

Light verb ellipsis constructions in Korean

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Drawing on the fact that the light verb *ha-* ‘do’ in Korean may or may not be elided in negative sentences, I offer a syntactic analysis for the light verb ellipsis in which the various types of light verbs belong to distinct heads, such as *v*, Appl, and Voice. Hierarchically, they occupy different syntactic positions. Thus, the light verb ellipsis ascribes itself to a syntactic hierarchy. The ellipsis behavior of various types of the light verb distinguishes them in a way that implicates structure, not other factors, such as semantics. The syntactic analysis put forth here constitutes substantive evidence supporting the configurational theory of argument structures in which different theta roles can be mapped into various syntactic positions.

Keywords: light verb ellipsis, agent, experiencer, Applicative, Voice, Korean

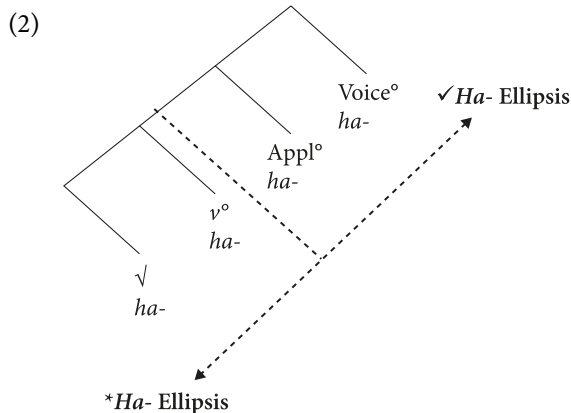
1. Introduction

As a starting point of discussion, let us consider the following examples in (1) below. The light verb *ha-* ‘do’ in Korean may or may not be elided in a negative sentence, leaving behind a root in small capitals.

- (1) a. *Nam il-ey KANSEP(ha-ci) ma-la.*
others business-at interfere.do-ci NEG-IMP
‘Don’t interfere with other people’s business.’
b. *Nay mal-ey SEPSEP*(ha-ci) {mal-/anh}-ass-umyen...*
my word-at disappoint.do-ci NEG-PST-if
‘(I wish) you would not be disappointed in me.’
c. *Nemwu Sulphe(ha-ci) ma-la.*
too sad.do-ci NEG-IMP
‘Don’t show too much sorrow.’

Drawing on such an ellipsis pattern for *ha-*, I offer a purely syntactic analysis of the *ha-* ellipsis in which the light verb is not treated the same by the syntax. The

light verb belongs to distinct verbal heads. Specifically, *ha-* is an exponent of a range of verbal heads, such as *v*, Appl, and Voice, as depicted below.



Under this view, the pattern of *ha-* ellipsis attributes itself to categorically different types of *ha-* and their corresponding syntactic structure. Appl and Voice, the two outermost verbal heads, allow the ellipsis, whereas the innermost head *v* and the root resist it. I argue that the behavior of various types of the light *ha-* with respect to the ellipsis distinguishes them in a manner that implicates structure, not other factors. Hence, the *ha-* ellipsis is subject to a syntactic hierarchy.¹

This article is organized as follows. § 2 briefly outlines the general background of the light verb constructions, DISTRIBUTED MORPHOLOGY, and argument-introducing heads. § 3 presents a basic observation that the light verb *ha-* elides in negative sentences. § 4 then provides a syntactic analysis of *ha-* ellipsis. Given that the light verb under consideration is a functional morpheme rather than a root (see Embick 2015), the *ha-* ellipsis is sensitive to syntactic structure. Lastly,

1. The light verb *ha-* can be elided in various contexts, other than negative sentences/imperatives, as shown in (i) below.

- (i) a. *John, Mary-wa hapseok(ha-ta).*
 John, Mary-with table-sharing(ha-C)
 'John and Mary shared a table.'
- b. *John-i sayngyak-ul yeonkwu(ha-nun) cwung-ita.*
 John-NOM ellipsis-ACC research(ha-C) middle-be.C
 'John is in the middle of researching ellipsis.'

It seems to be common that the verb under discussion undergoes deletion/ellipsis in newspaper headlines, such as (i.a) and in the so-called "lexical progressives," such as (i.b). Notice that the sentences given in (i) are not negative or imperative. Hence, the *ha-* ellipsis is not restricted to negative imperatives, as a reviewer wonders. The *ha-* ellipsis context seems to be heterogenous. I leave this for future research.

§ 5 concludes the article, by stressing that the *ha*-ellipsis straightforwardly follows from the configurational theory of argument structure in which different arguments occupy various syntactic positions (Baker 1988, among many others; Hale & Keyser 1993). Furthermore, the present configurational analysis is compared with a non-configurational, “single head” analysis (e.g. Folli & Harley 2005, 2007; Kallulli 2006, 2007).

2. Background

2.1 Light verb constructions

Grimshaw & Mester (1988) offer an *Argument Transfer* analysis of the light verb constructions in Japanese, as shown in (3a–b). I add their Korean counterparts in (3c–d).

- (3) a. *John-wa Bill-to AISEKI-o shita* (Japanese)
 John-TOP Bill-with table-sharing-ACC *suru*-PST
 ‘John shared a table with Bill.’
- b. *John-wa Bill-to AISEKI shita.*
 John-TOP Bill-with table-sharing *suru*-PST
 (Grimshaw & Mester: Example (2))
- c. *John-un Bill-kwa HAPSEK-ul ha-yssta.* (Korean)
 John-TOP Bill-with table-sharing-ACC do-PST.C
 ‘John shared a table with Bill.’
- d. *John-un Bill-kwa HAPSEK ha-yssta.*
 John-TOP Bill-with table-sharing do-PST.C

The gist of the analysis at stake is that *suru* is thematically incomplete, and it carries tense morphology. The small-capitalized nouns in (3) are theta-assigners without bearing tense inflections. Thus, the arguments, *John* and *Bill*, are theta-marked by the noun ‘table-sharing’ rather than by the light verb *suru*. But since theta-marking must be local, it is impossible for the noun to assign theta-roles to its arguments outside of its projection NP, being the local domain for theta-marking. Thus, the transfer of theta-roles takes place from the noun to *suru*, whereby the light verb acquires a theta-marking capacity (see Grimshaw & Mester 1988 for details). I assume the same Transfer mechanism for the Korea light verb *ha*- in (3c–d). Note that, for present purposes, the light *ha*-/*suru* assigns no theta-role.

