

Apparent Passivization of Unaccusative *Ha-ta* Verbs in Korean

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Lee, Keon Soo. 1999. Apparent Passivization of Unaccusative *Ha-ta* Verbs in Korean. *Linguistic Research* 17, 130-167. The 1-Advancement Exclusiveness Law (Perlmutter & Postal (1984)) predicts that where the initial 2 of an initially unaccusative clause is final 1, other advancements to 1 will not be possible. However, contrary to the prediction of 1-Advancement Exclusiveness Law, the unaccusative *ha-ta* verbs in Korean permit a passive clause whereas unergative *ha-ta* verbs do not. The purpose of this paper explicates such an apparent counter-example to the interaction of the 1-Advancement Exclusiveness Law with the Unaccusative Hypothesis (Perlmutter & Postal (1984)). First, this paper argues that the distinction between unergatives and unaccusatives also exists among the intransitive *ha-ta* verbs in Korean. Secondly, this papers shows that the 1-Advancement Exclusiveness law is also valid with regard to the intransitive *ha-ta* verbs in Korean. Thirdly, this paper argues that the passivization of unaccusative *ha-ta* verbs is an inevitable consequence which is attributed to the biclausal structure of intransitive *ha-ta* verbs.

1. Introduction

This paper deals with the apparent passivization of unaccusative *ha-ta* verbs in Korean. Unaccusative verbs select an initial 2, but no initial 1 whereas unergative verbs select an initial 1, but no initial 2.¹ Due to the absence of a subject, the initial 2 of an unaccusative verb advances to 1 to satisfy the Final 1 Law (Perlmutter & Postal (1983b))

¹ Within the framework of Relational Grammar, '1', '2', '3', and 'P' stand for the relations of subject, direct object, indirect object, and predicate, respectively. Relational Grammar is the theoretical framework recognizing the distinct linguistic levels at which nominals bear grammatical relations to clauses. Hence, 'initial' and 'final' are roughly equivalent to D-Structure and S-Structure in Government Binding terms.

(henceforth, FIL) which requires that every basic clause contain a final 1. On the other hand, the 1-Advancement Exclusiveness Law (Perlmutter & Postal (1984)) (henceforth, 1AEX) limits the number of advancements to 1 to at most one per clause. For this reason, unergative verbs reveal a different behavior from unaccusative verbs with regard to pseudo-passives:

- (1) a. The contestants skied under the bridge.
 b. The bridge was skied under by the contestants.
 (2) a. Trolls existed under the bridge.
 b. *The bridge was existed under by trolls.

(1b) is the sentence in which the locative nominal *the bridge* has been advanced to 1 via pseudo-passivization. Since unergative verbs involve no advancement to 1, the 1AEX does not forbid the advancement of the locative nominal to 1. Thus, (1b) is grammatical. However, (2a) fails to permit pseudo-passivization. Since the locative nominal *the bridge* in (2a) has been already advanced to 1 due to the FIL, the subsequent pseudo-passivization of the locative nominal brings about the violation of the 1AEX. Hence, (2b) is ungrammatical.

In Korean, so-called Sino-Korean verbal nouns (henceforth, VNs) combine with the native verb *ha* to form *ha-ta* verbs. Below are instances of intransitive *ha-ta* verbs:

- (3) a. Chelswu-ka yehayng-ha-yess-ta.
 -N travel-do-Past
 'Chelswu travelled.'
 b. Mwulka-ka halak-ha-yess-ta.
 price-N drop-do-Past
 'Prices went down.'

Of the intransitive *ha-ta* verbs, *yehayng-ha-ta* is thought to belong to the class of unergative verbs whereas *halak-ha-ta* is thought to belong to the class of unaccusative verbs.

On the other hand, in Korean, *toy* is generally assumed to be a

passive counterpart of the verb *ha*. If *toy* is indeed a passive form of the verb *ha*, *toy* would be expected to co-occur with *yehayng* but not with *halak*. However, contrary to the expectation, *halak-ha-ta* allows a seemingly passive form while *yehayng-ha-ta* does not:

(4) a. *Chelswu-ka yehayng-toy-yess-ta.

-N travel-Pass-Past

'Chelswu was made to travel.'

b. Mwulka-ka halak-toy-ess-ta.

price-N drop-Pass-Past

'Prices were made to go down.'

Given the assumption that *toy* is a passive counterpart of *ha*, intransitive *ha-ta* verbs in Korean seem to be peculiar. That is, alleged unaccusative verbs permit a passive clause but alleged unergative verbs do not. Thus, the data above apparently counter-exemplify the prediction that the 1AEX produces with the FIL. Though not exhaustive, the lists below include the intransitive *ha-ta* verbs which pattern with *yehayng-ha-ta* and *halak-ha-ta*, respectively:

- | | |
|--|---------------------------|
| (5) <i>kichim-ha-ta</i> 'to cough' | * <i>kichim-toy-ta</i> |
| <i>hapwum-ha-ta</i> 'to yawn' | * <i>hapwum-toy-ta</i> |
| <i>ssaum-ha-ta</i> 'to fight' | * <i>ssaum-toy-ta</i> |
| <i>thwucayng-ha-ta</i> 'to struggle' | * <i>thwucayng-toy-ta</i> |
| <i>cehang-ha-ta</i> 'to resist' | * <i>cehang-toy-ta</i> |
| <i>nongtam-ha-ta</i> 'to joke' | * <i>nongtam-toy-ta</i> |
| <i>swuyeng-ha-ta</i> 'to swim' | * <i>swuyeng-toy-ta</i> |
| <i>sanchayk-ha-ta</i> 'to take a walk' | * <i>sanchayk-toy-ta</i> |
| <i>keswu-ha-ta</i> 'to raise one's hand' | * <i>keswu-toy-ta</i> |
| (6) <i>cunga-ha-ta</i> 'to increase' | <i>cunga-toy-ta</i> |
| <i>kamso-ha-ta</i> 'to decrease' | <i>kamso-toy-ta</i> |
| <i>sengcang-ha-ta</i> 'to grow' | <i>sengcang-toy-ta</i> |
| <i>phokpal-ha-ta</i> 'to explode' | <i>phokpal-toy-ta</i> |
| <i>sangsung-ha-ta</i> 'to rise' | <i>sangsung-toy-ta</i> |
| <i>hakang-ha-ta</i> 'to fall' | <i>hakang-toy-ta</i> |

| | |
|-------------------------------------|------------------------|
| <i>pwungkoy-ha-ta</i> 'to collapse' | <i>pwungkoy-toy-ta</i> |
| <i>pwuphay-ha-ta</i> 'to be rotten' | <i>pwuphay-toy-ta</i> |
| <i>sicak-ha-ta</i> 'to begin' | <i>sicak-toy-ta</i> |
| <i>kyesok-ha-ta</i> 'to continue' | <i>keysok-toy-ta</i> |

Regardless of transitivity, *ha-ta* verbs reveal another interesting phenomenon with regard to case marking, on the other hand. VNs freely split from the verb *ha*, taking an accusative marker. But VNs freely split from the verb *toy*, taking a nominative marker. As a result, the contrast below is brought about:

- (7) a. Chelswu-ka yehayng-ul ha-yess-ta.
 -N travel-A do-Past
 'Chelswu travelled.'
- b. *Chelswu-ka yehayng-i toy-yess-ta.
 -N travel-N Pass-Past
 'Chelswu was made to travel.'
- (8) a. Mwulka-ka halak-ul ha-yess-ta.
 price-N drop-A do-Past
 'Prices went down.'
- b. Mwulka-ka halak-i toy-yess-ta.
 price-N drop-N Pass-Past
 'Prices were made to go down.'

Superficially, both (7a) and (8a) appear to be transitive sentences with canonical case marking for transitives. However, they are synonymous to the sentences in which VNs are not split from *ha* or *toy*. Moreover, with respect to passivization, they behave in much the same way as their original sentences do.

Then, questions subsequently arises as to (1) whether the distinction between unergatives and unaccusatives also exists among the intransitive *ha-ta* verbs in Korean; (2) whether the 1AEX is also valid with regard to the intransitive *ha-ta* verbs in Korean; and (3) what is the relation between the split forms and the incorporated forms. These are the central issues to be addressed in this paper.

