2006, Kim 2010).

The combinations of these grammatical properties seem to be enough to identify a construction as a type of SVC or not. Later in this chapter these properties will be employed as diagnostics to test whether a complex construction (e.g. the combination of causative and SVC) is really an SVC or not.

5.2 Typical SVCs

In this section, I examine how far the intention-based analysis of different readings of accomplishments can be extended to typical sequential SVCs.

I first further divide the typical sequential SVCs into two types: *bake-eat*-type SVCs and *hit-break*-type SVCs. Basically, in both cases the V1 and V2 events compose the whole event described by the SVC, but how the two events are related to each other is different in the different SVCs. Consider the following examples:

- (314) a. ku-ka koki-lul kwu-e mek-ess-ta. (bake-eat-type SVC)
 he-Nom meat-Acc bake-Comp eat-Pst-Dec
 'He baked the meat and then ate it.'
 - b. *ku-ka changmwun-ul ttayli-e pwusu-ess-ta*. (*hit-break*-type SVC)
 he-Nom window-Acc hit-Comp break-Pst-Dec
 'He broke the window by hitting it.'

In (314a) baking is not a causing event of eating *per se*. In contrast, hitting is the causing event of the breaking in (314b). This difference regarding the status of the causing event can be grammatically verified in the following tests. If a certain event is a causing event of another event, then the causing event can be expressed with a *by*-phrase (see a similar point in Dowty 1979: 227):

(315) a. Jane cooked the fish by grilling it/#buying it.

- b. Tom broke the window by hitting it/#picking up the hammer.
- c. Bill turned on the light by flipping the switch/#entering the room.³⁷
- d. Andy ate the fish by chewing and swallowing it/#baking it.

In addition, only a causing event can be an answer to the *how*-question:

(316) a. A: How did you cook it?

B: I grilled it/#I bought it.

b. A: How did you break it?

B: I hit it/#I picked up the hammer.

c. A: How did you turn on the light?

B: I flipped the switch/#I entered the room.

- d. A: How did you eat the fish?³⁸
 - B: I chewed and swallowed it/#I baked it.

Hence, the bake-eat- and hit-break-type SVCs have different event structures; in the

former, the component events are temporally concatenated, whereas in the latter the

V1 event is embedded in the V2 event as V2's causing subevent.

³⁷ Some rooms have an automatic system which turns on the lights whenever something or somebody enters the room. But in this sentence, I assume that the room lacks such an automatic system. If a room has the system, then *Bill turned on the light by entering the room* is acceptable.

³⁸ The equivalent question in Korean *ku sayngsen ettehkey mek-ess-ni*? 'How did you eat the fish?' has another meaning 'How did you cook the fish that you ate?' As a response, the sentence *kwu-ess-eyo* 'I baked it' can be interpreted as 'I ate it baked.' English behaves in the same way: one can respond to the question 'How did you eat it?' with the sentences 'I ate it raw/baked/sautéd.' In (316d) I assume that the question is asking about the manner or way the addressee ate the fish, not the state of the fish when she ate it.

5.2.1 Accomplishments involving typical SVCs

I now show that the two types of typical SVCs are accomplishments. First, the SVCs can occur in the progressive as in (317), (318) and (319), and the SVCs in the progressive do not entail the realization of the result of each component verb. The progressive targets the causing subevent of V1 or V2. In the *bake-eat*-type SVC in (317), the causing subevent of V1 is in the progressive. So the rest of the event of the SVC (i.e. the result of V1 and the whole event of V2) are potential consequences of the causing subevent of V1. In this example, V1 is 'bake' and its causing subevent is the event of Mina putting the fish into the oven.

(317) Mina-ka sayngsen-ul kwu-e mek-ko iss-ess-ta.
Mina-Nom fish-Acc bake-Comp eat-Comp exist-Pst-Dec haciman acik sayngsen-i kwu-e-ci-ci anh-ass-ta.
but yet fish-Nom bake-Comp-Pass-Comp Neg-Pst-Dec 'Mina was baking the fish so that she could eat it. But it was not baked yet.'

However, when an SVC is in the progressive and the event understood to be in progress is the event denoted by V2, the event of V1 is complete.

(318) [Context: Mina baked the fish and put it to her mouth.]

Mina-kasayngsen-ulkwu-emek-koiss-ess-ta.Mina-Nomfish-Accbake-Compeat-Compexist-Pst-Dechacimanaciksayngsen-imek-e-ci-cianh-ass-ta.andyetfish-Nomeat-Comp-Pass-CompNeg-Pst-Dec'Minabaked the fishand then was eating the fish. But it was not eaten yet.'

The *hit-break*-type SVCs can occur in the progressive, but they are different from the *bake-eat*-type SVCs. In the former, V1 describes the causing subevent of V2's event, so the event of V1 itself can be in the progressive, as in (319).

(319) [Context: Mina was kicking the door. So the door could be opened.]
Mina-ka mwun-ul pal-lo cha yel-ko iss-ess-ta.
Mina-Nom door-Acc foot-Inst kick.Comp open-Comp exist-Pst-Dec kulena acik mwun-i yel-li-ci anh-ass-ta.
but yet door-Nom open-Pass-Comp Neg-Pst-Dec 'Mina was opening the door by kicking it. But it was not opened yet.'

In the SVC in (319), Mina had kicked the door. However, V1 itself has an accomplishment event structure, and so the causing subevent of V1 can be in the progressive, as well:

(320) [Context: Mina was moving her right leg toward the door. So the door could be kicked and then opened.]
Mina-ka mwun-ul pal-lo cha yel-ko iss-ess-ta.
Mina-Nom door-Acc foot-Inst kick.Comp open-Comp exist-Pst-Dec kulena acik mwun-i cha-ci-ci-nun anh-ass-ta.
so yet door-Nom kick-Pass-Comp-Top Neg-Pst-Dec 'Mina was kicking the door so that it could be opened. But it was not kicked yet.'

Second, the SVCs with a *maney*-phrase are ambiguous between ingressive and telic readings. Consider the *bake-eat*-type SVC in (321).

(321) il pwun maney Mina-ka ku sayngsen-ul kwu-e
 one minute in Mina-Nom the fish-Acc bake-Comp
 mek-ess-ta.
 eat-Pst-Dec

'It took one minute for Mina to prepare (e.g. setting up cooking utensils) before she started to bake and then eat the fish.' (ingressive reading) 'It took one minute for Mina to bake the fish and then eat it.' (telic reading)

The default reading of (321) is the telic reading. It seems not very easy to get the ingressive reading, since the event denoted by the SVC is complex (the combination of the two events, baking and eating) and so the preparatory event is directly

connected with the V1 event, but not with the V2 event. That is, setting up cooking utensils is clearly a preparatory event for baking, but not exactly for eating. This seems to be the source of the difficulty getting the ingressive interpretation. Actually, when an event is not complex, as in the following, the difficulty just disappears:

(322) *il pwun maney Mina-ka ku sayngsen-ul kwu-ess-ta.*one minute in Mina-Nom the fish-Acc bake-Pst-Dec
'It took one minute for Mina to prepare (e.g. setting up cooking utensils)
before she started to bake the fish.' (ingressive reading)
'It took one minute for Mina to bake the fish.' (telic reading)

The telic reading in (322) still seems to be the default reading of the sentence, but we can also get the ingressive reading easily. The *bake-eat*-type SVC in (321) denotes a conceptualized single event, so in terms of that single event, we can get the ingressive reading anyway. The *hit-beak*-type SVC in the following behaves in much the same way:

(323) il pwun maney Ryan-i ku mwun-ul ttayli-e
one minute in Ryan-Nom the door-Acc hit-Comp
pwuswu-ess-ta.
break-Pst-Dec

'It took one minute for Ryan to prepare (e.g. standing in front of the door and

getting ready) before he started to break the door by hitting it.' (ingressive reading)

'It took one minute for Ryan to break the door by hitting it.' (telic reading)

It is easier to get the ingressive interpretation in the *hit-beak*-type SVC (323) than in the *bake-eat*-type SVC (321).

Third, the SVCs with *taci* 'again' are ambiguous between repetitive and restitutive readings. In the repetitive reading of (324), *taci* 'again' in the SVC must scope over the whole event of going and opening, but in the restitutive reading of (324), the adverb takes narrow scope over the result state of opening.

(324) *Mina-ka taci ku mwun-ul cip-ey ka yel-ass-ta*Mina-Nom again the door-Acc house-To go.Comp open-Pst-Dec
'Mina went to the house and then opened the door again.'
1. Repetitive interpretation: Entails that Mina went to the house and opened the door and presupposes that Mina went to the house and opened the door before.