2.2 DISTRIBUTED MORPHOLOGY

DISTRIBUTED MORPHOLOGY (DM) distinguishes itself from other morphological theories, such as Lexicalist Morphology. Among the core properties of DM is that there is a single generative component responsible for both words and phrases (Halle & Marantz 1993; Marantz 1997, among many others). From this point of view, parts of speech or categories (in the traditional sense) have no theoretical import. Rather, they correspond to category-determining heads (categorizers), such as *v*, *n*, and *a*. As shown in the categorization assumption in (4), the categorizers can combine with the category-neutral roots that are categorized as verbs, nouns, and adjectives.

- (4) Categorization assumption: Roots cannot appear without being categorized;
 Roots are categorized by combining with category-defining functional heads.
 (Embick & Marantz 2008:6)

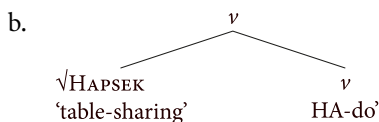
By the categorization assumption, roots never surface on their own. A “word” consists of a root and a categorizer. In Korean, for example, the category-neutral root $\sqrt{\text{CIN}}$ may merge with a verbalizer or nominalizer, thereby it becomes a verb, ‘wear (shoes),’ or a noun, ‘shoe,’ as illustrated below.

- (5) a.
$$\begin{array}{c} \nu\text{P} \\ \swarrow \quad \searrow \\ \nu \quad \quad \sqrt{\text{CIN}} \end{array}$$
 Spelled out as: *cin-* ‘wear (shoes)’
- b.
$$\begin{array}{c} n\text{P} \\ \swarrow \quad \searrow \\ n \quad \quad \sqrt{\text{CIN}} \end{array}$$
 Spelled out as: *cin* ‘shoe’

Since they are acategorial, roots cannot appear “bare.” They must always be combined with a categorizer. In addition, categorizers (terminal nodes, in general) may be empty with no phonetic matrix.

With this in mind, let us now turn our attention to the question of how the light verbs in (3) are structurally represented under the framework of DM. There are two possibilities for their structure, as shown below.

- (6) a.
$$\begin{array}{c} \nu \\ \swarrow \quad \searrow \\ \sqrt{\text{HAPSEK-HA-}} \quad \nu \\ \text{‘table-sharing-do’} \quad \emptyset \end{array}$$



The light verb is part of the root in (6a), but not in (6b). Rather, the *ha-* in (6b) severs itself from the verb, leaving the (Sino-Korean) root alone under the terminal root node. I assume that (6b) is correct for the light verb. On this view, the light *ha-* is a functional morpheme rather than (part of) a root – in (6b), it is a verbalizer. In what follows, I argue that *ha-* belongs to a range of different functional morphemes – precisely, *v*, Appl, and Voice, as shown in (2) above.

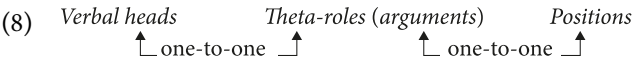
2.3 Argument-introducing heads and theta-roles

Addressing the question of why arguments (or thematic roles) are so restricted in the way that they are, Hale & Keyser (1993) argue that the thematic roles are “derivative” of syntactic relations; they are finite in number. That is to say, syntactic positions for arguments are limited, hence, impoverishing inventory of thematic roles. Baker (1988) proposes the Uniformity of Theta Assignment Hypothesis, which states that arguments with the same theta-role occur in the same structural position.

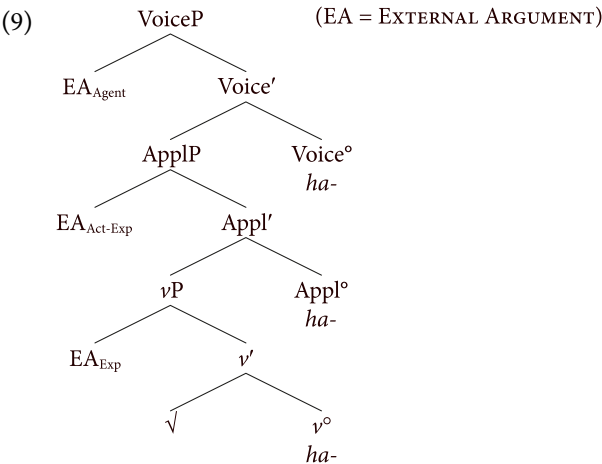
- (7) Uniformity of Theta Assignment Hypothesis (UTAH) (Baker 1988: 46)
 Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.

It is significant to notice that Baker’s (1988) UTAH entails that arguments with different theta-roles occupy different structural positions. Under the UTAH, an agent argument occupies a position different from the one in which an experiencer argument appears. In the same vein, Pytkänen (2008) offers a syntactic analysis of prolific heads in which elements introducing “non-core” arguments into argument structures have to be syntactic heads. As such, a range of argument types, such as agents, causers, and benefactives, are introduced by distinct functional categories, such as Voice and (high) Appl.

There are a range of argument-introducing syntactic heads, each of which is responsible for its own theta-role. Arguments with different theta-roles occur in different syntactic positions. Thus, there is a one-to-one relationship between argument-introducing syntactic heads and their theta-roles (arguments). Given that theta-role licensing is strictly local, there is another one-to-one relationship between theta-roles and their syntactic positions, as shown below.



Taking this *configurational theory of argument structures*, I argue that a range of interpretations of EXTERNAL ARGUMENTS of the light verb *ha-* attribute to distinct syntactic heads that introduce those arguments. Thus, the different types of *ha-* have different theta-roles and syntactic positions, as illustrated below.