Section 2 gives a brief synopsis of the Unaccusative Hypothesis proposed by Perlmutter (1978) and Perlmutter & Postal (1984), and shows that the unergative-unaccusative distinction is also needed as far as the *ha-ta* verbs examined above are concerned. Section 3 proposes a biclausal structure where the verb *ha* and VNs, respectively, serve as a matrix verb and an embedded verb. Section 3 also argues that the 1AEX is still valid with respect to unaccusative *ha-ta* verbs. Section 4 reviews the previous analyses and discusses the inadequacies of those analyses. Section 5 justifies the proposed analysis. Section 6 concludes this paper.

2. Two Types of Intransitive *Ha-ta* Verbs

This section outlines the Unaccusative Hypothesis and shows that with intransitive *ha-ta* verbs a distinction must be also made between unergatives and unaccusatives.

2.1 Unaccusative Hypothesis and Universal Alignment Hypothesis

Perlmutter (1978) and Perlmutter & Postal (1984) propose that certain intransitive clauses have an initial 2, but no initial 1. 'Certain clauses' here refers to unaccusative clauses. Thus, their proposal is saying that intransitive verbs are divided into two different classes: unergatives and unaccusatives. This is the Unaccusative Hypothesis. The existence of the two different classes of intransitive verbs is apparent by the contrast in (1) and (2), repeated here as (9) and (10):

- (9) a. The contestants skied under the bridge.
 b. The bridge was skied under by the contestants.
- (10) a. Trolls existed under the bridge.
 b. *The bridge was existed under by trolls.

In the context of the Unaccusative Hypothesis, Perlmutter & Postal (1984) hypothesize that there exist principles of universal grammar which predict the initial grammatical relation borne by a nominal in a

given clause from the meaning of the clause. This is the Universal Alignment Hypothesis. According to Perlmutter & Postal's semantic criteria, predicates determining initially unergative clauses are typically those which describe willed or volitional acts and certain involuntary bodily process such as 'coughing' and 'vomiting'. In contrast, predicates whose initial nuclear term² is semantically a Patient, predicates of existing and happening, and aspectual predicates are included in the class of predicates determining initially unaccusative clauses.³

Arguing that the unergative-unaccusative distinction does not strictly work across languages, though obviously the distinction operates on a fairly semantic base, Rosen (1984) proposes the Little Alignment Hypothesis. According to her, for a particular verb in a particular language, there is fixed mapping between semantic roles and initial relations and the alignment remains invariant for all clauses with that verb. However, it is true that syntactic evidence in many languages has shown that the distinction between unergative verbs and unaccusative verbs is a necessary concept in the analysis of languages. Hence, it is not necessary for the Universal Alignment Hypothesis to be quite true for the purpose of this paper. Since it is nearly true (Rosen (1984:54)), Perlmutter & Postal's semantic criteria are taken as the guiding principle of the analysis in this paper.⁴

2.2 Unaccusativities in Korean

Arguing that, in Korean, transitive and unergative verbs carry an agentivity feature whereas unaccusative verbs do not, Y. Kim (1990) proposes that the unaccusativity in Korean can be tested against the syntactic processes which are sensitive to agentivity. In Korean, she states, the syntactic processes which appeal to agentivity are imperative formation, propositive formation, embedding under control verbs like *nolyek-ha-ta* 'try', and embedding under coercive verbs like

² Nuclear terms refer to the subject and direct object of a clause.

³ See Perlmutter & Postal (1984:94-99) for details.

⁴ See Rosen (1984) for the discussion in detail.

kangyo-ha-ta 'force'.

According to Perlmutter & Postal's semantic criteria, verbs like *yehayng-ha-ta* belong to a class of unergative verbs while verbs like *halak-ha-ta* belong to a class of unaccusatives. Hence, it would be expected that the former are subject to the aforementioned syntactic processes whereas the latter are not. This follows from the fact that unergative verbs are closely related to the notion of agentivity but unaccusative verbs are not. The illustration below shows that *yehayng-ha-ta* is an unergative verb but *halak-ha-ta* is an unaccusative verb:

(11) Imperative:

- a. (Chelswu-ya) Yehayng-ha-yela.
 -Voc travel-do-Imperative
 '(Chelswu!) Travel!'
- b. *(Mwulka-ya) Halak-ha-yela.
 price-Voc drop-do-Imperative
 '(Prices!) Go down!'

(12) Propositive:

- a. (Chelswu-ya) Yehayng-ha-ca.
 -Voc travel-do-Propositive
 '(Chelswu!) Let's travel.'
- b. *(Mwulka-ya) Halak-ha-ca.
 -Voc drop-do-Propositive
 '(Prices!) Let's go down.'

(13) Embedding under control verbs:

- a. Chelswu-ka yehayng-ha-lyeko nolyek-ha-yess-ta.
 -N travel-do-Comp try-do-Past
 'Chelswu tried to travel.'
- b. *Mwulka-ka halak-ha-lyeko nolyek-ha-yess-ta.
 price-N drop-do-Comp try-do-Past
 'Prices tried to go down.'

(14) Embedding under coercive verbs:

- a. Swuni-ka Chelswu-eykey yehayng-ha-lako kangyo-ha-yess-ta.
 -N -to travel-do-Comp force-do-Past
 'Swuni forced Chelswu to travel.'

- b. *Cengpwu-ka mwulka-eykey halak-ha-lako kangyo-ha-yess-ta.
 government-N price-to drop-do-Comp force-do-Past
 'The government forced prices to go down.'

As demonstrated above, *yehayng-ha-ta* permits all of the syntactic processes which are triggered by an agentivity feature while *halak-ha-ta* permits none of them. This is due to the fact that unaccusative verbs do not initialize a 1 which can serve as an agent. Hence, it can be concluded that verbs like *yehayng-ha-ta* are unergatives while verbs like *halak-ha-ta* are unaccusatives.

Before leaving this section, it seems worthwhile to discuss the relation between VNs and the verb *ha* in terms of transitivity. VNs invariably combine with the verb *ha* to form *ha-ta* verbs which differ in transitivity.

- (15) a. Chelswu-ka sanchayk-ha-yess-ta.
 -N walk-do-Past
 'Chelswu walked.'
- b. Chelswu-ka saken-ul cosa-ha-yess-ta.
 -N affair-A investigate-do-Past
 'Chelswu investigated the affair.'
- c. Chelswu-ka Swuni-eykey sinmwun-ul paytal-ha-yess-ta.
 -N -to newspaper-A deliver-do-Past
 'Chelswu delivered newspapers to Swuni.'

In the data above an intransitive verb, a transitive verb, and a ditransitive verb are presented. However, the verb *ha* does not seem to participate in determining the transitivity of the sentences at all. Rather, the transitivity of the sentences in (15) seems to be determined in accordance with the argument structure of the preceding VNs. This is confirmed by the fact that the same set of arguments occurs in the nominalized phrases, as illustrated in (16), where the verb *ha* is not present. In this regard, the verb *ha* is transparent with respect to transitivity.

- (16) a. Chelswu-uy sanchayk
 -G walk
 'Chelswu's walking'
- b. Chelswu-uy saken-uy cosa.
 -G affair-G investigation
 'Chelswu's investigating of the affair'
- c. Chelswu-uy Swuni-eykey-uy sinmwun-uy paytal
 -G -to-G newspaper-G delivery
 'Chelswu's delivering of newspapers to Swuni'

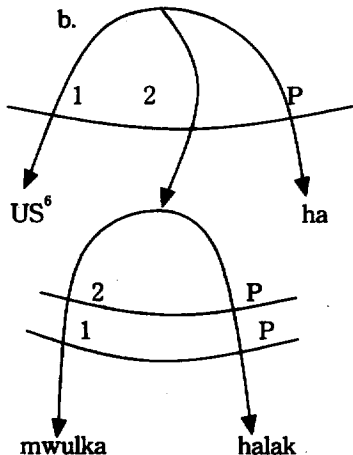
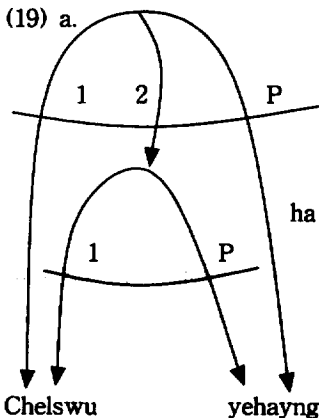
Then, by the same token, it can be assumed that the unaccusativity of *ha-ta* verbs is also determined by the preceding VNs. That is, if the VN carries unergativity, then the complex of VN and *ha* is unergative. Or, if the VN carries unaccusativity, then, the complex of VN and *ha* is unaccusative. Subsequently, this paper assumes that the VNs occurring in the given structures are verbs.⁵ This assumption may be supported by the fact that transitivity usually refers to the valency of verbs and by the fact that VNs come originally from Chinese where there is no morphological distinction between verbs and their corresponding nominal forms. Section 5 deals with the categorial status of VNs in details.