2. Restitutive interpretation: Entails that Mina went to the house and opened the door and presupposes that it was open before.

The *hit-beak*-type SVC below is also ambiguous between the two readings:

(325) Mina-ka taci ku mwun-ul pal-lo cha yel-ess-ta.
Mina-Nom again the door-Acc foot-Inst kick.Comp open-Pst-Dec
'Mina opened the door by kicking it again.'
1. Repetitive interpretation: Entails that Mina opened the door by kicking it and presupposes that Mina opened the door by kicking it before.
2. Restitutive interpretation: Entails that Mina opened the door by kicking it

and presupposes that it was open before.

These grammatical properties indicate that the two types of SVCs have an accomplishment event structure.

5.2.2 Interpretation of V1 in typical SVCs

In this section I discuss interpretations of V1 in a typical SVC. First, note that the verb *cip*- 'pick up' is an accomplishment predicate; so it can have the failed-attempt interpretation which entails the subject's intention, as in (326).

- (326) Jane-i khong-ul ceskalak-ulo cip-ess-ciman, cip-e
 Jane-Nom bean-Acc chopsticks-Inst pick.up-Pst-but pick.up-Comp *ci-ci* anh-ass-ta.
 Pass-Comp Neg-Pst-Dec
 (lit.) 'Jane picked up the bean with the chopsticks, but it was not picked up.'
 - = 'Jane tried to pick up the bean with the chopsticks, but it was not picked up.'

However, if *cip*- 'pick up' is used as V1 in an SVC, as in the following, it cannot have the failed-attempt interpretation:

(327) Jane-i khong-ul ceskalak-ulo cip-e mek-ess-ciman,
Jane-Nom bean-Acc chopsticks-Inst pick.up-Comp eat-Pst-but
#khong-i cip-e ci-ci anh-ass-ta.
bean-Nom pick.up-Comp Pass-Comp Neg-Pst-Dec
'Jane picked up the bean with the chopsticks and then ate it. #But the bean was not picked up.'

A similar pattern of SVCs is found in other languages. The following Yoruba examples show the difference between the SVC in (328a) and the coordination structure in (328b): i.e. only coordination in (328b) can be followed by (328c) (examples from Stahlke 1970).

(328) a. mo mú ìwé wá ilé

I took book come home 'I brought a book home.'

- b. mo mú ìwé; mo sì wá ilé
 I took book I and came home
 'I took the book and I came home.'
- c. sùgbón mo gbàgbé lá.ti mú u wá pèlú
 but I forgot to take it come also
 'But I forgot to bring it along.'

According to Lord (1974, 1993) and Foley and Olson (1985), the difference between (328a) and (328b) is due to the fact that the V2 in an SVC is "always in some sense a further development, result or goal" of the V1 in the construction. In other words, if the V1 event can be canceled, then the SVC's basic function of serializing events cannot obtain. So, the non-cancellation of a V1 result state (or object) seems to be a natural consequence of serializing events in SVCs.

In (327) the V1 result is shown to be not cancelable, but more generally results of non-final verbs cannot be canceled in SVCs, as illustrated below:

(329) a. Jane-i sayngsen-ul sa kwu-e mek-ess-ta.
Jane-Nom fish-Acc buy.Comp bake-Comp eat-Pst-Dec
'Jane bought the fish, and then baked it, and then ate it.'

b. ...#kulena sayngsen-ul sa-l swu eps-ess-ta.
but fish-Acc buy-Rel way not.exist-Pst-Dec
'...#But she could not buy the fish.' (in the context of (329a))
c. ...#kulena sayngsen-i kwu-e ci-ci anh-ass-ta.

but fish-Nom bake-Comp Pass-Comp Neg-Pst-Dec '...#But the fish was not baked.' (in the context of (329a))

In (329a), Jane must bake the fish to eat it, and to bake it, Jane must buy it. Of course, according to our world knowledge buying or baking is not absolutely necessary for baking or eating, respectively. But what the construction expresses includes the temporally plausible connections between the component events. If one of the links is "broken," then the various subevents described by each verb cannot form a unified event. The *hit-break*-type SVCs also follow this general constraint. The result of the verb *ttayli-* 'hit' is contact, and it can be canceled in a non-SVC, as shown in (330).

(330) Ryan-i ku mwun-ul mangchi-lo ttayli-ess-ciman,
Ryan-Nom the door-Acc hammer-Inst hit-Pst-but mangchi-cil-i pisnaka-ss-ta.
hammer-doing-Nom miss-Pst-Dec
(lit.) 'Ryan hit the door with the hammer, but the hammering missed the door.'

But in the context of SVCs, the result of the same verb is not cancelable when it is

used as a non-final verb:

(331) Ryan-i ku mwun-ul mangchi-lo ttayli-e pwuswu-ess-ciman,
Ryan-Nom the door-Acc hammer-Inst hit-Comp break-Pst-but
#mangchi-cil-i pisnaka-ss-ta.
hammer-doing-Nom miss-Pst-Dec

'Ryan broke the door by hitting it with the hammer, #but the hammering missed the door.'

Furthermore, V1 has another restriction on its meaning in the context of light verb constructions. The light verbs of the quaila-*ha* constructions require a phrase headed by a common noun as the object, as illustrated in Chapter 4 (*Ha*-Constructions). Consider the following examples:

- (332) a. *Bill-i pap-ul hay-ss-ta*.
 Bill-Nom rice-Acc do-Pst-Dec
 'Bill cooked the rice.'
 - b. *Bill-i khephi-lul hay-ss-ta*.
 Bill-Nom coffee-Acc do-Pst-Dec
 'Bill brewed/drank the coffee.'

The exact meanings of the light verbs in the minimal pair (332) are determined by the common noun objects. If a qualia-*ha* construction is embedded in an SVC, we get

SVCs like those in (333). There is a restriction on the appropriate choice from the associated qualia of a common noun object for the determination of the V1 light verb meaning (see Lee 2011a,b):

- (333) a. ku-ka pap-ul hay ponay-ess-ta.
 he-Nom rice-Acc do send-Pst-Dec
 'He cooked the rice and sent it to somebody.'
 - b. ku-ka khephi-lul hay ponay-ess-ta.
 he-Nom coffee-Acc do send-Pst-Dec
 'He brewed the coffee and sent it to somebody.'
 #'He drank the coffee and sent it to somebody.'

In (333), only the agentive role *cook* or *brew* is appropriate for the meaning of the V1 light verb *hay*, suggesting that a light V1 in an SVC can only take on the agentive reading for its object. However, there is an alternative: it could be that the telic role (i.e. drinking the coffee) is pragmatically implausible prior to sending. I suggest that the first hypothesis is in fact correct. If a light V1 in an SVC is restricted to agentive qualia, this predicts that any N that lacks this qualia, such as *khemphyuthe* 'computer,' which has only a telic qualia, as shown in (334a), should be impossible in an SVC. This is confirmed in (334b) (see Lee 2011a,b).

- (334) a. Jenny-ka khemphyuthe-lul hay-ss-ta.Jenny-Nom computer-Acc do-Pst-Dec'Jenny used the computer.'
 - b. *Jenny-ka khemphyuthe-lul hay ponay-ess-ta.
 Jenny-Nom computer-Acc do send-Pst-Dec
 (int.) 'Jenny used the computer and sent it to somebody.'

In (334b), using the computer and sending it to somebody is pragmatically plausible, but this meaning is not available in (334b). Thus, the ungrammaticality of (334b) suggests that SVCs generally allow agentive qualia. This suggests that there should be a change (i.e. result object or result state) caused by the event of the V1 that somehow feeds into the V2 event. It is not clear in (334b) what change of the computer using a computer brings about and how any such change would relate to sending. By contrast, in (333b) brewing a coffee brought about its creation, and since this coffee was brewed the subject could send it somewhere.

Instead of failed-attempt interpretations, non-final verbs of SVCs allow any actual-result interpretations. In (335), since hitting seems to be non-gradable (#*He slightly/completely hit the door*), V1 only has the complete-result reading.

(335) Ryan-i ku mwun-ul mangchi-lo ttayli-e pwuswu-ess-ta.
Ryan-Nom the door-Acc hammer-Inst hit-Comp break-Pst-Dec
'Ryan broke the door by hitting it.'