I argue that the light *ha-* is a spell-out of *v*, *Appl*, or *Voice*, and that those heads license their own theta-roles: *v* for experiencers and *Voice* for agents. As for *Appl*, I propose a novel type of argument, ACTIONAL EXPERIENCER, licensed by that head (see §4.3 for detail).

One clarification in terminology is in order. I use the term EXTERNAL ARGUMENT to roughly correspond to Pytkänen’s (2008) “non-core” arguments (agents and causers), Krazter’s (1996) EXTERNAL ARGUMENT (agents for actions and “holders” for states, as in *own the dog*), and Dowty’s (1991: 572 (27)) Proto-Agent. Excluding patients or themes (in the sense of Dowty’s Proto-Patient), EXTERNAL ARGUMENT is a broad cover term for agents, actors, holders, and experiencers.

3. Light verb ellipsis

In Korean, there are two ways of negating a sentence: short- and long-form negation, as illustrated below. In (10b), short-form negation adds the negator *an* ‘not’ immediately before the verb to be negated. In long-form negation (10c), the verb is suffixed with the particle *-ci* and followed by the light verb *ha-*.

- (10) a. *Celin-i cip-e kassta.*
 Celin-NOM home-at went
 'Celin went home.'
- b. *Celin-i cip-e an kassta.* (Short-form negation)
 Celin-NOM home-at not went
 'Celin did not go home.'
- c. *Celin-i cip-e ka-ci anh-ass-ta.* (Long-form negation)
 Celin-NOM home-at go-ci not.do-PST-C

However, negative imperatives do not make use of such usual short- or long-form negation, as exemplified below.

- (11) a. **An kkomccakhay-la.* (Short-form negation)
 NEG move-IMP
 'Don't move.'
- b. **Kethmosup-ulo an phantanhay-la.*
 appearance-by NEG judge-IMP
 'Don't judge from appearances.'
- c. **Kkomccakha-ci an ha-la.* (Long-form negation)
 move-ci NEG do-IMP
- d. **Kethmosup-ulo phantanha-ci an ha-la.*
 appearance-by judge-ci NEG do-IMP

Instead, the negative imperatives employ a special form of negation, as shown in (12) below. In place of the negator and *ha-*, a different form is used: *mal-* 'lit., stop, cease.' Han & Lee (2007) propose that this *mal-* in the negative imperative is an exponent of the long-form negation sequence, *an ha-*, in the context of deontic modality (see Han & Lee 2007 for detail).

- (12) a. *Kkomccakha-ci ma-la.*²
 move-ci NEG-IMP
 'Don't move.'
- b. *Kethmosup-ulo phantanha-ci ma-la.*
 appearance-by judge-ci NEG-IMP
 'Don't judge from appearances.'
- c. *Nam il-ey kansepha-ci ma-la.*
 others business-at interfere-ci NEG-IMP
 'Don't interfere with other people's business.'

2. The coda /l/ of *mal-* is deleted before /l/, a phonologically-conditioned change.

In the negative imperatives containing *ha-*, the light verb can undergo a (stylistically optional) ellipsis, leaving behind the bold-faced root, as shown in (13).³ I refer to this ellipsis of the light *ha-* as light verb ellipsis (LiVE), hereafter.

- (13) a. *Kkomccak-Ø ma-la.* (cf. (12a))
 move-Ø NEG-IMP
 'Don't move.'
- b. *Kethmosup-ulo phantan-Ø ma-la.* (cf. (12b))
 appearance-by judge-Ø NEG-IMP
 'Don't judge from appearances.'
- c. *Nam il-ey kansep-Ø ma-la.* (cf. (12c))
 others business-at interfere-Ø NEG-IMP
 'Don't interfere with other people's business.'

To the best of my knowledge, Lee (1979: 17–18) is the first to observe LiVE in negative contexts. As the name implies, LiVE is illicit with content verbs containing no light *ha-*. This is exemplified below.

- (14) a. *Wuski*(-ci) com ma-la.*
 laugh-*ci* a.little NEG-IMP
 'Don't be kidding.'
- b. *Kaeul-eyn tteona*(-ci) mal-ayo.*
 fall-in.TOP leave-*ci* NEG-IMP.HON
 'In fall, don't leave.'
- c. *Mwul-ul ephcilu*(-ci) ma-la.*
 Water-ACC spill-*ci* NEG-IMP
 'Don't spill the water.'

The impossibility of LiVE in (14) shows that without the light *ha-*, it is impossible for the *-ci* particle alone to undergo LiVE.

Based on the fact that some types of *ha-* allow LiVE, whereas others resist it, I offer a syntactic analysis of LiVE in which the light verb is not (part of) a root but a functional morpheme. In addition, the different types of *ha-* belong to distinct verbal heads which introduce various EXTERNAL ARGUMENTS, such as agents, experiencers, and ACTIONAL EXPERIENCERS. This provides support for the configurational theory of argument structure which holds that distinct arguments (or thematic roles) are syntactically different in positioning (Baker 1988; Hale & Keyser 1993, among others).

3. Along with the light verb, *-ci* is elided together. For present purposes, it suffices to say that the particle functions as "morphological closure" in the sense of Kang (1988): it morphologically closes off the bound stem.

4. Different types of light verb *ha-* and distinct verbal heads

4.1 Root *ha-*

As a starting point, let us consider the following examples.

- (15) a. *Minho-ka {tampay/meli/pap}-ul ha-nta.*
 Minho-NOM cigarette/hair/rice-ACC do-PRS.C
 ‘Minho {smokes a cigarette/fixes hair/cooks rice}.’
 b. **Minho-ka {tampay/meli/pap}-ul.*
 Minho-NOM cigarette/hair/rice-ACC
 ‘Minho {cigarette/hair/rice}.’

This type of *ha-* is semantically “heavy” or a content verb as it has its own lexical meaning. This is verified by the fact that without the verb, the sentence in (15b) becomes completely uninterpretable: The uninterpretability of (15b) is accounted for by the fact that two referential entities (the subject and object) are simply juxtaposed, lacking a theta-assigner. Another piece of evidence in favor of the “heaviness” of *ha-* in (15a) emerges from the fact that in (16), the verb under consideration can be replaced with semantically corresponding lexical verbs, such as ‘smoke,’ ‘fix,’ or ‘cook,’ depending on the object co-occurring with it.