3. Proposal: Biclausal Analysis

As discussed in the previous section, the unaccusativity or unergativity of intransitive *ha-ta* verbs is assumed to be determined by the preceding VNs. Tentatively assuming that VNs are embedded verbs and the verb *ha* is a matrix verb, on the other hand, this paper proposes the stratal diagrams (19a) and (19b), for the sentences (17a) and (17b), respectively, supposing that (18a) and (18b) are corresponding structures.

⁵ Ahn (1991) points out that the term 'verbal noun' is a misnomer. However, the term 'verbal nouns' is used in this paper since there is no other proper term.

- (17) a. Chelswu-ka yehayng-ul ha-yess-ta.
 b. Mwuulka-ka halak-ul ha-yess-ta.
 (18) a. [Chelswu;-ka [Chelswu;-ka yehayng]-ul ha-yess-ta]
 b. [Δ [mwuulka-ka halak]-ul ha-yess-ta]



Before providing an account of the given data, it is in order to discuss how well the proposed biclausal analysis is motivated. An underlying idea is that Korean allows clauses to be assigned cases, as shown below:

- (20) a. [[Salam-tul-i pep-ul cikhi]-ki]-ka eleyp-ta.
 people-PL-N law-A observe-NM-N difficult
 'To observe the laws is difficult.'
 b. [[Swuni-ka papo]-im]-i sasil-i-ess-ta.
 -N fool-NM-N truth-N-Past
 'That Swuni was a fool was true.'
 c. Swuni-ka [[Chelswu-ka mikwuk-ey ka]-ki]-lul pala-n-ta.
 -N -N US-A go-NM-A want-Pres
 'Swuni wants Chelswu to go to the United States.'

⁶ US is the abbreviation of Unspecified Subject.

- d. Swuni-ka [[Chelswu-ka mikwuk-ey ka-ss]-um]-ul mol-lass-ta
 -N -N US-to go-Past-NM-A did not know-Past
 'Swuni did not know that Chelswu went to the United States.'

So-called nominalizers such as *-ki* and *-um* in (20) have been traditionally assumed to nominalize verbs themselves. However, nominalizers have been recently treated as complementizers (Song 1981, Hong 1983, Kwon 1985, Lee (1991), etc.). So, if nominalizers are complementizers, (20) shows that case markers are being attached to clauses, not to verbs, in Korean.

Another independent motivation is that the verb *ha* usually subcategorizes the nominal bearing a 2-relation, as shown below:

- (21) a. Swuni-ka il-ul ha-yess-ta.
 -N work-A do-Past
 'Swuni did the work.'
 b. *Swuni-ka ha-yess-ta.
 -N do-Past
 'Swuni did (something).'

(21) shows that the sentences containing the verb *ha* are complete only when the verb *ha* takes a direct object but the sentences are incomplete (i.e., ungrammatical in a strict sense) when the verb *ha* does not take a direct object.

On the other hand, the verb *ha* can also take clauses as its direct object, as illustrated below:

- (22) a. Swuni-ka [[Chelswu-ka chayk-ul ilk]-key](-lul) ha-yess-ta.⁷
 -N -N book-A read-Comp(-A) do-Past
 'Swuni made Chelswu read a book.'
 b. *Swuni-ka ha-yess-ta.
 -N do-Past
 'Swuni did (something).'

⁷ *Ha*-causative sentences are generally assumed to be biclausal. See Lee (1991, 1997) for the discussion of the biclausality of *ha*-causative sentences.

In the above, the verb *ha* takes a clause as its direct object. As illustrated, sentences are incomplete if the embedded clauses are not taken as a direct object. Consequently, it would not be problematic to assume that the verb *ha* is a typical transitive verb which takes a nominal or a clause as its direct object.

However, the postulation of an unspecified subject in (19b) still requires an explanation. According to Perlmutter & Postal's (1984) semantic criteria, aspectual verbs like *begin*, *continue* are unaccusative verbs. Then, the Universal Alignment Hypothesis would predict that Korean aspectual verbs like *sicak* 'begin', *kyesok* 'continue' are also unaccusative verbs. On the other hand, Dixon (1994) claims that aspectual verbs like *begin*, *continue* always require a distinct initiator or controller which is a universal subject. Let us take a look at the following Korean examples which contain aspectual verbs.

- (23) a. Yengwha-ka sicak(-ul) ha-yess-ta
 movies-N begin(-A) do-Past
 'The movie began.'
- b. Cohun nalssi-ka kyesok(-ul) ha-yess-ta.⁸
 good weather-N continue(-A) do-Past
 'Good weather continued.'

The above are the sentences whose verbs are aspectual and unaccusative. If a movie has just begun, there must have been an engineer who ran a projector. Or, if good weather has continued for a week, there must have been a cause which made the weather good. In those situations, the projector or the invisible cause is a distinct initiator or controller which serves as an invisible subject. In much the same way, if prices have gone down, there must have been a cause or a controller which made prices go down. However, unaccusative verbs

⁸ In reality, (23b) does not sound quite natural. However, it might be attributed to the fact that Korean native speakers tend to prefer to the passive form '*Cohun nalssi-ka kyesok(-i) toy-ess-ta*' to express the same situation. Hence, the unnaturalness in (23b) might be regarded as a matter of pragmatics, not as a matter of syntax.

cannot take an initial subject. Accordingly, the verb *ha* needs to take an invisible cause or controller as its subject which is not phonetically realized when it combines with unaccusative VNs.

Now let us turn to the data given in (17) to see how the proposed analysis can account for them. In (19a), *Chelswu* assumes the final 1-relations of the downstairs clause and the upstairs clause. Thus, *Chelswu* is nominatively marked.⁹ On the other hand, the embedded clause [*Chelswu-ka yehayng*] bears the final 2-relation of the matrix clause. For this reason, the embedded clause is accusatively marked. In (19b), the unspecified subject takes the final 1-relation of the matrix clause. However, since the unspecified subject does not phonetically realize, it does not need to be morphologically case-marked. On the other hand, *mwulka* assumes the initial 2-relation of the embedded clause since *halak* is an unaccusative verb. However, *mwulka* acquires the final 1-relation due to the FIL, so that *mwulka* is also nominatively marked. The embedded clause [*mwulka-ka halak*] assumes the 2-relation of the matrix clause. Hence, the embedded clause is also accusatively marked.

As explained above, the proposed analysis provides a principled account for the reason why both unergative and unaccusative *ha-ta* verbs superficially appear to be transitive sentences with canonical case marking for transitives. In addition, the proposed analysis provides another principled account for the reason why so-called VNs freely incorporate with the verb *ha*, deleting an accusative case marker. As can be seen from the examples below, direct objects generally tend to freely delete a case marker in Korean:

(24) a. *Chelswu-ka pap-ul mek-ess-ta.*

-N rice-A eat-Past

⁹ In Korean, case markers have been generally assumed to be assigned on the base of the final term-hood which the nominals bear. Below are the case-marking system for the term nominals in Korean:

final 1, final 1-chomeur: nominative (except passive 1-chomeur)

final 2, final 2-chomeur: accusative

final 3: dative

b. Chelswu-ka pap-mek-ess-ta.

-N rice-eat-Past

'Chelswu ate the rice.'