In (336), since baking a fish is gradable, the V1 can be either partial-result or complete-result:

(336) [Context: Jane slightly/completely baked the fish.]
Jane-i sayngsen-ul kwu-e mek-ess-ta.
Jane-Nom fish-Acc bake-Comp eat-Pst-Dec
'Jane baked the fish and then ate it.'

Summarizing, V1 must have some result relevant to V2 and the result of V1 must be realized. More generally, a component verb of an SVC must have some result relevant to the following verb, and the result must occur.

Based on this property of SVCs, I propose the following generalization:

(337) Event Connection Generalization (ECG):

In the event structure of a complex predicate sentence, connecting event(s) (i.e. the final subevent of temporally non-final predicate) must occur in the actual world.

According to the Event Connection Generalization (ECG), the result of the V1 in the *bake-eat*-type SVC in (338a), must occur, since the caused subevent of the V1 is connected to the causing subevent of the V2 in the event structure of the SVC. In the *hit-break*-type SVC (338b), the caused subevent of the V1 must occur, since it is connected to the caused event of the V2 in the event structure of the SVC.

- (338) a. *ku-ka ttalki-lul cal-la mek-ess-ta*. (*bake-eat-type SVC*)
 he-Nom strawberry-Acc cut-Comp eat-Pst-Dec
 'He cut the strawberry and then ate it.'
 - b. *ku-ka mwun-ul tangki-e yel-ess-ta*. (*hit-break*-type SVC)
 he-Nom door-Acc pull-Comp open-Pst-Dec
 'He opened the door by pulling it.'

Recall that the causing subevents of the V1 and V2 in (338a) and the causing subevent of the V1 in (338b) should occur according to the Subject Realization Generalization. Due to the combination of the Subject Realization Generalization and the Event Connection Generalization, all the subevents of the SVCs in (338) should occur except the final subevents, the result state of being eaten in (338a) and the result state of being broken in (338b). The final subevents of the constructions can occur or not. This problem is taken up in the next section. Resultatives are generally considered a complex predicate construction. We thus expect that the Event Connection Generalization should be applied to resultative constructions. In the resultatives in (339), the caused events of the main verbs cannot be canceled.

(339) a. ku-ka soy-lul napcakha-key/tolok twutulki-ess-ta.
he-Nom metal-Acc flat-Key/Tolok hammer-Pst-Dec
#kulena soy-ka twutulki-e ci-ci anh-ass-ta.
but metal-Nom hammer-Comp Pass-Comp Neg-Pst-Dec
'He hammered the metal flat. #But the metal was not hammered.'

b. ku-ka soy-lul ttukep-key/tolok talkwu-ess-ta.
he-Nom metal-Acc hot-Key/Tolok heat-Pst-Dec
#kulena soy-ka talkwu-e ci-ci anh-ass-ta.
but metal-Nom heat-Comp Pass-Comp Neg-Pst-Dec
'He heated the metal hot. #But the metal was not heated.'

The main verbs correspond to the causing subevents and the secondary predicates to the caused subevents in the event structures of the resultatives. Temporally, the main verbs are the non-final predicates and the results (the final subevents) of the main verbs are connected to the events of the secondary predicates. Thus in (339a), the metal must be hammered, and in (339b) the metal must be heated. According to the Subject Realization Generalization, the action of hammering in (339a) and the action of heating in (339b) should occur. Again, the final subevents of the constructions can occur or not.

5.2.3 Interpretation of V2 in typical SVCs

Unlike non-final verbs, failed-attempt interpretations of the final verbs in typical SVCs are allowed, as illustrated below. The final subevent of the *bake-eat*-type SVC in (340) can be canceled. The *hit-break*-type SVC in (341) also allows cancellation of the result of V2.

(340) Jane-i sayngsen-ul kwu-e mek-ess-ta.
Jane-Nom fish-Acc bake-Comp eat-Pst-Dec kulena nemwu ttukewe-se mek-ul swu-ka eps-ess-ta.
but too hot-since eat-Rel way-Nom not.exist-Pst-Dec (lit.) 'Jane baked the fish, and then ate it. But she couldn't eat it, since it was too hot.'

= 'Jane baked the fish, and then intended to eat it. But she couldn't eat it, since it was too hot.'

(341) Ryan-i mwun-ul ttayli-e pwuswu-ess-ta.

Ryan-Nom door-Acc hit-Comp break-Pst-Dec *kulena mwun-i tantanhay-se pwuswu-e ci-ci anh-ass-ta.* but door-Nom solid-since break-Comp Pass-Comp Neg-Pst-Dec (lit.) 'Ryan broke the door by hitting it. But it was not broken, since it was solid.'

= 'Ryan hit the door, intending to break it. But it was not broken, since it was solid.'

When the results of the typical SVCs are denied, the interpretations of the SVCs entail the subject's intention. Sentences denying subject intentions in (342) and (343) cannot follow the SVCs:

(342) ...#kuliko sayngsen-ul mek-ul uyto-ka eps-ess-ta.
and fish-Acc eat-Rel intention-Nom not.exist-Pst-Dec
'...And she did not intend to eat the fish.'
(in the context of (340))

(343) ...#kuliko mwun-ul pwuswu-l uyto-ka eps-ess-ta.
and door-Acc break-Rel intention-Nom not.exist-Pst-Dec
'...And he did not intend to break the door.'
(in the context of (341))

Interestingly, however, the *bake-eat*-type SVC in (340) does not entail the subject's intention regarding the V1 event; that is, the fish can be baked accidentally or intentionally. So the *bake-eat*-type SVC (340), repeated in (344), can be used in either of the contexts given in (344).

(344) [Context 1: Jane *accidentally* baked the fish (e.g. Jane accidentally pushed the button of the oven in which her mother put raw fish, and so the fish was baked), and then *attempted to* eat the fish.]

[Context 2: Jane *intentionally* baked the fish, and then *attempted to* eat the fish.]

Jane-i sayngsen-ul kwu-e mek-ess-ta. Jane-Nom fish-Acc bake-Comp eat-Pst-Dec kulena nemwu ttukewe-se mek-ul swu-ka eps-ess-ta. but too hot-since eat-Rel way-Nom not.exist-Pst-Dec 'Jane baked the fish, and then tried to eat it. But she could not eat it, since it was too hot.'

In (344b) the V1 and V2 can be assigned a different value regarding intentionality. This is actually expected from the definition of intention given in Chapter 3 (Intention-based Analysis). Intention requires the subject's belief or knowledge about causation, but the V1 and V2 in the *bake-eat*-type SVC do not constitute a causal chain *per se*. Thus the prediction is that the V1 and V2 can have different values of intentionality, since they are themselves individual events of causation; some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being baked and some causing action leads to the result of being eaten. Thus the *bake-eat*-type SVC (345), in which V1 and V2 are interpreted as an actual-result, can be used in the four logically possible contexts given in (345). Among those possible readings, intentional taking off and hanging up in Context 1 is

the default reading, and accidental taking off and hanging up in Context 4 is the most marked reading, since it requires an unusually complex situation (e.g. Tom accidentally bumped against Jane and so Jane's hat was taken off, and then Jane tried to throw it onto the bed, but it got hung on a hanger).

(345) [Context 1: Jane *intentionally* took off the hat, and then *intentionally* hung it up.]

[<u>Context 2</u>: Jane *intentionally* took off the hat, and then *accidentally* hung it up.]

[<u>Context 3</u>: Jane *accidentally* took off the hat, and then *intentionally* hung it up.]

[Context 4: Jane *accidentally* took off the hat, and then *accidentally* hung it up.]

Jane-imoca-lul pes-ekel-ess-ta.Jane-Nom hat-Acctake.off-Comphang.up-Pst-Dec'Jane took off the hat and then hung it up.'

Unlike the *bake-eat*-type SVCs, the failed-attempt *hit-break*-type SVC in (341), repeated in (346), entails the subject's intention in both the V1 and V2 events. So only Context 1 in (346) is compatible with the SVC in (346); it cannot be used in the other contexts in (346).

(346) [Context 1: *Ryan intentionally* hit the door *with the intention* of breaking it.]

[Context 2: *Ryan intentionally* hit the door *without the intention* of breaking it.]

[Context 3: *Ryan accidentally* hit the door *with the intention* of breaking it.]

[Context 4: *Ryan accidentally* hit the door *without the intention* of breaking it.]