- (16) a. *tampay-lul {ha-/phiwu-}*
 cigarette-ACC do/smoke
 ‘to smoke a cigarette’
 b. *meli-lul {ha-/manci-}*
 hair-ACC do/touch
 ‘to fix hair’
 c. *pap-ul {ha-/cis-}*
 rice-ACC do/make
 ‘to cook rice’

Given that the *ha-* in (15) is a regular content verb, it is reasonable to suppose that it is a root $\sqrt{\text{P}}$, as illustrated below.

- (17)
-
- ```

 graph TD
 P["√P"] --- C["'cigarette/hair/rice'"]
 P --- HA["√HA-"]

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Bearing this in mind, let us now observe that Root *ha-* fails to undergo LiVE, as shown below.

- (18) Tampay/pap/meli-lul \*(ha-ci) ma-la.  
cigarette/rice/hair-ACC do-ci NEG-IMP  
'Don't smoke/cook rice/fix hair.'

The LiVE of Root *ha-* can be ruled out in the same way that (15b) is ruled out. Just as (15b) is uninterpretable due to the absence of a content verb that bears all theta-roles for the arguments in the sentence, (18) also becomes uninterpretable if the heavy *ha-* is elided. Note that this type of *ha-* is a root, and that it resists LiVE.

## 4.2 Agentive and Stative *ha-*

Let us begin with Koh's (1996) analysis of the light verb *ha-*. He divides the verb into two subtypes: "verb" *ha-* and "adjective" *ha-*. The former corresponds to agentive verbs, whereas the latter to non-agentive stative verbs. Agentive *ha-* verbs in (19a) take an agent subject, as given in (19b–d).

- (19) Agentive *ha-*
- kansepha-* 'interfere', *cwucangha-* 'argue', *phantanha-* 'judge', ...
  - Chelswu-nun ilpwule ku il-ey kansephayssta.*  
Chelswu-TOP on.purpose that business-at interfere.did  
'Chelswu interfered with that on purpose.'
  - Nay-ka Chelswu-eykey ceytaylo cwucangha-tolok seltukhayssta*  
I-NOM Chelswu-DAT properly argue.do-c persuaded  
'I persuaded Chelswu to argue it properly.'
  - Chelswu-nun cincwunghakey phantanha-lyeko nolyekhayssta.*  
Chelswu-TOP carefully judge.do-c tried  
'Chelswu tried to judge it carefully.'

In (19b), *kansepha-* is an agentive verb since it allows the agent-oriented adverbial modification. Likewise, given that only agentive verbs may be embedded under verbs like 'persuade' and appear as the complement of control verbs, such as 'try' (see Kim 1990), the grammaticality of (19c–d) tells us that *cwucangha-* and *phantanha-* are agentive verbs. Accordingly, as is usually assumed, those tests diagnose the presence of a verbal head introducing an agentive EXTERNAL ARGUMENT: hence, Voice.

In contrast, Stative *ha-* in (20a) takes an experiencer, as shown below.

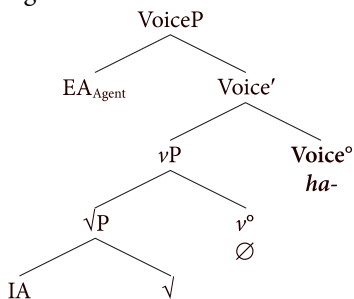
- (20) Stative *ha-*
- pwulanha-* 'uneasy', *cilwuha-* 'boring', *changphiha-* 'ashamed', ...
  - Chelswu-nun (\*ilpwule) sihem kyelkwa-ka changphihayssta.*  
Chelswu-TOP on.purpose exam result-NOM ashamed.did  
'Chelswu was ashamed of his exam result (\*on purpose).'

- c. \**Na-nun Chelswu-eykey nala-uy milay-lul pwulanha-tolok*  
 I-TOP Chelswu-DAT nation-GEN future-ACC uneasy.do-C  
*seltukhayssta.*  
 persuaded  
 'I persuaded Chelswu to be uneasy about the country.'
- \**Chelswu-nun cwuep-i an cilwuha-lyeko nolyekhayssta.*  
 Chelswu-TOP class-NOM not boring.do-C tried  
 'Chelswu tried not to be bored with the class.'

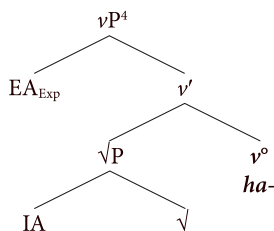
*Chelswu* in (20b–d) is a typical experiencer. This is evidenced by the fact that the agent-oriented adverbial modification is impossible with *changphiha-* in (20b). In addition, it is impossible for *pwulanha-* in (20c) and *cilwuha-* in (20d) to co-occur with 'persuade' and 'try', respectively, since those verbs are only compatible with agentive verbs taking full-fledged agents (Kim 1990). This leads to the conclusion that Stative *ha-* lacks an agent argument-introducing Voice head. Note that Agentive *ha-* takes an agent, whereas Stative *ha-* an experiencer.

Based on the discussion so far, let us suppose that both Agentive and Stative *ha-* have the structures given in (21). In (21a), Agentive *ha-* is a spell-out of Voice which introduces a full-fledged agent argument (Kratzer 1996; Marantz 1997). In (21b), Stative *ha-* lacking Voice is an exponent of  $\nu$ , with the assumption that experiencers appear in Spec $\nu$ P (see Arad 1998; Alexiadou & Iordăchioaia 2014).

(21) a. Agentive *ha-*



b. Stative *ha-*



(EA = EXTERNAL ARGUMENT, IA = INTERNAL ARGUMENT)

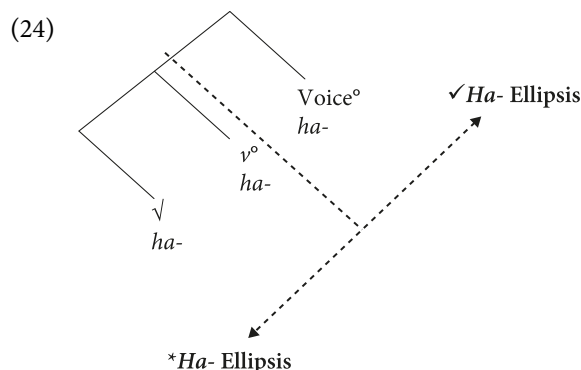
With this in mind, let us now see whether Agentive and Stative *ha-* are compatible with LiVE. Agentive *ha-* can undergo LiVE, as shown below.

- (22) a. *Ceypal nam il-ey kansep(ha-ci) ma-la.*  
 please others business-at interfere.do-ci NEG-IMP  
 ‘Please don’t interfere with other people’s business.’  
 b. *Cikwu-ka phyengphyenghata-ko cwucang(ha-ci) ma-la.*  
 earth-NOM flat-C argue.do-ci NEG-IMP  
 ‘Don’t argue that the earth is flat.’  
 c. *Hyencil-ul waykokhayse phantan(ha-ci) ma-la.*  
 reality-ACC distortedly judge.do-ci NEG-IMP  
 ‘Don’t judge the reality distortedly.’