Moreover, incorporated forms are much preferred by Korean native speakers if the direct object is a clause, as can be seen below:

(25) a. Swuni-ka Chelswu-ka chayk-ul ilk-key-lul ha-yess-ta.

-N -N book-A read-Comp-A do-Past

b. Swuni-ka Chelswu-ka chayk-ul ilk-key ha-yess-ta.

-N -N book-A read-Comp do-Past

'Swuni made Chelswu read a book.'

Consequently, the proposed analysis gives a simple account of the relation between the split forms and the incorporated forms of *ha-ta* verbs. That is, the deletion of an accusative marker is just a reflection of the general tendency for direct objects to delete freely in Korean.

Now let us examine how the proposed analysis can account for the contrast which unergative *ha-ta* verbs and unaccusative *ha-ta* verbs reveal in conjunction with passivization. In the first part of this paper it was shown that unaccusative clauses are prohibited from being passivized because of the 1AEX whereas unergative clauses are not. However, it has been also shown that, in Korean, unaccusative *ha-ta* verbs form passive clauses whereas unergative *ha-ta* verbs do not, as repeated below:

(26) a. Chelswu-ka yehayng(-ul) ha-yess-ta.

b. *Chelswu-ka yehayng(-i) toy-yess-ta.

(27) a. Mwulka-ka halak(-ul) ha-yess-ta.

b. Mwulka-ka halak(-i) toy-yess-ta.

At this juncture, it is worth mentioning that both unergative *ha-ta* verbs and unaccusative *ha-ta* verbs form a transitive clause under the proposed analysis. If this is the case, both types of *ha-ta* verbs would be expected to permit a passive clause. Put differently, embedded

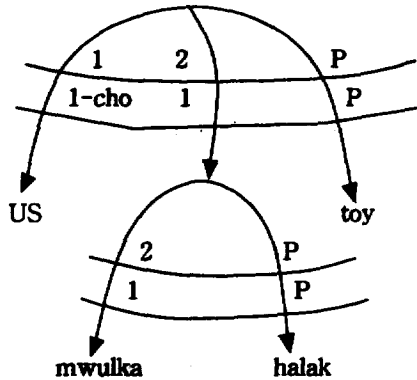
clauses would be expected to be passivized since they assume the final 2-relation of the matrix clause. However, note that passivization is the process which does not apply across clause boundaries. Further note that the embedded subject in (19a) also bears the final 1-relation of the matrix clause. For this reason, the embedded clause cannot be passivized in (19a), despite the fact that the whole sentence is transitive. This can be confirmed by the fact that exceptional clauses cannot be passivized either, as shown below:

- (28) a. Everyone considered him to be a genius.
 b. *Him to be a genius was considered by everyone.
- (29) a. *Motun salam-tul-i Swuni-lul chencey-lako mit-ess-ta.*
 all person-PL-N -A genius-Comp believe-Past
 'All the person believed Swuni to be a genius.'
 b. **Swuni-lul chencey-lako motun salam-tul-ey uyhay mit-e ci-ess-ta.*
 -A genius-Comp all person-PL-by believe-Pass-Past
 'Swuni to be a genius was believed by all the persons.'

Radford (1988) argues that exceptional case-marking verbs such as *consider*, *believe* take an S complement. This is to say that *him to be a genius* in (28a) and *Swuni-lul chencey* in (28b) form a constituent which serves as a direct object of the matrix verb. In this kind of construction, the subject of the complement clause also serves as a direct object of the matrix verb, however. Accordingly, the embedded clause cannot be passivized since it contains an element which also belongs to a higher clause.

Let us now take a look at the stratal diagram below to see how unaccusative *ha-ta* verbs can permit a passive clause.

(30)



As shown above, the embedded clause [*mwulka-ka halak*] acquires the final 1-relation by virtue of passivization at the matrix clause level. Hence, the embedded clause itself is nominatively marked. However, note that two different 1-Advancements take place at the different clause levels. As discussed, the initial 2 of the unaccusative verb *halak* first advances to 1 at the embedded clause level and the whole embedded clause in turn advances to 1 at the matrix clause level through passivization. As a consequence, the 1AEX is not violated although the unaccusative clauses under discussion contain more than one 1-advancement. Thus, the proposed analysis also provides a principled account for the apparent peculiarity of the unaccusative *ha-ta* verbs in Korean with respect to the interaction of the 1AEX with the FIL.

4. Previous Analyses

The biclausal analysis has been proposed for the constructions in question. The claims underlying the biclausal analysis are that so-called VNs serve as an embedded verb and that the verb *ha* is a heavy verb which serves as a matrix verb. For this reason, this section argues against the analyses relying on the claims that VNs are nouns and the verb *ha* is not a main verb.

4.1 Light Verb Analyses

Assuming that the Japanese verb *suru* is thematically incomplete or light, Grimshaw & Mester (1988) claim that *suru* subcategorizes and case-marks a direct object NP, without assigning it a θ -role. Hence, Grimshaw & Mester argue that θ -marking in the *suru* complex is a function of a process of complex predicate formation, which they call Argument Transfer. To put it differently, the nominal θ -marker, i.e., VN, transfers some or all of its arguments to the argument structure of the light verb *suru*. As a consequence, both *suru* and the head of the object NP act as θ -markers, each with its own θ -marking domain.

Owing to Grimshaw & Mester's light verb concept, the Korean verb *ha* has often been assumed to be a light verb which subcategorizes and case-marks a direct object, without assigning it a θ -role. Accordingly, the intransitive *ha-ta* verb constructions, illustrated in (31), have been treated as instances of light verb constructions in Korean (Ahn (1991), J. Kim (1993), and many others).

- (31) a. Chelswu-ka yehayng(-ul) ha-yess-ta.
 b. Mwulka-ka halak(-ul) ha-yess-ta.

In the above examples, the verb *ha* assigns an accusative marker to the VNs *yehayng* in (31a) and *halak* in (31b). On the other hand, the verb *ha* θ -marks *Chelswu* in (31a) and *mwulka* in (31b) through the operation of Argument Transfer. Thus, the light verb concept seems at a glance to account for the sentences above, especially with respect to the case assignment and θ -role assignment.

However, Grimshaw & Mester argue that there must be restrictions in the operation of Argument Transfer. According to them, at least one non-subject argument in addition to the subject argument of the VN must be transferred. If these restrictions hold true in light verb constructions, sentences like (31) would be ruled out. In other words, there must be at least two arguments including a subject argument in light verb constructions. However, the VNs in (31) subcategorize only one argument. For this reason, the process of

Argument Transfer cannot operate on the sentences in (31). Therefore, their light verb analysis cannot but predict that sentences like (31) are ungrammatical. Nonetheless, they are perfectly grammatical sentences in Korean.

To get around such a problem, Yoon (1991) and Chae (1966) among others claim that at least the subject argument of the VN must be transferred in Korean light verb constructions. However, the term subject here seems to be vague. Note that the subject of an unergative verb is both an initial subject and a final subject, whereas the subject of an unaccusative verb is a final subject, but not an initial subject. If this is the case, it is not clear which subject the term subject refers to in their analyses.

Even though Yoon's and Chae's claims are admitted, the constructions of unaccusative verbs like (31b) would remain unaccountable. If the verb *ha* assigns an accusative case to the VN, then *ha* must assign an external θ -role to its subject. Otherwise, it will be a violation of Burzio's generalization stating that a verb assigns an external θ -role if and only if it can assign accusative Case. Thus, Burzio's generalization rules out light verb constructions like (31b). However, in fact, (31b) is fully grammatical.

To recapitulate, if Grimshaw & Mester's (1988) light verb analysis is extended intact to the so-called light verb constructions in Korean, the intransitive *ha-ta* sentences under consideration cannot but be treated as ungrammatical sentences. Even if Yoon's (1991) and Chae's (1996) modified light verb analyses are admitted, unaccusative sentences like (31b) cannot but be ruled out as ungrammatical sentences because of Burzio's generalization. Accordingly, any analysis relying on the idea that the verb *ha* is a light verb cannot but experience the problem of undergeneration.