Ryan-imwun-ul ttayli-epwuswu-ess-ta.Ryan-Nom door-Acc hit-Comp break-Pst-Deckulena mwun-itantanhay-sepwuswu-eci-cianh-ass-ta.butdoor-Nom hard-sincebreak-Comp Pass-Comp Neg-Pst-Dec(lit.) 'Ryan broke the door by hitting it. But it was not broken, since it was

hard.'

= 'Ryan hit the door, intending to break it. But it was not broken, since it was solid.'

In (346), the sentences mean that Jane tried to break the door by intentionally hitting it, and so the door was hit, but it was not broken. The intentions regarding both V1 and V2 in (346) are derived from the fact that V1 and V2 events of the *hit-break* SVC constitute a single event of causation (hitting is the causing event of breaking), and another general fact that intention regarding a caused event entails intention regarding

the causing event, as in (347). In other words, denial of the door being broken requires the subject's intention for the result of V2, which in turn requires her intention to perform the action described by V1, which serves as the causing subevent of V2.

(347) a. Tom intentionally kicked the door in order to open it.

- b. Tom intentionally kicked the door without the intention of opening it.
- c. Tom unintentionally kicked the door without the intention of opening it.
- d. #Tom unintentionally kicked the door in order to open it.

If the V2 event of a *hit-break*-type SVC is realized, as in (348), then the subject's intention is not required regarding V2. When V2 has an actual-result interpretation and the result is intended, then the action of V1 must also be intended because of the general constraints of intention. But when V2 has an actual-result reading and is not intended, then the action described by V1 can be intended or not; the sentences in (348) can be used only in Context 1, 2, and 4.

(348) [Context 1: Jane *intentionally* hit the door *with the intention* of breaking it.]
 [Context 2: Jane *intentionally* hit the door *without the intention* of breaking it.]

[Context 3: Jane *accidentally* hit the door *with the intention* of breaking it.] [Context 4: Jane *accidentally* hit the door *without the intention* of breaking it.]

Ryan-i mwun-ul ttayli-e pwuswu-ess-ta.
Ryan-Nom door-Acc hit-Comp break-Pst-Dec
kuliko mwun-i cokum/wancenhi pwuswu-e ci-ess-ta.
but door-Nom a.little/completely break-Comp Pass-Pst-Dec
'Jane broke the door by hitting it. So it was a little/completely broken.'

In summary, V1 must have an actual-result interpretation due to the Subject Realization Generalization and the Event Connection Generalization. In a *bake-eat*-type SVC, the causing subevent of V2 must occur according to the Subject Realization Generalization, and the caused subevent of V2 may or may not occur. If the caused subevent of V2 does not occur, the subject's intention regarding the unrealized result is required (as per the Subject Intention Generalization). When the caused subevent of V2 occurs, the subject's intention is not required (as per the Subject Intention Generalization). V1 and V2 are independent from each other in terms of intentionality, i.e. they do not constitute a single event of causation. In a *hit-break*-type SVC, the V2 result event may or may not occur. If the V2 result does not

occur, the subject's intention regarding the unrealized event is required (as per the Subject Intention Generalization), and this in turn requires the subject's intention about the V1 action. When the V2 result obtains, the subject's intention is not required (as per the Subject Intention Generalization) for the V2 event. But if the V2 result is intended, then the V1 action must also be intended. If the V2 result is not intended, the V1 event may or may not be intended.

5.2.4 The subject's intention in typical SVCs

When the subject is an instrument in the two types of SVCs, only actual-result interpretations are possible, as illustrated in the following:

(349) a. ku kikyey-ka caylyo-lul cip-e neh-ess-ta.
the machine-Nom material-Acc pick.up-Comp insert-Pst-Dec
#?kulena caylyo-ka tuleka-ci anh-ass-ta.
but material-Nom enter-Comp Neg-Pst-Dec
'The machine picked up the material and then inserted it. #But it was not inserted.'

b. tayngkhu-ka ku cip-ul ttayli-e pwuswu-ess-ta.
tank-Nom the house-Acc hit-Comp break-Pst-Dec
#kulena cip-i pwuswu-e ci-ci anh-ass-ta.
but house-Nom break-Comp Pass-Comp Neg-Pst-Dec
'The tank broke the house by hitting it. #But it was not broken.'

Similarly, if the subject is a natural force, failed-attempt interpretations are not available. Only actual-result readings are permitted:

- (350) a. ku nuph-i nay tali-lul cap-a tangki-ess-ta.
 the swamp-Nom my leg-Acc grasp-Comp pull-Pst-Dec
 #kulena tali-ka tangki-e ci-ci anh-ass-ta.
 but leg-Nom pull-Comp Pass-Comp Neg-Pst-Dec
 'The swamp grasped my leg and then pulled it. #But it was not pulled.'
 - b. kangpwung-i ku cip-ul ttayli-e pwuswu-ess-ta.
 strong.wind-Nom the house-Acc hit-Comp break-Pst-Dec
 #kulena cip-i pwuswu-e ci-ci anh-ass-ta.
 but house-Nom break-Comp Pass-Comp Neg-Pst-Dec
 'The strong wind broke the house by hitting it. #But it was not broken.'

Likewise, if the subject is negligence or a mistake, again only an actual-result reading is possible:

- (351) a. Mary-uy pwucwuuy-/silswu-ka nay tali-lul cap-a
 Mary-Gen negligence-/mistake-Nom my leg-Acc grasp-Comp
 tangki-ess-ta.
 pull-Pst-Dec
 #kulena tali-ka tangki-e ci-ci anh-ass-ta.
 but leg-Nom pull-Comp Pass-Comp Neg-Pst-Dec
 'Mary's negligence/mistake grasped my leg and then pulled it. #But it was not pulled.'
 - Mary-uy pwucwuuy-/silswu-ka ku kenmwul-ul phokphahay
 Mary-Gen negligence-/mistake-Nom the building-Acc explode.Comp pwuswu-ess-ta.

break-Pst-Dec

#kulena nemwu tantanhay-se pwuswu-e ci-ci anh-ass-ta.
but so solid-since break-Comp Pass-Comp Neg-Pst-Dec
'Mary's negligence/mistake broke the building by exploding it. #But it was not broken, since it was so solid.'

Finally, when the subject is an action, again only an actual-result reading is allowed:

(352) a. Mary-ka pethun-ul nwu-lun hayngtong-i caylyo-lul
Mary-Gen button-Acc push-Rel action-Nom material-Acc
cip-e neh-ess-ta.
pick.up-Comp insert-Pst-Dec
#kulena caylyo-ka tuleka-ci anh-ass-ta.
but material-Nom enter-Comp Neg-Pst-Dec
'Mary's action of pushing the button (of the machine) picked up the material and then inserted it. #But it was not inserted.'

b. Mary-ka pethun-ul nwu-lun hayngtong-i ku kenmwul-ul
Mary-Nom button-Acc push-Rel action-Nom the building-Acc
phokphahay pwuswu-ess-ta.
explode.Comp break-Pst-Dec
#kulena nemwu tantanhay-se pwuswu-e ci-ci anh-ass-ta.
but so solid-since break-Comp Pass-Comp Neg-Pst-Dec
'Mary's action of pushing the button (of the dynamite) broke the building by exploding it. #But it was not broken, since it was so solid.'

Again, the lack of failed-attempt interpretations of all these constructions conforms to the Subject Intention Generalization. Since the subjects cannot have intentions, only actual-result readings are available.

5.2.5 Passives of typical SVCs

The passive counterparts of *bake-eat*-type SVCs do not permit failed-attempt interpretations, as seen in (353a). The passive *hit-break*-type SVC in (353b) shows the same property.

- (353) a. Jane-eyuyhay sayngsen-i kwu-e mek-e ci-ess-ta.
 Jane-by fish-Nom bake-Comp eat-Comp Pass-Pst-Dec
 #kulena nemwu ttukewe-se mek-ul swu-ka eps-ess-ta.
 but too hot-since eat-Rel way-Nom not.exist-Pst-Dec
 'The fish was baked and then eaten by Jane. #But she couldn't eat it, since it was too hot.'
 - b. Jane-eyuyhay mwun-i ttayli-e pwuswu-e ci-ess-ta.
 Jane-by door-Nom hit-Comp break-Comp Pass-Pst-Dec
 #kulena mwun-i tantanhay-se pwuswu-l swu eps-ess-ta.
 but door-Nom solid-since break-Comp way not.exist-Pst-Dec
 'The door was hit and then broken by Jane. #But she couldn't break it, since it was solid.'

The passive *bake-eat*-type SVC allows any relevant actual-result interpretations, and these readings do not require the subject's intentions. Any context in (354) is compatible with the passive *bake-eat*-type SVC in (354).