In contrast, LiVE is illicit with Stative *ha-*, as given below.

- (23) a. *Ni-ka nay mal-ey sepsep\*(ha-ci) {mal-/anh-}aya haltheynte.*  
 you-NOM my word-at dispoint.do-ci NEG-should wish  
 ‘I wish you would not be disappointed in me.’  
 b. *Nwukwueykeyto yenghwa-ka cilwu\*(ha-ci) {mal-/anh-}ass-umyen*  
 anybody.DAT film-NOM bore.do-ci NEG-PST-if  
*cohkeysse.*  
 wish  
 ‘I wish the film would not be boring to anybody.’

We have seen so far that Root *ha-* and Stative *ha-* resist LiVE, whereas Agentive *ha-* allows it. Note that structure-wise, the outermost verbal head Voice allows LiVE, whereas the two innermost  $\checkmark$  and  $\nu$  do not, as illustrated in (24) below.



4. The view that  $\nu$  has two functions of verbalizing (categorization) and argument-taking is not new (see also Cuervo 2003; Jung 2016). See § 4.6 for a relevant discussion. I thank an anonymous reviewer for bringing this point to my attention.

### 4.3 ACTIONAL EXPERIENTIAL *ha-*

The next type of light verb *ha-* to be investigated in this subsection differs from the two types examined in the previous subsection. Unlike Agentive or Stative *ha-* in (19a) and (20a), this type of *ha-* is combined with (native Korean) psychological stative verbs, as exemplified in (25a).

- (25) a. *sulpheha*-‘show sorrow’, *kippeha*-‘show gladness’,  
*mwuseweha*-‘show scare’, *oyloweha*-‘show loneliness’, ...<sup>5</sup>  
 b. *Chelswu-ka sewelho chamsa-lul nemwuna sulphehayssta*.  
*Chelswu-NOM Sewol.Ferry disaster-ACC too.much sad.did*  
 ‘Chelswu showed much sorrow about the Sewol Ferry disaster.’  
 c. *Salamtul-i tokcayca-lul cengmal mwusewehanta*.  
*people-NOM dictator-ACC really scare.do*  
 ‘People show real scare about the dictator.’

In what follows, I show that the subject arguments in (25b–c) differ from typical agents or experiencers. Based on this fact, I propose a novel type of theta-role for those arguments, which I call ACTIONAL EXPERIENCERS, as opposed to typical experiencers, and I refer to this type of *ha-* as ACTIONAL EXPERIENTIAL *ha-* (AE *ha-*). An ACTIONAL EXPERIENCER is defined here as a participant incapable of intentionality who undergoes psychological experience denoted by the verb. Given this definition, as summarized in Table 1, AE *ha-* differs from Agentive *ha-* in that it fails agentivity diagnostics, such as the *on purpose* and *try/persuade* tests. It further differs from Stative *ha-* in that it passes actionality diagnostics, such as the progressive and actional verbal ending tests. Thus, there is a three-way contrast.

Table 1.

|                     | Agentivity        |                     | Actionality    |                 |
|---------------------|-------------------|---------------------|----------------|-----------------|
|                     | <i>On purpose</i> | <i>Try/persuade</i> | Progressive    | Actional ending |
| Agentive <i>ha-</i> | ✓                 | ✓                   | ✓ <sup>6</sup> | ✓               |
| Stative <i>ha-</i>  | *                 | *                   | *              | *               |
| AE <i>ha-</i>       | *                 | *                   | ✓              | ✓               |

5. Since the psychological verb stem is a bound morpheme, the “linker” *-e* is employed to morphologically close it off in the sense of Kang (1988).

6. It is self-evident that Agentive *ha-* passes those two tests (progressive and actional verb ending); *cwucangha-ko issta* ‘be arguing’ and *cwucangha-nta* ‘argue-PRS’.

With this in mind, let us first consider the agentivity test. It is important to notice that although they are sentient, the subject arguments of AE *ha-* in (25b–c) are not agentive. This is confirmed by the fact that AE *ha-* is not compatible with the agent-oriented adverbial modification. Moreover, it cannot be embedded under the ‘persuade’ or ‘try’ verbs, which are only possible with agentive verbs (see Kim 1990), as shown below.

- (26) a. *Chelswu-ka (\*ilpwule) sewelho chamsa-lul sulphehayssta.*  
 Chelswu-NOM on.purpose Sewol.Ferry disaster-ACC sad.did  
 ‘Chelswu showed sorrow about the Sewol Ferry disaster (\*on purpose).’  
 b. *?Nay-ka Chelswu-eykey hapkyek-ul kippeha-tolok seltukhayssta.*  
 I-NOM Chelswu-DAT acceptance-ACC glad.do-C persuaded  
 ‘I persuaded Chelswu to show gladness about his acceptance.’  
 c. *\*Chelswu-nun tokcayca-lul mwuseweha-lyeko nolyekhayssta.*  
 Chelswu-TOP dictator-ACC scare.do-C tried  
 ‘Chelswu tried to show scare about the dictator.’

The ungrammaticality of (26a) indicates that *Chelswu* is not a full-fledged agent, because it is not the case that Chelswu intentionally does something in order to get a result denoted by the verb. Likewise, the ungrammaticality of (26b–c) confirms the same conclusion. Verbs, such as *kippeha-* and *mwuseweha-*, are not agentive. Thus, the EXTERNAL ARGUMENT, *Chelswu*, is an involuntary (psychological) experiencer.