4.2 Raising Analysis

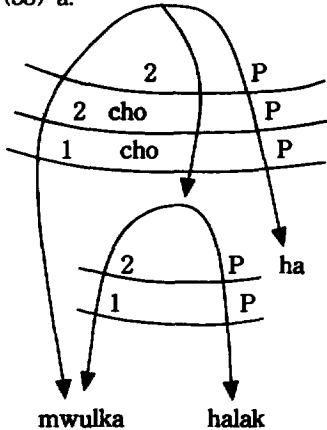
Claiming that what determines the valency of the clause relevant to the unergative vs. unaccusative dichotomy is not the verb *ha* or the verb *toy* but rather the preceding VNs such as *halak*, and assuming

that the verb *ha* and *toy* are auxiliary verbs, Choi (1988) proposes the stratal diagrams (33a) and (33b) for the sentences (32a) and (32b), respectively.

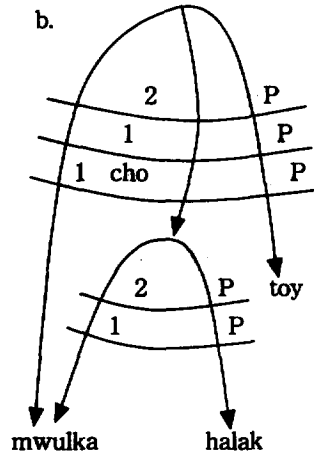
(32) a. *Mwulka-ka halak-ul ha-yess-ta.*

b. *Mwulka-ka halak-i toy-ess-ta.*

(33) a.



b.



In the stratal diagrams above, the verb *ha* and *toy* initialize the complement clause which is headed by the unaccusative VN *halak*. The complements of the verb *ha* and *toy* bear an initial 2-relation since auxiliary verbs universally occur in initially unaccusative clauses (Perlmutter & Postal (1984) and Postal (1986)). In (33a), *mwulka*, the initial 2 of the complement, advances to 1 due to the FIL. Then, it raises to the matrix clause, acquiring a 2-relation by virtue of the Relational Succession Law.¹⁰ Finally, the raisee, i.e., *mwulka*, advances to 1 in accordance with the FIL. Consequently, *mwulka* bears the final 1-relation of the clause and is nominatively marked. On the other hand, the complement [*(mwulka-ka) halak*] is accusatively marked since it bears the final 2-chomeur relation of the clause.

In (33b), the complement of the verb *toy* advances to 1 to satisfy

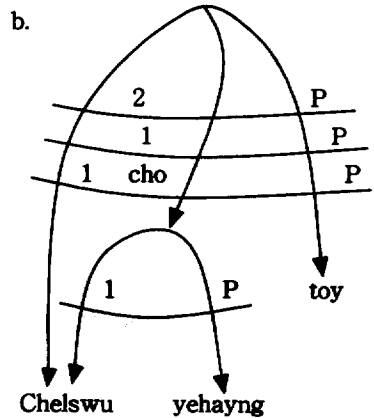
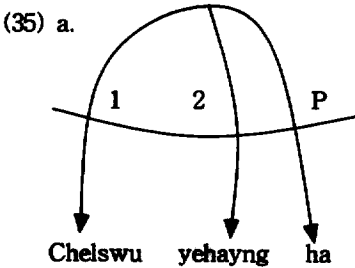
¹⁰ **Relational Succession Law:** (Perlmutter & Postal 1983)

An NP promoted by an ascension rule assumes the grammatical relation borne by the host out of which it ascends.

the F1L. On the other hand, *mwulka*, the initial 2 of the complement, also advances to 1 due to the F1L. Then, it raises to the matrix clause, acquiring a final 1-relation by virtue of the Relational Succession Law. Thus, *mwulka* is nominatively marked since it bears the final 1-relation of the clause, and the complement [(*mwulka-ka*) *halak*] is also nominatively marked since it takes the final 1-chomeur relation of the clause.

On the other hand, claiming that the VN *yehayng* is a direct object of the verb *ha* in (34a) but is a predicate nominal in (34b), Choi (1988) proposes (35a) and (35b) as the stratal diagrams of the sentences (34a) and (34b), respectively.

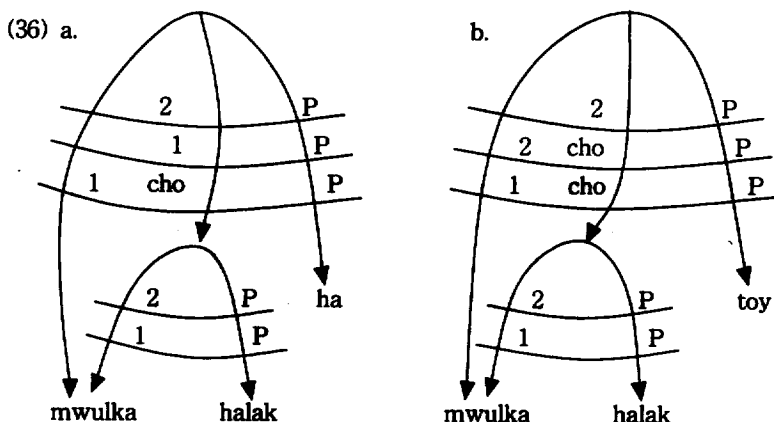
- (34) a. Chelawu-ka yehayng-ul ha-yess-ta.
 b. *Chelswu-ka yehayng-i toy-ess-ta.



In (35a), *Chelswu* is nominatively marked since it bears a final 1-relation while *yehayng* is accusatively marked due to its final 2-relation. In (35b), the complement of the verb *toy* advances to 1 to satisfy the F1L. On the other hand, *Chelswu*, the initial and final 1 of the complement, raises to the matrix clause, acquiring a final 1-relation by virtue of the Relational Succession Law. Thus, *Chelswu* is nominatively marked. On the other hand, the complement [(*Chelswu-ka*) *yehayng*] is nominatively marked since it bears the final 1-chomeur

relation of the clause. However, Choi (1988) argues that only an initial 2 can be raised from the complement of *toy*.¹¹ Hence, (34b) is ruled out since the initial 1, not the initial 2, has been raised, as shown in (35b).

As reviewed above, Choi's (1988) raising analysis at a glance seems to give a plausible account for the contrast between unergative and unaccusative VNs with respect to the case assignment and seemingly passive counterparts, although he does not consider the verb *toy* as the passive counterpart of the verb *ha*. However, a closer examination reveals that his analysis is inadequate in at least two respects. First, his analysis cannot entirely exclude incorrect predictions. Let us again take a close look at the stratal diagrams in (33). Both of the stratal diagrams involve a raising and an unaccusative advancement at the matrix clause level. However, a raising takes place before an unaccusative advancement in (33a) whereas an unaccusative advancement occurs before a raising in (33b). Then, it implies that there is no intrinsically or extrinsically determined order between a raising and an unaccusative advancement. Accordingly, nothing would prevent them from taking place in reverse orders, as shown below:



¹¹ Perlmutter & Postal (1983a) suggest that only a term of a grammatical relation (i.e., subject, direct object, and indirect object) can be the host of an ascension (i.e. raising). This is the universal Host Limitation Law. However, which term of a grammatical relation can be raised in a particular language depends on the constraints imposed on the given language.

In (36a), the complement itself advances to 1 by virtue of the FIL. Then, the final 1 of the complement raises to the matrix clause, acquiring a final 1-relation due to the Relational Succession Law. As a result, *mwulka* is nominatively marked. On the other hand, the complement itself is nominatively marked due to its final 1-chomeur relation. In (36b), the final 1 of the complement raises to the matrix clause, acquiring the 2-relation of the clause by virtue of the Relational Succession Law. Then, the raisee, i.e., *mwulka*, takes a final 1-relation because of the FIL. For this reason, in (36b), *mwulka* is nominatively marked whereas the complement is marked accusatively. Moreover, raising of the final 1 of the complement does not violate the condition that only an initial 2 can be raised from the complement of *toy* since the raisee is an initial 2 of the VN *halak*. Then, the sentences in (37) would be expected to be grammatical under Choi's raising analysis, although they are ungrammatical sentences.