 [Context 2: Jane intentionally took off the hat, and then accidentally hung it up.]

 [Context 3: Jane accidentally took off the hat, and then intentionally hung it up.]

 [Context 4: Jane accidentally took off the hat, and then accidentally hung it up.]

 Jane-eyuyhay moca-ka pes-ki-e

 kel-e

 Jane-by

 hat-Nom take.off-Pass-Comp hang.up-Comp

 ci-ess-ta.

 Pass-Pst-Dec

 'The hat was taken off and then hung up by Jane.'

(354) [Context 1: Jane *intentionally* took off the hat, and then *intentionally* hung it

up.]

In case of the passive *hit-break*-type SVC with an actual-result interpretation in (355), only Context 3 is incompatible with the SVC.

(355) [Context 1: Jane *intentionally* hit the door *with the intention* of breaking it.]
[Context 2: Jane *intentionally* hit the door *without the intention* of breaking it.]

[Context 3: Jane *accidentally* hit the door *with the intention* of breaking it.] [Context 4: Jane *accidentally* hit the door *without the intention* of breaking it.]

Jane-eyuyhay mwun-i ttayli-e pwuswu-e ci-ess-ta. Jane-by door-Nom hit-Comp break-Comp Pass-Pst-Dec 'The door was hit and then broken by Jane.'

The Context 3 in (355) is implausible due to the nature of the notion of intention.

The actual-result requirement of passive SVCs is also in accordance with the Subject Realization Generalization. In passive *bake-eat*-type SVCs, the results of V1 and V2 must obtain, and these occurrences in turn require the causing events of V1 and V2 to occur, respectively, based on our knowledge of the world. In passive *hit-break*-type SVCs, the caused event of V1 and the event of V2 itself must occur conforming to the Subject Realization Generalization; the causing event of V1 then must also occur.

In the next section, I investigate whether the intention-based analysis can account for interpretations of a more complex construction, namely, causative SVCs.

5.3 Causative SVCs

What I call a causative SVC here is the combination of a causative construction discussed in Chapter 4 (*Ha*-constructions) and a typical SVC. The three generalizations outlined previously (the Subject Realization Generalization, Subject Intention Generalization, and Event Connection Generalization) are tested with causative SVCs.

5.3.1 Basic properties of causative SVCs

An example of a normal causative construction is given in the following:

(356) Mary-ka khephi-lul ttukep-key/chakap-key hay-ss-ta.
Mary-Nom coffee-Acc hot-Key/cold-Key do-Pst-Dec
'Mary made the coffee hot/cold.'

If a normal causative construction is embedded in an SVC like (357), we have a combination like (358).

(357) Mary-ka khephi-lul sa masi-ess-ta.
Mary-Nom coffee-Acc buy.Comp drink-Pst-Dec
'Mary bought the coffee and then drank it.'

(358) Mary-ka khephi-lul chakap-key hay masi-ess-ta.
Mary-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec
'Mary made the coffee cold and then drank it.'

The V1 *sa* 'buy.Comp' in (357) is replaced with the combination of the XP *chakapkey* 'cold-Key' and the light verb *hay*, resulting in the construction in (358). This construction looks like an SVC with the component verbs *hay* and *masi-ess-ta* constituting a complex predicate. I explicitly show below that it is really an SVC, using the typical SVC properties discussed in the section 5.1.3.

First, the negative marker *an* can negate the whole event of the construction:

(359) Mary-ka khephi-lul chakap-key an hay masi-ess-ta.
Mary-Nom coffee-Acc cold-Key Neg do.Comp drink-Pst-Dec
'It is not the case that Mary made the coffee cold and then drank it.'

The wide scope of *an* shows that the verbs constitute a complex, mono-clausal predicate. Recall that *an* cannot have wide scope in constructions like coordinations or subordinations. Second, an argument should be shared by the verbs. A separate expression of the same subject cannot appear in the sentence, as shown in (360) and (361).

- (360) *Mary-ka khephi-lul chakap-key hay Mary-ka masi-ess-ta.
 Mary-Nom coffee-Acc cold-Key do.Comp Mary-Nom drink-Pst-Dec (int.) 'Mary made the coffee cold and then Mary drank it.'
- (361) *Mary-ka Mary-ka khephi-lul chakap-key hay masi-ess-ta.
 Mary-Nom Mary-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec (int.) 'Mary made the coffee cold and then Mary drank it.'

Similarly, two different subjects are not allowed to come together in the sentence, as illustrated in (362) and (363).

- (362) *Mary-ka khephi-lul chakap-key hay Tom-i masi-ess-ta.
 Mary-Nom coffee-Acc cold-Key do.Comp Tom-Nom drink-Pst-Dec (int.) 'Mary made the coffee cold and then Tom drank it.'
- (363) *Mary-ka Tom-i khephi-lul chakap-key hay masi-ess-ta.
 Mary-Nom Tom-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec (int.) 'Mary made the coffee cold and then Tom drank it.'

So the verbs must share a subject. Third, the event described by the light verb plus the XP must occur before the event described by the final verb. When the verbs in (364) are switched, as in (365), the sentence becomes ungrammatical.

- (364) Mary-ka khephi-lul chakap-key hay cwu-ess-ta.
 Mary-Nom coffee-Acc cold-Key do.Comp give-Pst-Dec
 'Mary made the coffee cold and then gave it to someone.'
- (365) *Mary-ka khephi-lul chakap-key cwu-e hay-ss-ta.
 Mary-Nom coffee-Acc cold-Key give-Comp do-Pst-Dec (int.) 'Mary gave the coffee to someone and made it cold.'

Fourth, the first verb cannot have separate tense marking. The tense affix is only attached to the final verb:

(366) Mary-ka khephi-lul chakap-key ha(*-yess)-e masi-ess-ta.
Mary-Nom coffee-Acc cold-Key do-Pst-Comp drink-Pst-Dec
'Mary made the coffee cold and then drank it.'

All these four properties together indicate that the combination of a causative construction and a typical SVC is a kind of typical sequential SVC.

Causative SVCs can be also classified into two types: *bake-eat*-type causative SVC, as in (367a), and *hit-break*-type causative SVC, as in (367b).

(367) a. ku-ka khephi-lul chakap-key hay masi-ess-ta.
he-Nom coffee-Acc cold-Comp do.Comp drink-Pst-Dec
'He made the coffee cold and then drank it.'

b. Mary-ka mwul-lul chakap-key hay elli-ess-ta.
Mary-Nom water-Acc cold-Key do.Comp freeze-Pst-Dec
'Mary froze the water by making it cold.'

In the *bake-eat*-type causative SVC in (367a), making the coffee cold is not a causing event of drinking the coffee. In the *hit-break*-type causative SVC (367b), however, making water cold is a causing event of freezing the water.

5.3.2 Accomplishments involving causative SVCs

If causative SVCs are a kind of typical sequential SVC (*bake-eat-*type SVC or *hit-break-*type SVC), it should be an accomplishment, since the two types of typical SVCs are shown to be accomplishments in section 5.2.1 above. I show here that causative SVCs are really accomplishments.

First, *bake-eat*-type causative SVCs can occur in the progressive as exemplified in (368)), and the *bake-eat*-type causative SVC in the progressive does not entail the realization of the result of V2. The causing subevent of the V2 can be in the progressive, but V1 cannot. So the causative SVC in (368) can be used in Context 1, but not in Context 2 in (368).

(368) [Context 1: May had made the coffee cold and was drinking it.]
[Context 2: Mary was operating a cooling machine so that the coffee in it could become cold and then she could drink it.] *ku-ka khephi-lul chakap-key hay masi-ko iss-ess-ta.*he-Nom coffee-Acc cold-Comp do.Comp drink-Comp exist-Pst-Dec *haciman acik khephi-ka masi-e-ci-ci anh-ass-ta.*but yet coffee-Nom drink-Comp-Pass-Comp Neg-Pst-Dec
(lit.) 'He was making the coffee cold so that he could eat it. But it was not drunk yet.'

The *hit-break*-type causative SVCs can also occur in the progressive. Since the *hit-break*-type causative SVC has only one causing event (i.e. the action described by V1), the V1 must be in the progressive:

(369) [Context: Mary was operating a cooling machine so that the water in it could become cold and then frozen.] *kunye-ka mwul-ul chakap-key hay elli-ko iss-ess-ta.*she-Nom water-Acc cold-Key do.Comp freeze-Pst-Dec exist-Pst-Dec *haciman, acik mwul-i chakap-ci-nun anh-ass-ta.*but yet water-Nom cold-Comp-Top Neg-Pst-Dec 'She was freezing the water by making it cold.'