Let us now turn to the actionality test. It is well known that, in Korean grammar, verbal particles, such as the progressive *-ko issta* and the actional ending *-nta*, can only follow actional, not stative, verbs. This actionality test is used to distinguish “verbs” (actions) from “adjectives” (states) in the language. In (27), the particles at stake are incompatible with Stative *ha-*. In contrast, they are compatible with AE *ha-*.

- (27) Stative *ha-*  
 a. *\*Chelswu-nun sihem kyelkwa-ka {changphiha-ko issta, changphiha-nta}.*  
 Chelswu-TOP exam result-NOM ashamed.do-PROG.C, ashamed.do-PRS.C  
 ‘Chelswu is (being) ashamed of his exam result.’  
 AE *ha-*  
 b. *Ce-A-ka sewelho chamsa-lul {sulpheha-ko issta, sulpheha-nta}.*  
 Ce-A-NOM Sewol.Ferry disaster-ACC sad.do-PROG.C, sad.do-PRS.C  
 ‘Ce-A {is showing, shows} sorrow about the Sewol Ferry disaster.’

This sharp contrast in (27) indicates that since the actional particle *-nta* is only licit with actional verbs, Stative *ha-* denotes a stative event, whereas AE *ha-* denotes an actional event. Likewise, given that the progressive is only compatible

with actions, but not with (psychological) states (see also Kim 1990:67), as in English (*\*John is liking/seeing Mary*), the contrast in grammaticality between Stative *ha-* and AE *ha-* suggests that the former is a typical (psychological) state verb, whereas the latter an action verb. Note that AE *ha-* is a non-agentive action verb.

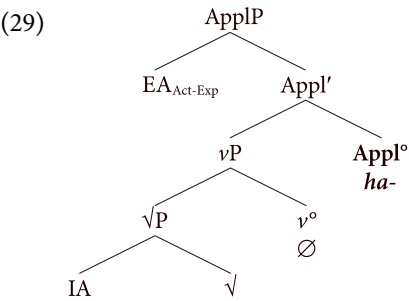
With this in mind, let us now consider EXTERNAL ARGUMENTS of AE *ha-*. The different behavior that these three types of *ha-* exhibit in (26) and (27) summarized in Table 1 suggests that their respective EXTERNAL ARGUMENTS should be distinct from each other. As seen above, Agentive *ha-* takes full-fledged agents and Stative *ha-* (typical) experiencers. In contrast, EXTERNAL ARGUMENTS of AE *ha-* are not full-fledged agents or typical experiencers. What are they then?

Choi (1973:218, 221) argues that AE *ha-* takes a stative verb as its input and turns it into an actional or dynamic verb. Therefore, semantics-wise, it adds to the resulting form “actionality” (*hayngtongseng*, translation mine). Kim (2007) also makes a similar claim: that the subject argument of AE *ha-* behaves like an “actor without volition.” He also provides a semantic feature-based analysis. While the typical agents bear [+volition] and [+action], the EXTERNAL ARGUMENTS of AE *ha-* have [–volition] and [+action] (see also Jeong 2010:315 for a similar proposal). In a nutshell, the EXTERNAL ARGUMENTS of AE *ha-* should be distinct from typical experiencers in that they denote actionality in semantic nature. This means that a three-way contrast emerges, as shown below.

- (28) a. typical agents: [+volition] [+action] ← Voice (Agentive *ha-*)  
 b. typical experiencers: [–volition] [–action] ← *v* (Stative *ha-*)  
 c. ACTIONAL EXPERIENCERS: [–volition] [+action] ← ??? (AE *ha-*)

From the [+volition, +action] feature of agents, it straightforwardly follows that Agentive *ha-* passes both agentivity and actionality tests, as shown in Table 1. Likewise, the [–volition, –action] feature of experiencers accounts for the fact that Stative *ha-* fails all the tests at stake. More importantly, the [–volition, +action] feature of AE *ha-* fits well with the fact that the verb passes the actionality test, but fails the agentivity test.

Given that agents are introduced by Voice and experiencers by *v*, an important theoretical question to ask at this juncture is: What kind of verbal head would introduce ACTIONAL EXPERIENCERS of AE *ha-*? An answer to this question comes from Kim (2011). She argues that there are two different argument-introducing heads in Korean, Voice and Appl. Voice, but not Appl, introduces a volitional agentive argument. In contrast, an argument in SpecApplP is not a full-fledged agent, unlike agents in VoiceP. Accordingly, agentivity is specific to Voice. Given this, let us suppose that Appl is exponed as AE *ha-* and that its Spec position is filled by ACTIONAL EXPERIENCERS, as illustrated below.



The novelty of the current work concerns fine-tuning differences between full-fledged agents, ACTIONAL EXPERIENCERS, and typical experiencers. These theta-roles are grouped under the cover term of EXTERNAL ARGUMENT. No previous studies distinguish agents from ACTIONAL EXPERIENCERS, on the one hand, and typical experiencers from ACTIONAL EXPERIENCERS, on the other. Note that, in (29), AE *ha-* is a non-agentive action verb and the theta-role for its subject is an ACTIONAL EXPERIENCER, as opposed to a typical experiencer.

With this in mind, let us now observe that AE *ha-* allows LiVE, as exemplified below.

- (30) a. *Silphayhayto sulphe(ha-ci) ma-la.*  
fail.if sad.do-ci NEG-IMP  
‘Don’t show sorrow if you fail.’  
b. *Nam-uy chingchan-ey nemwu kippe(ha-ci) ma-la.*  
others-GEN praise-at much glad.do-ci NEG-IMP  
‘Don’t show too much gladness about other people’s praise.’  