- (37) a. **Mwulka-ka halak-i ha-yess-ta.*
 prices-N drop-N do-Past
 'Prices went down.'
- b. **Mwulka-ka halak-ul toy-ess-ta.*
 prices-N drop-A Pass-Past
 'Prices were made to go down.'

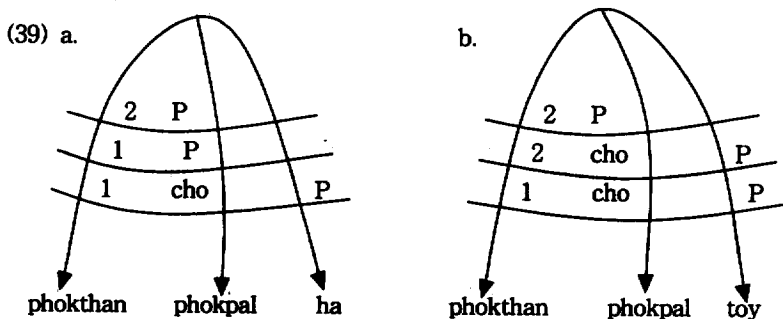
Second, as mentioned in Section 1, the verb *toy* has been generally assumed to be a passive counterpart of the verb *ha*. However, Choi (1988) treats the verb *toy* as a raising verb, as shown above. In this regard, Choi's raising analysis cannot but admit two different *toy*-verbs: one is a passive verb, the other is a raising verb.

4.3 Predicate Union Analyses

Assuming that the verb *ha* and the verb *toy* are light verbs in the sense of Grimshaw & Mester (1988), M. Kim (1994) argues that the sentences in (38) are instances of light verb constructions in Korean.¹²

- (38) a. *phokthan-i phokpal(-ul) ha-yess-ta.*
 bomb-N explode(-A) do-Past
 'The bomb exploded.'
- b. *Phokthan-i phokpal(-i) toy-es-ta.*
 bomb-N exploded(-N) become-Pass
 'The bomb exploded.'

On the other hand, assuming that the verb *ha* and the verb *toy* are union predicates which initialize no terms except a complement clause, she proposes (39a) and (39b) as the stratal diagrams of the sentences (38a) and (38b), respectively.¹³



In her analysis, *phokpal* is a predicate which selects only a 2 in the initial stratum, and the verb *ha* and the verb *toy* themselves are union predicates which are introduced in the later stratum. Since the initial stratum of (39a) is unaccusative, the initial 2 *phokthan* advances to 1 in the second stratum. In the third stratum, the union verb *ha* puts the VN *phokpal* into chomage. And the verb *ha* assigns an emphatic accusative marker to the VN *phokpal*. The initial stratum of (39b) is also unaccusative as in (39a). However, unlike in (39a), the union verb *toy* chomeurizes the initial predicate *phokpal* in the second stratum, and

¹² Examples are drawn from M. Kim (1994). Since the VN *phokpal* 'explode' is also unaccusative, to directly discuss her examples does not affect the discussion in this paper.

¹³ See Davies & Mester (1988) and M. Kim (1994) for the discussion of the predicate union analysis.

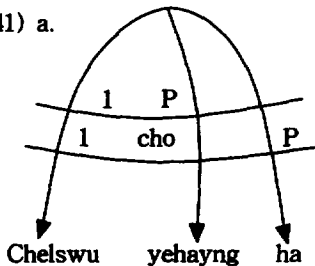
the initial 2 *phokthan* advances to 1 through passivization. And the verb *toy* assigns an emphatic nominative marker to the VN *phokpal*.

On the other hand, the stratal diagrams of the sentences in (41a) and (41b) would be (41a) and (41b), respectively, although M. Kim (1994) does not deal with unergative *ha-ta* verbs.

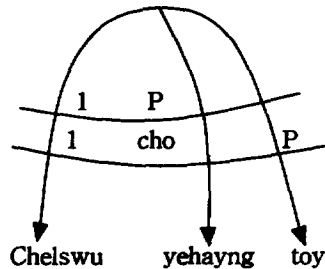
(40) a. Chelswu-ka yehayng(-ul) ha-yess-ta.

b. *Chelswu-ka yehayng(-i) toy-ess-ta.

(41) a.



b.



As shown above, *yehayng* selects only a 1 in the initial stratum since it is an unergative verb. In (41a), the union verb *ha* chomeurizes the initial predicate *yehayng* and the verb *ha* assigns an emphatic accusative marker to the VN *yehayng*. In (41b), the union verb *toy* also chomeurizes the initial predicate *yehayng* in the second stratum, passivizing the inner clause. And then, the verb *toy* assigns an emphatic nominative marker to the VN *yehayng*. However, passivization cannot apply since the inner clause does not contain a nominal bearing a 2-relation. For this reason, (41) is ruled out.

Thus, M. Kim's predicate union analysis seems to give a plausible account for the contrast in (38) and (40). However, her analysis is also inadequate in two respects. She argues that the union verb *toy* triggers a passive advancement in structure (39b). Her argument is based on the semantic difference between (38a) and (38b). Relying on the examples in (42), she argues that (38a) entails no passive meaning and it can be interpreted as the bomb exploded itself while (38b) entails passive meaning and it means that the bomb was exploded by somebody.

- (42) a. *Phoktan-i Swuni-ey uyhayse phokpal-ha-yess-ta.
 bomb-N -by explode-do-Past
 'The bomb was exploded by Swuni.'
- b. Phokthan-i Swuni-ey uyhayse phokpal-toy-ess-ta.
 bomb-N -by explode-become-Past
 'The bomb was exploded by Swuni.'

However, note that passivization is a 2-to-1 advancement which applies to a transitive stratum. Transitive stratum refers to the stratum which contains one subject and one direct object. Further note that, in the stratal diagram (39b), the initial predicate *phokpal* selects only an initial 2. In this regard, the stratal diagram (39b) is not different from the stratal diagram (39a), since both of them involve only an unaccusative advancement. Accordingly, the structure which she proposes for the sentence (38b) is not theoretically valid. Since (39b) does not represent a passive structure, although she argues that it is a passive clause.

In M. Kim's analysis, the VNs assume the relation of final P-chomeur. Within the framework of Relational Grammar, all nominals get their case in accordance with the final relation borne by them. For this reason, an accusative marker can be assigned to only a final 2 or a final 2-chomeur whereas a nominative marker can be assigned only to a final 1 or a final 1-chomeur (but not to a passive-chomeur). However, nominative and accusative markers are assigned to P-chomeur nominals under the predicate union analysis. To explain how a P-chomeur can get a case marker, she proposes the rule of emphatic marker in (43), claiming that the case markers attached to the VNs in (38) and (40) are not case markers but emphatic markers (cf. (Ahn (1990, 1991))).

- (43) a. A VN may bear an emphatic NOM marker, in case the heavy counterpart of the following union predicate is an intransitive verb.
- b. A VN may bear an emphatic ACC marker, in case the heavy counterpart of the following union predicate is a transitive verb.

According to her, emphatic markers are optional but case markers are obligatory, and emphatic markers convey an exclusive meaning. In much the same way, she argues, the case markers attached to VNs in the sentences under consideration are optional and convey an exclusive meaning. However, as is well known, case markers are freely deleted in Korean. Moreover, the sentences in (38) do not carry an exclusive meaning except when the case markers attached to the VNs are fully emphasized. Even though her claim is admitted, the case markers attached to non-verbal nominals also convey an exclusive meaning if they are fully emphasized.

Furthermore, the rule of emphatic marker in (43) is redundant. According to the rule (43), an accusative marker is assigned to a VN if the heavy counterpart of the union predicate functions as a transitive verb, while a nominative marker is assigned to a VN if the heavy counterpart of the union predicate functions as an intransitive verb. This means that emphatic markers are assigned to VNs depending upon the kinds of union predicates which follow them. However, the verb *ha* necessarily assigns an accusative marker to its complement and the verb *toy* is always intransitive. Thus, the assignment of emphatic markers is identical with the assignment of case markers. If this is the case, the rule of emphatic marker might be superfluous.