Second, the modification of the adverb with maney 'in' brings about the ambiguity

between ingressive and telic readings. The *bake-eat*-type causative SVC in (370) can be used in either of the contexts given in (370).

(370) [Context 1: It took one minute for Mary to prepare before she started to make the coffee cold and then drink it. (ingressive reading context)]
[Context 2: It took one minute for Mary to make the coffee cold and drink it. (telic reading context)] *il pwun maney Mary-ka khephi-lul chakap-key hay*

one minute in Mary-Nom coffee-Acc cold-Key do.Comp masi-ess-ta.

drink-Pst-Dec

'Mary made the coffee cold and then drank it in one minute.'

The *hit-break*-type causative SVC is also ambiguous when modified by the *maney*-phrase (*in*-phrase), and thus is compatible with both the contexts given in (371).

(371) [Context 1: It took one minute for Mary to prepare before she started to freeze it by making it cold. (ingressive reading context)]
[Context 2: It took one minute for Mary to freeze the water by making it cold. (telic reading context)] *il pwun maney Mary-ka mwul-ul chakap-key hay* one minute in Mary-Nom water-Acc cold-Key do.Comp *elli-ess-ta.*freeze-Pst-Dec

'Mary froze the water by making it cold in one minute.'

Third, the adverb *taci* 'again' causes the repetitive and restitutive readings in the causative SVCs. The *bake-eat*-type causative SVC in (372) has a repetitive or restitutive reading:

(372) Mary-ka taci khephi-lul chakap-key hay cwu-ess-ta.
Mary-Nom again coffee-Acc cold-Key do.Comp give-Pst-Dec
'Mary made the coffee cold and then gave it to Jane again.'
1. Repetitive interpretation: Entails that Mary made the coffee cold and then gave it to Jane and presupposes that Mary made the coffee cold and then gave it to Jane before.

2. Restitutive interpretation: Entails that Mary made the coffee cold and then gave it to Jane and presupposes that the coffee was given to Jane before.

The *hit-break*-type causative SVC in the following is also ambiguous with respect to *taci* 'again':

(373) Mary-ka taci mwul-ul chakap-key hay elli-ess-ta.
Mary-Nom again water-Acc cold-Key do.Comp freeze-Pst-Dec
'Mary froze the water by making it cold again.'

Repetitive interpretation: Entails that Mary froze the water by making it cold and presupposes that Mary froze the water by making it cold before.
 Restitutive interpretation: Entails that Mary froze the water by making it

cold and presupposes that the water was frozen before.

In short, the causative SVCs, whether they belong to *bake-eat*-type or *hit-break*-type, are accomplishments. In the next section, I investigate the various interpretations of causative SVCs.

5.3.3 Interpretations of V1-XP in causative SVCs

In the *bake-eat*-type causative SVC in (374), an XP with *-key* corresponds to the result of the event denoted by the light V1 and the XP together (i.e. V1-XP). This XP result state is not cancelable:

(374) Mary-ka khephi-lul chakap-key hay masi-ess-ta.
Mary-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec
#kulena khephi-ka chakap-ci anh-ass-ta.
but coffee-Nom cold-Comp Neg-Pst-Dec
'Mary made the coffee cold and then drank it. #But the coffee was not cold.'

Instead, the V1-XP event must have an actual-result reading, and it can be intentional or unintentional, i.e. the causative SVC in (375) can be used in both of the following contexts.

(375) [Context 1: Mary *intentionally* made the coffee cold.]
[Context 2: Mary *unintentionally* made the coffee cold.]
Mary-ka khephi-lul chakap-key hay masi-ess-ta.
Mary-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec
'Mary made the coffee cold and then drank it.'

An interpretation as in Context 1 is the default reading for (375). A possible situation for Context 2 is that Mary accidentally pushed the button of the cooling machine containing warm coffee, and so the coffee became cold. This obligatory actual-result interpretation of the XP accords with the Event Connection Generalization; the XP event is connected to the causing subevent of the drinking event within the whole event structure of the complex predicate sentence. In the following *hit-break*-type causative SVC, the XP state cannot be canceled either. But this can be attributed to the entailment relation between being cold and being frozen in the construction. Since being frozen entails being cold, and in (376) the result (being frozen) of the V2 event is assumed to occur, being cold must also occur.

(376) Mary-ka mwul-ul chakap-key hay elli-ess-ta.
Mary-Nom water-Acc cold-Key do.Comp freeze-Pst-Dec
#kulena mwul-i chakap-ci anh-ass-ta.
but water-Nom cold-Comp Neg-Pst-Dec
'Mary froze the water by making it cold. #But the water was not cold.'

However, in the *hit-break*-type causative SVC (377), the result (being pushed) described by the XP must occur, even though this result is not entailed by the V2 event (opening the door); we can open a door, for example, by pulling it.

(377) Mary-ka Tom-ul mwun-ul mil-key hay yel-ess-ta.
Mary-Nom Tom-Acc door-Acc push-Key do.Comp open-Pst-Dec
#kulena mwun-i mil-li-ci anh-ass-ta.
but door-Nom push-Pass-Comp Neg-Pst-Dec
'Mary opened the door by making Tom push the door. #But the door was not pushed.'

The event described by V1-XP in a *hit-break*-type causative SVC can be intentional or non-intentional. Again, the actual-result reading of the XP in the *hit-break*-type causative SVC conforms to the Event Connection Generalization.

In sum, causative SVCs generally require that the V1-XP event occur. This is compatible with the general pattern of typical SVCs.

5.3.4 Interpretation of V2 in causative SVCs

Unlike with V1, a failed-attempt interpretation of V2 in a causative SVC is possible. Consider the following *bake-eat*-type causative SVC:

(378) Mary-ka khephi-lul chakap-key hay masi-ess-ta.
Mary-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec kulena nemwu chakawe-se masi-l swu eps-ess-ta.
but too cold-since drink-Rel way not.exist-Pst-Dec (lit.) 'Mary made the coffee cold and then drank it. But she could not drink it, since it was so cold.'

The *hit-break*-type causative SVCs in the following are parallel to the *bake-eat*-type causative SVCs with respect to the availability of failed-attempt interpretation of V2:

- (379) Mary-ka mwul-ul chakap-key hay elli-ess-ta.
 Mary-Nom water-Acc cold-Key do.Comp freeze-Pst-Dec kulena mwul-i el-ci anh-ass-ta.
 but water-Nom freeze-Comp Neg-Pst-Dec (lit.) 'Mary froze the water by making it cold. But the water was not frozen.'
- (380) Mary-ka Tom-ul mwun-ul mil-key hay yel-ess-ta.
 Mary-Nom Tom-Acc door-Acc push-Key do.Comp open-Pst-Dec kulena mwun-i yel-li-ci anh-ass-ta.
 but door-Nom open-Pass-Comp Neg-Pst-Dec (lit.) 'Mary opened the door by making Tom push the door. But the door was not opened.'

When the result of the V2 in a causative SVC is denied, the failed-attempt interpretation requires the subject's intention regarding the result of the V2. The sentences below cannot follow the causative SVCs:

(381) ...#kuliko khephi-lul masi-l uyto-ka eps-ess-ta.
and coffee-Acc drink-Rel intention-Nom not.exist-Pst-Dec
'...And she did not intend to drink the coffee.'
(in the context of (378))

(382) ...#kuliko mwul-ul elli-l uyto-ka eps-ess-ta.
and water-Acc freeze-Rel intention-Nom not.exist-Pst-Dec
'...And she did not intend to freeze the water.'
(in the context of (379))

(383) ...#kuliko mwun-ul ye-l uyto-ka eps-ess-ta.
and door-Acc open-Rel intention-Nom not.exist-Pst-Dec
'...And she did not intend to open the door.'
(in the context of (380))

Intentions about the V2 in a *bake-eat*-type causative SVC does not require that the V1-XP event be intended. The sentences in (384) can be truthfully used in the contexts given in (384).

[Context 1: Mary intentionally made the coffee cold and then attempted to (384) drink it.] [Context 2: Mary unintentionally made the coffee cold and then attempted to drink it.] Marv-ka khephi-lul chakap-key hay masi-ess-ta. Mary-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec kulena nemwu chakawe-se masi-l swu eps-ess-ta. but cold-since drink-Rel way not.exist-Pst-Dec too (lit.) 'Mary made the coffee cold and then drank it. But she could not drink it, since it was so cold.'