c. *Sacikhal ttay celtay mwusewe(ha-ci) ma-la.*  
job.quit time ever scare.do-ci NEG-IMP  
‘Don’t ever show scare when quitting the job.’

Note that AE *ha-* is an exponent of Appl and SpecApplP is filled by ACTIONAL EXPERIENCERS. It undergoes LiVE.

Table 2 summarizes the discussion so far. Hierarchy-wise, the two innermost Root and Stative *ha-*, √ and *v*, respectively, resist LiVE while the two outermost AE and Agentive *ha-*, Appl and Voice, respectively, allow it.

Table 2.

| Type | Root | Stative    | ACTIONAL EXPERIENTIAL | Agentive |
|------|------|------------|-----------------------|----------|
| Head | √    | <i>v</i> ° | Appl°                 | Voice°   |
| LiVE | *    | *          | ✓                     | ✓        |



#### 4.4 Stacking *ha-*

It is of interest to notice that it is possible to stack *ha-* of one type on top of another. Specifically, Stative *ha-* can stack onto AE *ha-*, as illustrated below.

- (31) a. *Chelswu-nun pwulhapkyek-i changphi

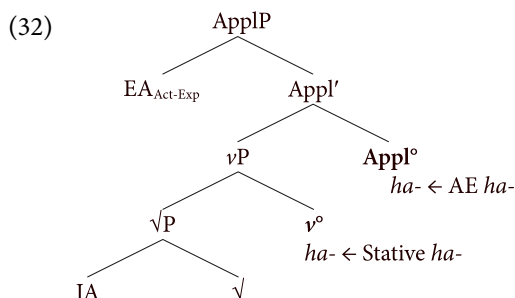
# hayssta.* ← Stative *ha-*  
 Chelswu-TOP failure-NOM ashamed.did  
 'Chelswu was ashamed of his failure.'
- b. *Chelswu-nun pwulhapkyek-ul changphi

# hayhayssta.* ← Stative *ha-* + AE *ha-*  
 Chelswu-TOP failure-ACC ashamed.do.did  
 'Chelswu showed shame about his failure.'
- c. *Mina-nun caki milay-ka pwulan

# hayssta.* ← Stative *ha-*  
 Mina-TOP self future-NOM uneasy.did  
 'Her future worried Mina.'
- d. *Mina-nun caki milay-lul pwulan

# hayhayssta.* ← Stative *ha-* + AE *ha-*  
 Mina-TOP self future-ACC uneasy.do.did  
 'Mina showed concern about her future.'

As illustrated in (32) below, stacking of *ha-* can be straightforwardly explained by the analysis put forth here in which different types of the light *ha-* are exponents of structurally distinct verbal heads.



Recall at this juncture that LiVE is licit with AE *ha-*, as observed in § 4.3, whereas it is illicit with Stative *ha-*, as shown in § 4.2. Thus, a prediction to make here is that the outer *ha-* can undergo LiVE, whereas the inner *ha-* cannot. This prediction has been borne out, as illustrated below.

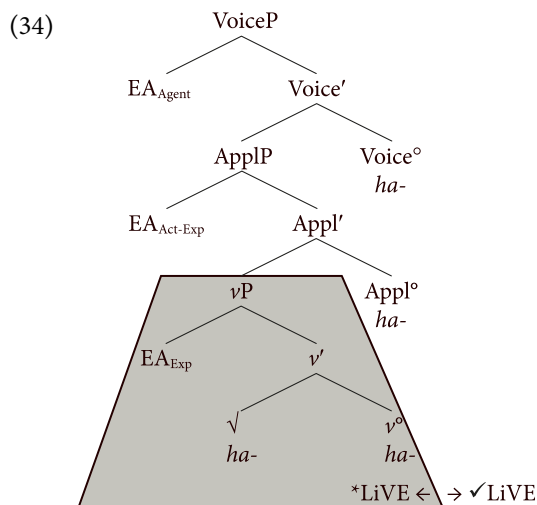
- (33) a. *Pwulhapkyek-ul nemwu changphi(ha-ci) ma-la.*  
 failure-ACC too ashamed.do.do-ci NEG-IMP  
 'Don't show too much shame about your failure.'
- b. *Pwulhapkyek-ul nemwu changphi\*(hayha-ci) ma-la.*

- c. *Milay-lul nemwu pwulanhay(ha-ci) ma-la.*  
future-ACC too uneasy.do.do-ci NEG-IMP  
'Don't show too much fear about your future.'
- d. *Milay-lul nemwu pwulan\*(hayha-ci) ma-la.*

Note that the stacking of the light verb and the (un)availability of LiVE are straightforwardly accounted for by the present analysis in which the LiVE behavior is ascribed to syntactic hierarchy. That is, it is only licit with the hierarchically outermost heads, Appl and Voice.

## 4.5 Discussion

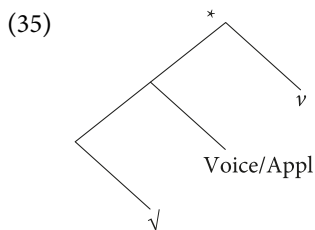
So far, we have seen that distinct verbal heads such as *v*, Appl, and Voice can be exponed as different types of the light verb *ha-*. They may or may not undergo LiVE in negative sentences, as shown in Table 2 in §4.3. LiVE is impossible with Root *ha-* and Stative *ha-* on *v*. Whereas it is possible with *ha-* on Appl and Voice. This fact straightforwardly follows from the claim that the light verb is not (part of) a root. Rather, it is a functional morpheme. Thus, the LiVE behavior of a light verb is ascribed to syntactic hierarchy, as illustrated in (34) below.



The hierarchically lower  $\sqrt{\phantom{x}}$  and *v* pattern differently from the higher heads, Appl and Voice. Note that the LiVE fact supports the view of a prolific inventory of syn-

tactic verbal heads, such as *v*, Appl, and Voice introducing their own EXTERNAL ARGUMENTS.<sup>7</sup>

Before closing this section, as one of the reviewers points out, it is worth addressing the question of what guarantees the hierarchical relation between those verbal heads depicted in (34). Evidence emerges, both theoretically and empirically. As for empirical support, the stacking data observed in §4.4 straightforwardly follows from the view that *v* must appear hierarchically lower than Appl since Stative *ha-* on *v* is followed by ACTIONAL EXPERIENTIAL *ha-* on Appl, but not the other way around. From a theoretical point, moreover, based on the categorization assumption in (4) of §2, for a category-neutral root to acquire a category, nothing can intervene between the root and a categorizer. As a consequence, neither Appl nor Voice can appear in a position lower than the categorizer *v*. If so, roots will fail to be categorized. Given this, a hierarchical structure like the one in (35) would be impossible, because the root will fail to acquire a category.