5. Justification of the Biclausal Analysis

The previous section has shown that the analyses relying on the claim that VNs are exclusively nouns and the verb *ha* is not a main verb are inadequate to account for the contrast which unergative *ha-ta* verbs and unaccusative *ha-ta* verbs reveal. This section now argues that VNs are either nouns or verbs in accordance with the given context. This section also argues that the verb *ha* is a heavy verb which is responsible for both case and θ -role assignments to its arguments.

5.1 Verbal Nouns: Nouns or Verbs?

B. Park (1981) and Chae (1996) among others speculate that VNs had been borrowed as nouns from Chinese. Ahn (1991), K. Park (1992, 1995) and Lee (to appear), however, assume that VNs had been borrowed as verbs or nouns in accordance with their usage in Chinese. This assumption may be reasonable since Chinese is a language where there is no morphological distinction between verbs and their nominal forms.

Now let us first take a look at the following examples:

- (44) a. Swuywun kongpwu-ka eps-ta.
 easy study-N non-exist
 'No study is easy.'
- b. Swuni-ka elyewun kongpwu-lul kkuthnay-ess-ta.
 -N difficult study-A complete-Past
 'Swuni completed difficult studies.'
- (45) a. Chelswu-uy yehayng-i maywu kil-ess-ta.
 -G travel-N very long-Past
 'Chelswu's travel was very long.'
- b. Salam-tul-i cwuka-uy halak-ul kekceng-ha-yess-ta.
 people-PL-N stock price drop-A worry-do-Past
 'People worried about dropping of stock price.'

In the above examples, VNs occur in the subject position and the direct object position which are typical NP positions. Moreover, VNs are modified by adjectives or the possessive forms of nouns. Accordingly, the above examples convincingly suggest that VNs are not verbs but nouns. Otherwise, the above examples would remain unaccountable.

However, it is easy to find out several pieces of evidence that VNs are not nouns but verbs. First, VNs can be immediately modified by VP-adverbs, as shown below:

- (46) a. Chelswu-ka (yenge-lul) yelsimhi kongpwu-lul ha-yess-ta.
 -N (English-A) ardently study-A do-Past
 'Chelswu ardently studied English.'
- b. Chelswu-ka culkepkey yehayng-ul ha-yess-ta.
 -N joyfully travel-A do-Past
 'Chelswu joyfully travelled.'
- c. Mwulka-ka ppalukey halak-ul ha-yess-ta.
 price-N quickly drop-A do-Past
 'Prices have quickly gone down.'

Cross-linguistically, verbs are immediately modified by the adverbs which restrict them. Hence, the fact that VNs can be immediately modified by VP-adverbs indicates that VNs are verbs.

Second, according to Dixon (1994), verbs in any language can be divided into two broad classes: primary verbs and secondary verbs. Secondary verbs are the verbs which express secondary concepts (such as *begin*, *try*, etc.). Showing that secondary verbs take a (seeming object) complement clause in many languages, Dixon claims that it is one of the two major kinds of syntactic behavior when secondary concepts are expressed by verbs. Korean secondary verbs such as *sicak* 'begin', *noleyk* 'try', etc. also take a clausal complement, as shown below:

- (47) a. Swuni-ka nolay-lul pwulu-ki(-lul) sicak(-ul) ha-yess-ta.
 -N song-A sing-Comp(-A) begin-A do-Past
 'Swuni began to sing a song.'
- b. Pi-ka o-ki(-lul) sicak(-ul) ha-yess-ta.
 rain-N come-Comp begin(-A) do-Past
 'It began to rain.'

In the above examples, secondary verbs, which are also VNs, occur in the same position that other VNs can have. The above examples strongly indicate that VNs are verbs. Otherwise, it would be problematic to account for the fact that nouns take a clausal object. However, it would be natural for verbs to take a clausal complement.

Third, *cwung-i-ta* is one of two progressive forms in Korean. For this reason, verbs which denote activities can be used with the progressive form *cwung-i-ta* but substantial nouns cannot, as shown below:

- (48) a. Swuni-ka pap-ul mek-nun-cwung-i-ta.
 -N rice-A eat-Pres-Prog-be
 'Swuni is eating the rice.'
 b. *Swuni-ka chayksang-cwung-i-ta.
 -N desk-Prog-be-Past
 'Swuni is being the desk.'

However, VNs can co-occur with the progressive form *cwung-i-ta*, as illustrated below:

- (49) a. Chelswu-ka yehayng-cwung-i-ta.
 -N travel-Prog-be
 'Chelswu is travelling.'
 b. Mwulka-ka halak-cwung-i-ta.
 price-N drop-Prog-be
 'Prices are going down.'

Provided that only verbs can be used with the progressive form in Korean, it would be problematic to account for the fact that nouns can be used with the progressive form. However, it would be natural for verbs to co-occur with the progressive form. Thus, the above examples strongly suggest that VNs are verbs.

Thus, the facts examined so far are convincing enough to draw the conclusion that VNs had been borrowed as verbs or nouns in accordance with the given context. Now, remember that one of the claims of biclausal analysis is that unergative VNs and unaccusative VNs appearing in the constructions under consideration are not nouns but verbs. This is, therefore, the place to return to our discussion of intransitive *ha-ta* constructions. Let us observe the following examples:

- (51) a. Mwulka-ka ppalukey/*ppalun halak-ul ha-yess-ta.
 price-N quickly/quick drop-A do-Past
 'Prices quickly/quick went down.'
- b. Chelswu-ka sinsokhi/?sinsokhan yehayng-ul ha-yess-ta.
 -N rapidly/rapid travel-A do-Past
 'Chelswu rapidly/rapid travelled.'

The fact that *halak* can be modified by adverbs, but not adjectives, reveals that *halak* is a verb. However, *yehayng* is somewhat problematic. As shown above, *yehayng* can be modified by adverbs and can also be modified by adjectives, though it is not a perfectly natural process. Note that it has been discussed in Section 3 that the subject of the matrix verb *ha* and the embedded verb *yehayng* are identical. For this reason, the VN *yehayng* might also be perceived as an object. Note that the sentence sounds a little odd when it is modified by adjectives. This might be due to the fact that *yehayng* is perceived as a noun, although it is used as a verb. Here, it might be said that the unergative VNs and the unaccusative VNs appearing in the sentences under discussion are verbs.

More evidence comes from the passivization of the intransitive *ha-ta* verbs. As noted previously, both unaccusative *ha-ta* clauses and unergative *ha-ta* clauses look like transitive clauses. Consider (51):

- (51) a. Mwulka-ka halak-ul ha-yess-ta.
 b. Chelswu-ka yehayng-ul ha-yess-ta.

If the VNs in (51) are indeed nouns, and if the above are indeed transitive clauses, the VNs can be regarded as the direct objects of the clauses. The VNs in (51) should be passivized. However, it is not the case, as shown below:

- (52) a. *Halak-i mwulka-ey uyhay toy-ess-ta.
 drop-N price-by Pass-Past
 'Drop was made by prices.'

- b. *Yehayng-i Chelswu-ey uyhay toy-ess-ta.
 travel-N -by Pass-Past
 'The travel was made by Chelswu.'

Thus, their passivization suggests that the VNs in (51) are not nouns.

On the other hand, it has been argued in Section 3 that unaccusative *ha-ta* verbs permit a passive clause whereas unergative *ha-ta* verbs do not, as shown below:

- (53) a. Mwulka-ka halak(-i) toy-yess-ta.
 b. *Chelswu-ka yehayng-i toy-ess-ta.

It was stated in Section 3 of this paper that a complement clause can be passivized since it takes the final 2-relation of the clause. However, the complement clause in (51b) cannot be passivized since passivization does not apply across clause boundaries. For this reason, (53a) is grammatical whereas (53b) is ungrammatical. With respect to the passivization of the constructions being considered, it should be noted that the VNs head complement clauses. That is to say that here the VNs are verbs. Otherwise, the passivization of the constructions must be accounted for in a very complicated process.

5.2 *Ha* as a Heavy Verb

It has been shown in the previous section that the VNs occurring in the construction at hand can be immediately modified by VP-adverbs. Note that *ha* can also be modified by VP-adverbs, however:

- (54) a. Chelswu-ka yehayng-ul culkepkey ha-yess-ta.
 -N travel-A joyfully do-Past
 'Chelswu joyfully travelled.'
 b. Mwulka-ka halak-ul kupsokhi ha-yess-ta.
 price-N drop-A abruptly do-Past
 'Prices abruptly went down.'