However, in *hit-break*-type causative SVCs, since V1-XP and V2 are in a causation relation, intention about the event described by V2 requires intention about the event described by V1-XP. For example, in the sentences in (385), the denial of the result of V2 entails the subject's intention with regard to the result of V2 and this in turn requires the subject's intention regarding the event described by V1-XP. Thus this causative SVC can be truthfully used only in Context 1 in (385), and similarly for (386).

(385) [Context 1: Mary *intentionally* made the water cold w*ith the intention* of freezing it.]

[Context 2: Mary *intentionally* made the water cold *without the intention* of freezing it.]

[Context 3: Mary *unintentionally* made the water cold *with the intention* of freezing it.]

[Context 4: Mary *unintentionally* made the water cold *without the intention* of freezing it.]

Mary-ka mwul-ul chakap-key hay elli-ess-ta.

Mary-Nom water-Acc cold-Key do.Comp freeze-Pst-Dec

kulena mwul-i el-ci anh-ass-ta.

but water-Nom freeze-Comp Neg-Pst-Dec

(lit.) 'Mary froze the water by making it cold. But the water was not frozen.'

(386) [Context 1: Mary *intentionally* made Tom push the door w*ith the intention* of opening it.]
[Context 2: Mary *intentionally* made Tom push the door *without the*

intention of opening it.]

[Context 3: Mary *unintentionally* made Tom push the door *with the intention* of opening it.]

[Context 4: Mary *unintentionally* made Tom push the door *without the intention* of opening it.]

Mary-ka Tom-ul mwun-ul mil-key hay yel-ess-ta.

Mary-Nom Tom-Acc door-Acc push-Key do.Comp open-Pst-Dec

kulena mwun-i yel-li-ci anh-ass-ta.

but door-Nom open-Pass-Comp Neg-Pst-Dec

(lit.) 'Mary opened the door by making Tom push the door. But the door was not opened.'

Conversely, when the V2 of a *bake-eat*-type causative SVC is interpreted as actualresult, the event described by V2 can be intentional or unintentional; the sentences in (387) can be used with any context in (387). (387) [<u>Context 1</u>: Mary *intentionally* made the coffee cold and then *intentionally* drank it.]

[<u>Context 2</u>: Mary *intentionally* made the coffee cold and then *unintentionally* drank it.]

[<u>Context 3</u>: Mary *unintentionally* made the coffee cold and then *intentionally* drank it.]

[<u>Context 4</u>: Mary *unintentionally* made the coffee cold and then *unintentionally* drank it.]

Mary-ka khephi-lul chakap-key hay masi-ess-ta.

Mary-Nom coffee-Acc cold-Key do.Comp drink-Pst-Dec

kuliko khephi-ka masiss-ess-ta.

and coffee-Nom delicious-Pst-Dec

'Mary made the coffee cold and then drank it. And the coffee was delicious.'

As shown in (387), the intentional or non-intentional reading of V2 of the *bake-eat*type causative SVC is compatible with the intentional or non-intentional reading of V1-XP. If the V2 of a *hit-break*-type causative SVC is interpreted as actual-result, V2 can be interpreted as either intentional or unintentional. But unlike *bake-eat*-type causative SVCs, intentionality for the event described by V1-XP and V2 is constrained by properties of intention, since V1-XP and V2 constitute a single causal event. That is, an intentional reading of V2 requires an intentional reading of V1-XP. For instance, in (388) and (389) below, an intentional actual-result reading of V2 is only compatible with an intentional reading of V1-XP (i.e. Context 1) and a non-intentional actual-result reading of V2 is compatible with an intentional or non-intentional reading of V1-XP (i.e. Context 2 and Context 4):

(388) [Context 1: Mary *intentionally* made the water cold *with the intention* of freezing it.]

[<u>Context 2</u>: Mary *intentionally* made the water cold *without the intention* of freezing it.]

[Context 3: Mary *unintentionally* made the water cold *with the intention* of freezing it.]

[Context 4: Mary *unintentionally* made the water cold *without the intention* of freezing it.]

Mary-kamwul-ulchakap-key hayelli-ess-ta.Mary-Nom water-Acccold-Keydo.Compfreeze-Pst-Deckulaysemwul-icokum/kkongkkongel-ess-ta.sowater-Noma.little/hardfrozen-Pst-Dec

'Mary froze the water by making it cold. So it was frozen a little/hard.'

(389) [Context 1: Mary *intentionally* made Tom push the door *with the intention* of opening it.]

[<u>Context 2</u>: Mary *intentionally* made Tom push the door *without the intention* of opening it.]

[Context 3: Mary *unintentionally* made Tom push the door *with the intention* of opening it.]

[Context 4: Mary *unintentionally* made Tom push the door *without the intention* of opening it.]

Mary-ka Tom-ul mwun-ul mil-key hay yel-ess-ta. Mary-Nom Tom-Acc door-Acc push-Key do.Comp open-Pst-Dec kulayse mwun-i cokum/wancenhi yel-li-ess-ta. but door-Nom a.little/completely open-Pass-Pst-Dec

'Mary opened the door by making Tom push the door. So the door was a little/completely opened.'

In sum, causative SVCs have the same pattern as typical SVCs. In *bake-eat*-type and *hit-break*-type causative SVCs, V1-XP must be interpreted as an intentional or non-intentional actual-result conforming to the Event Connection Generalization, and V2 can be interpreted as an intentional or non-intentional actual-result or intentional failed-attempt. The main difference between the two types of causative SVCs is that in *bake-eat*-type causative SVCs, V1-XP and V2 are independent from each other in terms of intentionality value, but in *hit-break*-type causative SVCs, intentional V2

entails intentional V1-XP.

5.3.5 The subject's intention in causative SVCs

When the subject of a causative SVC is an instrument, actual-result interpretations are obligatory:

- (390) a. ku kikyey-ka namwusiph-ul tteleci-key hay kwulli-ess-ta.
 the machine-Nom leaves-Acc fall-Key do.Comp roll-Pst-Dec
 #kulena namwusiph-i kwulu-ci anh-ass-ta.
 but leaves-Nom roll-Comp Neg-Pst-Dec
 'The machine made the leaves fall and then rolled them. #But they did not roll.'
 - b. nayngcangko-ka mwul-ul chakap-key hay elli-ess-ta.
 fridge-Nom water-Acc cold-Key do.Comp freeze-Pst-Dec
 #kulena mwul-i el-ci anh-ass-ta.
 but water-Nom freeze-Comp Neg-Pst-Dec

'The fridge froze the water by making it cold. #But it was not frozen.'

Similarly, a natural force subject rules out a failed-attempt reading, and only an actual-result reading is available, as in (391).

- (391) a. chanpalam-i namwusiph-ul tteleci-key hay kwulli-ess-ta.
 cold.wind-Nom leaves-Acc fall-Key do.Comp roll-Pst-Dec
 #kulena namwusiph-i kwulu-ci anh-ass-ta.
 but leaves-Nom roll-Comp Neg-Pst-Dec
 'The cold wind made the leaves fall and then rolled them. #But they did not roll.'
 - b. chanpalam-i mwul-ul chakap-key hay elli-ess-ta.
 cold.wind-Nom water-Acc cold-Key do.Comp freeze-Pst-Dec
 #kulena mwul-i el-ci anh-ass-ta.
 but water-Nom freeze-Comp Neg-Pst-Dec

'The cold wind froze the water by making it cold. #But it was not frozen.'

Furthermore, when the subject is an action, only an actual-result reading is allowed:

(392) a. Mary-uy pwucwuuy-/silswu-ka namwusiph-ul tteleci-key
Mary-Gen negligence-/mistake-Nom leaves-Acc fall-Key
hay kwulli-ess-ta. #kulena namwusiph-i kwulu-ci anh-ass-ta.
do.Comp roll-Pst-Dec but leaves-Nom roll-Comp Neg-Pst-Dec
'Mary's negligence/mistake made the leaves fall and rolled them. #But they did not roll.'

b. Mary-uy pwucwuuy-/silswu-ka mwul-ul chakap-key hay
Mary-Gen negligence-/mistake-Nom water-Acc cold-Key do.Comp elli-ess-ta. #kulena mwul-i el-ci anh-ass-ta.
freeze-Pst-Dec but water-Nom freeze-Comp Neg-Pst-Dec
'Mary's negligence/mistake froze the water by making it cold. #But it was not frozen.'

When the subject is a fact or action, an actual-result reading is obligatory:

(393) a. Mary-ka pethun-ul nwu-lun hayngtong-/sasil-i namwusiph-ul Mary-Nom button-Acc push-Rel action-/fact-Nom leaves-Acc tteleci-key hay kwulli-ess-ta. #kulena namwusiph-i kwulu-ci fall-Key do.Comp roll-Pst-Dec but leaves-Nom roll-Comp anh-ass-ta.

Neg-Pst-Dec

'The fact that Mary pushed the button (of the machine)/Mary's action of pushing the button (of the machine) made the leaves fall and rolled them. #But they did not roll.'

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b. Mary-ka pethun-ul nwu-lun hayngtong-/sasil-i mwul-ul Mary-Nom button-Acc push-Rel action-/fact-Nom water-Acc chakap-key hay elli-ess-ta. #kulena mwul-i cold-Key do.Comp freeze-Pst-Dec but water-Nom el-ci anh-ass-ta. freeze-Comp Neg-Pst-Dec

'The fact that Mary pushed the button (of the fridge)/Mary's action of pushing the button (of the fridge) froze the water by making it cold. #But it was not frozen.'

In short, causative SVCs with an instrument, natural force, negligence, mistake, action or fact as the subject do not allow failed-attempt readings; some result must occur. All of these cases are in accordance with the Subject Intention Generalization. Since the non-sentient subjects cannot have intentions, the causative SVCs cannot have failed-attempt readings according to the Korean accomplishment event structure proposed in (140).

5.3.6 Passives of causative SVCs

Passive causative SVCs require actual-result interpretations. For instance, the *bake-eat*-type passive causative SVC in (394a) and the *hit-break*-type passive causative SVC in (394b) must have an actual-result reading.

(394) a. Mary-eyuyhay khephi-ka chakap-key toy-e masi-e
Mary-by coffee-Nom cold-Key do.Pass-Comp drink-Comp ci-ess-ta.
Pass-Pst-Dec
#kulena nemwu chakawe-se masi-l swu-ka eps-ess-ta.
but too cold-since drink-Rel way-Nom not.exist-Pst-Dec
'The coffee was made cold and then drunk by Mary. #But she could not drink it, since it was so cold.'

b. Mary-eyuyhay mwul-i chakap-key toy-e elli-e
Mary-by water-Nom cold-Key do.Pass-Comp freeze-Comp ci-ess-ta. #kulena mwul-i el-ci anh-ass-ta.
Pass-Pst-Dec but water-Nom freeze-Comp Neg-Pst-Dec
'The water was frozen by Mary by chilling it. #But it was not frozen.'

Passive causative SVCs do not require the subject's intention. The *bake-eat*-type passive causative SVC in (395) is compatible with any context given in (395).

(395) [Context 1: Mary *intentionally* made the coffee cold, and then *intentionally* drank it.]

[<u>Context 2</u>: Mary *intentionally* made the coffee cold, and then *unintentionally* drank it.]

[<u>Context 3</u>: Mary *unintentionally* made the coffee cold, and then *intentionally* drank it.]

[<u>Context 4</u>: Mary *unintentionally* made the coffee cold, and then *unintentionally* drank it.]

Mary-eyuyhay khephi-ka chakap-key toy-e masi-e

Mary-by coffee-Nom cold-Key do.Pass-Comp drink-Comp ci-ess-ta.

Pass-Pst-Dec

'The coffee was made cold and then drunk by Mary.'

As for *hit-break*-type causative SVCs, if the V2 event is intended, then the V1-XP event must also be intended. For instance, the *hit-break*-type passive causative SVC in (396) is compatible only with Context 1, 2, and 4 in (396).

(396) [Context 1: Mary *intentionally* made the water cold *with the intention* of freezing it.]

[<u>Context 2</u>: Mary *intentionally* made the water cold *without the intention* of freezing it.]

[Context 3: Mary *unintentionally* made the water cold *with the intention* of freezing it.]

[Context 4: Mary *unintentionally* made the water cold *without the intention* of freezing it.]

Mary-eyuyhay mwul-i chakap-key toy-e elli-e

Mary-by water-Acc cold-Key do.Pass-Comp freeze-Pst-Dec

ci-ess-ta.

Pass-Pst-Dec

'The water was frozen by Mary by chilling it.'

Summarizing, the restriction on the interpretations of passive causative SVCs conforms to the Subject Realization Generalization. That is, the patient subjects are directly related to the result states in the event structures of passive causative SVCs, and so the result states must occur. This is derived from the event structure of accomplishments in (140): since the x is not the subject of the passive causative SVCs, the condition (b) in (140) is never satisfied and this leads the constructions to have only actual-result readings.

Chapter 6

Conclusion

6.1 Summary

Based on the various interpretations of accomplishment predicates (lexical or derived) in Korean, I observed three generalizations, the Subject Realization Generalization, Subject Intention Generalization, and Event Connection Generalization:

(397) a. Subject Realization Generalization (SRG):

In the event structure of a verbal predicate, the (sub)event directly related to the predicate's subject (i.e. the subevent that includes the subject as the argument or the subevent that corresponds to the subject) must occur in the actual world.

b. Subject Intention Generalization (SIG):

Non-occurrence of an event requires the subject's intention regarding the event.

c. Event Connection Generalization (ECG):

In the event structure of a complex predicate sentence, connecting event(s) (i.e. the final subevent of temporally non-final predicate) must

occur in the actual world.

In order to account for the first two generalizations, I proposed the following modalized event structure for Korean accomplishment predicates:

(398) $[[x ACT] CAUSE_{Korean} [y BECOME < STATE>]]$ is true at w_0 iff

i) [x ACT] is true at w₀, and

ii) [[x ACT] CAUSE_{English} [y BECOME <STATE>]] is true at

(a) w₀, or

(b) all worlds w' in x's intention set, which is the non-empty set of possible worlds that are compatible with x's intention. (precondition: x is linked to the subject)

This event structure can derive the multiple interpretations (i.e. failed-attempt and actual-result readings) of an accomplishment predicate in Korean.

6.2 Future research

I leave to future work whether and how much the intention-based analysis can be extended to other constructions and languages.

6.2.1 Other constructions

The Korean verbs like *ttwi*- 'jump' or *ket*- 'walk' have been generally considered to be activity predicates (i.e. [x ACT_{<MANNER>}]) rather than accomplishment predicates (i.e. [[x ACT] CAUSE [y BEOME <STATE>]]). However, it seems that they allow failed-attempt interpretations, as in (399).

(399) a. Marcus-ka ttwi-ess-ta.

Marcus-Nom jump-Pst-Dec

- i) 'Marcus jumped.' (actual-result reading)
- ii) 'Marcus tried to jump, but he could not jump.' (failed-attempt reading)
- b. *Marcus-ka kel-ess-ta*. Marcus-Nom walk-Pst-Dec
 - i) 'Marcus walked.' (actual-result reading)
 - ii) 'Marcus tried to walk, but he could not walk.'
 - (failed-attempt reading)

In terms of a minimal event, walking (i.e. taking one step) or jumping seems to have an accomplishment event structure. Only if these predicates have an accomplishment event structure, it is natural that they are ambiguous between actual-result and failedattempt readings.

In addition to the manner of motion verbs, some perception verbs such as *tut*-'listen' or *po*- 'see' also appear to allow a failed-attempt interpretation, as in (400). (400) a. ku-ka latio-lul tul-ess-ta.

he-Nom radio-Acc listen-Pst-Dec

i) 'He listened to the radio.' (actual-result reading)

ii) 'He tried to listen to the radio, but nothing was heard (maybe because people were talking loudly in the room).' (failed-attempt reading)

b. *ku-ka* changpakk-ul po-ass-ta.
he-Nom window.outside-Acc see-Pst-Dec
i) 'He saw the outside of the window.' (actual-result reading)
ii) 'He tried to see the outside of the window, but nothing was seen (maybe since the window was blocked with a curtain).'
(failed-attempt reading)

Questions to be pursued in the future are: (i) theoretically whether the manner of motion verbs and perception verbs (or other verbs which have not been considered as accomplishments) have in fact an accomplishment event structure, and (ii) empirically whether they really allow failed-attempt interpretations.

6.2.2 Other languages

Many other languages allow failed-attempt readings. Investigating whether the intention-based analysis of the constructions discussed in this dissertation can be applied to the corresponding or similar constructions in those languages is a matter of

future work.

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