Cross-linguistically, VP-adverbs are usually assumed to occur at the closest position to the verb that they restrict. If this is the case, the fact that VP-adverbs can occur immediately before *ha* strongly indicates that *ha* is the main verb of the sentences in (54).

B. Park (1981) argues that the occurrence of VP-adverbs can be due to such devices as adverb placement. However, note that VP-adverbs can simultaneously occur immediately before both VNs and *ha*, as shown below:

- (55) a. Chelswu-ka culkepkey yehayng-ul ppalli ha-yess-ta.
 -N joyfully travel-A fast do-Past
 'Chelswu fastly travelled in a pleasant manner.'
- b. Mwulka-ka cisokhayse halak-ul sesehi ha-yess-ta.
 price-N gradually drop-A slowly do-Past
 'Prices have gradually gone down in a slow speed.'

Thus, the above fact suggests that both VN and *ha* are main verbs although there is no *a priori* ban which restricts the occurrence of the two VP-adverbs with the same clause. If (55) is a simple clause, it would then contain two main verbs. However, according to the Stratal Uniqueness Law, no simple clause can contain more than one verb. This law states that no simple clause can contain more than one distinct R-arc.¹⁴ Consequently, the construction in question cannot but be assumed to be biclausal. Otherwise, the occurrence of two VP-adverbs would remain problematic if not unaccountable.

On the other hand, the negation word *an* 'not' in Korean appears only before the main verb which it negates and no auxiliary verb can be negated. Accordingly, (56) clearly shows that *ha* is a main verb since *ha* can be directly negated by *an*:

- (56) a. Chelswu-ka yehayng-ul an ha-yess-ta.
 -N travel-A not do-Past
 'Chelswu did not travel.'

¹⁴ According to Davies and Rosen (1988), R is foundational relations such as predicate, subject, direct object and indirect object.

- b. *Mwulka-ka halak-ul an ha-yess-ta.*
 price-N drop-A not do-Past
 'Prices did not go down.'

The previous section has argued that the VNs appearing in the construction in question are embedded verbs. Yet to be accounted for is whether VNs can also be directly negated by *an*. If both *ha* and VNs are really main verbs, both should be able to be negated simultaneously. However, it does not seem to be the case:

- (57) a. **Chelswu-ka an yehayng-ul an ha-yess-ta.*
 -N not travel-A not do-Past
 'It is not the case that Chelswu did not travel.'
 b. **Mwulka-ka an halak-ul an ha-yess-ta*
 price-N not drop-A not do-Past
 'It is not the case that prices did not go down.'

In (57), both VNs and the verb *ha* are negated, but the sentences are unacceptable. However, remember that unergative *ha-ta* verbs require the Like Subject Condition. Hence, the unacceptability in (57a) might be ascribed to the fact that semantic conflict arises if both VN and *ha* are negated. The unacceptability in (57a) might be regarded as a matter of semantics, not a matter of syntax. However, the unacceptability in (57b) may be attributed to another reason. The verb *ha* in (57b) takes an unspecified subject. For this reason, the verb *ha* in (57b) does not require the Like Subject Condition as the verb *ha* in (57a) does. However, note that the complex of VN and *ha* is perceived as a single verb at the level of perception. Subsequently, the double negation of the sequence of VN and the verb *ha* also presents a semantic conflict. Hence, (57b) is ungrammatical.

Here, the level of perception refers to some level after Syntax (presumably in the phonological component in the sense of Shibatani & Kageyama (1988) or PF-component in the sense of Chomsky (1981)). Given the level of perception, the complexes of VN and the verb *ha* might be perceived as a verb stem unless other elements such as case markers, adverbs or negation words intervene, though they are

syntactically the sequences of an embedded verb and matrix verb. Hence, when the more intervening elements are omitted, the more acceptable sentences become, as can be observed below:¹⁵

- (58) a. ??Mwulka-ka an halak-ul ha-yess-ta
 price-N not drop-A do-Past
 b. ?Mwulka-ka an halak-ha-yess-ta
 price-N not drop-do-Past
 'Prices did not go down.'

However, (58b) does not sound extremely natural as expected. The reason why the sentence (58b) sounds slightly odd may be attributed to the fact that the negation word *an* is compatible with native Korean verbs only. If this is the case, it can be consequently said that both VN and *ha* can be simultaneously negated but semantically and/or morphologically prohibited. Hence, the claim that VNs and *ha* are both main verbs remains intact.

Before closing this section, one thing needs to be addressed. One of the assumptions underlying the light verb analyses is that *ha* is semantically empty. However, J. Kim (1999:28-34) argues that *ha* is not semantically empty since a selectional restriction holds between *ha* and its preceding element, as shown below:

- (59) a. !Chelswu-ka chayksang-ul ha-n-ta
 -N desk-A do-Pres
 'Chelswu does the desk.'
 b. !Swuni-ka haksayng-ul ha-n-ta.
 -N student-A do-Pres
 'Swuni does the student.'

Since selectional restrictions are parts of the verb's meaning (Jackendoff (1990:53)), they usually hold between verbs and their arguments. Accordingly, the fact that a selectional restriction holds between *ha* and

¹⁵ The complexes of VN and *ha* are generally perceived as a single verb at the level of perception. This follows from the fact that the verb *ha* does not denote a different action from the ones carried by VNs.

its preceding element can be a piece of evidence suggesting that *ha* has a semantic content.

J. Kim (1999) further argues that the fact that VNs take their own arguments should not be interpreted as the sense that *ha* cannot have its own arguments. Claiming that the semantic content of *ha* is 'abstract movement (i.e., doing something)', J. Kim (1999:42-3) contends that the lexical entry of *ha* must be (61) (cf. Yoon (1991), Lee (1991)):

(60) *ha*: (X, Y) (X = agent, Y = content)

What (60) claims is that *ha* takes an agent argument as its subject and some kind of event as its direct object. This claim is compatible with Burgio's generalization. As discussed, *ha* should have its own external argument if it assigns an accusative case. Otherwise, Burgio's generalization will be violated.

Thus, it can be concluded from the discussions in this section that there is no reason not to treat *ha* as a main verb.

6. Conclusion

This paper has argued that so-called VNs combine with the Korean native verb *ha* to form a biclausal structure in which the VNs and the verb *ha*, respectively, head the embedded clause and the matrix clause. This paper has first shown that the distinction between unergatives and unaccusatives is also needed with respect to the intransitive *ha-ta* verbs in Korean. Secondly, relying on the proposed biclausal structures, this paper has shown that the deletion of an accusative marker from the VNs is merely a reflection of the general tendency for direct objects to delete freely in Korean. Thirdly, this paper has argued that the IAEX is also valid with regard to intransitive *ha-ta* verbs in Korean by showing that the co-occurrence of unaccusative VNs with the passive verb *toy* does not disprove the IAEX but is an inevitable result of it which is brought about by the interaction of the FIL being applied to the embedded clause with the

passivization occurring at the matrix clause. On the other hand, this paper has shown that the analyses claiming that VNs are exclusively nouns and the verb *ha* is not a main verb (i.e., a heavy verb) are inadequate in many ways to account for the contrast between the unergative *ha-ta* verbs and the unaccusative *ha-ta* verbs in Korean.

Since Perlmutter (1978) has proposed the Unaccusative Hypothesis, syntactic evidence in many languages has shown that the unergative-unaccusative distinction is a necessary concept in linguistic analysis. For instance, Rosen (1984) has shown that, in Italian, transitive clauses and unergative clauses select auxiliary *avere* 'have' whereas unaccusative clauses and passive clauses take *essere* 'be'. Accordingly, the auxiliary selection in Italian can serve as a diagnostic tool to distinguish whether a certain intransitive clause is initially unergative or unaccusative. This paper suggests that the *ha-toy* selection can be a diagnostic tool to distinguish unaccusative verbs from unergative verbs as far as the *ha-ta* verbs in Korean along with Y. Kim's (1990) diagnostics.

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