Regarding the height of Voice and Appl, which one is higher than the other? For present purposes, it is sufficient to say that both of them are at least hierarchically higher than *v*, because they behave alike in terms of LiVE. Following Marantz (1993) and Pylkkänen (2008), I assume that Voice appears higher than Appl. Note that argument-introducing heads are hierarchically organized: *v* is hierarchically lower than Appl, which in turn appears lower than Voice, as shown in (34) above.

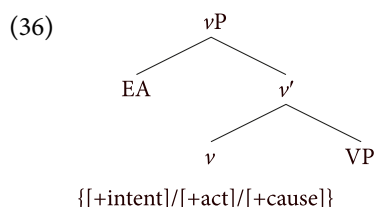
7. The present analysis of LiVE reaches a level of explanatory adequacy in that it answers a “what”-question about the ellipsis phenomenon: what are the properties of *ha-* ellipsis? However, there arises a “why”-question in a “beyond-explanatory” adequacy kind of sense: why is *ha-* ellipsis the way it is?

Given that phase heads host EXTERNAL ARGUMENTS in their specifier positions, Voice and Appl are phase heads (Chomsky 2001; McGinnis 2001; Harley 2013, 2017; and references therein). Suppose that *ha-* under a phase head undergoes ellipsis. Since Voice and Appl are phase heads, LiVE is licensed on those phase heads. However, a non-trivial problem arises. Under the present analysis, the *v* head is also an external argument-introducer: experiencers. But this head resists LiVE even though it is a phase head. I leave this for future research. Thanks to a reviewer for mentioning this point.

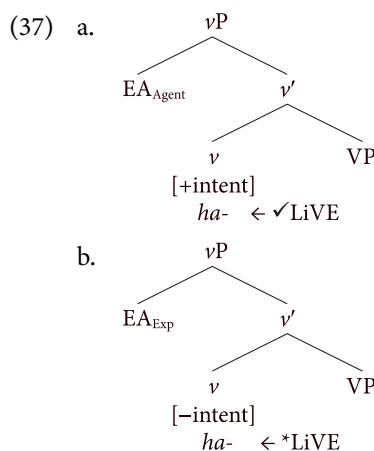
# 5. Conclusion: Theoretical implications

Thus far, I have argued that the (un)availability of LiVE is attributed to structural relations. It is due to the hierarchical difference between verbal heads spelled out as the light verb *ha-*. Given that each verbal head introduces its own EXTERNAL ARGUMENT within its own projection, this supports the configurational theory of argument structure, which identifies theta-roles with syntactic configurations in a one-to-one fashion (e.g. Baker 1988; Hale & Keyser 1993; Kratzer 1996).

The configurational analysis developed here is then compared to a non-configurational, single head analysis by others (e.g. Folli & Harley 2005, 2007; Kallulli 2006, 2007). Under this approach, there is one single type of *v* that consists of distinct feature bundles, such as [+act], [+cause], and [+intent] for various interpretations of EXTERNAL ARGUMENTS like agents, actors, and (unintentional) causers. Structure-wise, thus, the position that EXTERNAL ARGUMENTS occupy is one and the same, Spec*v*P. Accordingly, as illustrated below, the diverse flavors of *v* are not distinctive in terms of syntactic hierarchy.



Under the single head theory, Agentive and Stative *ha-* would have been assigned structures given in (37a–b), respectively. It is important to notice that there is no difference in the hierarchy between Agentive *ha-* in (37a) and Stative *ha-* in (37b).



This featural approach should attribute the LiVE behavior solely to feature matrices on  $v$  since they are not distinguished structurally or hierarchically. Since there is no implicational relationship between those feature bundles on  $v$  and LiVE, there seems to not be a non-ad-hoc way to offer a principled and structural explanation for the LiVE fact observed above. Specifically, it should be explained why Agentive *ha-* with [+intent] allows LiVE and Stative *ha-* with [-intent] resists it. An implication difficulty that the analysis under discussion faces is that there seems to be no plausible reason why LiVE is sensitive to this [intent] feature. Moreover, there is a more serious problem with the featural analysis under discussion. Recall that Agentive and AE *ha-* both allow LiVE. However, what do they have in common in terms of featural matrices? It is obvious that they do not form a natural class. In fact, they are diagonally opposite in terms of the [intent] feature. But they do not behave alike with respect to agentivity or intentionality. Hence, Agentive *ha-* has [+intent] while AE *ha-* has [-intent]. In a nutshell, the featural single head approach seems to be very unlikely to accommodate the systematic range of the LiVE pattern of the light verb *ha-*.<sup>8</sup>

Alternatively, I have offered a fully structural explanation for LiVE in Korean. Given that the light verb is a functional morpheme rather than (part of) a root, the LiVE fact is subject to the structural hierarchy of distinct verbal heads. Thus, the LiVE behavior is due to structural relations, rather than being a result of the interaction between the structure and the other components that the single head analysis would capitalize upon. This constitutes substantive evidence in favor of the configurational theory of argument structure in which semantically different EXTERNAL ARGUMENTS and their verbal heads are distinct and treated in a different way in syntax (see also Kim 2011; Schäfer 2012).

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8. A similar criticism is leveled at Wood and Marantz (2017) since they propose a single (external) argument introducer  $i^*$  to which a range of verbal heads such as  $v$ , Voice, and Appl reduce.

## Abbreviations

|      |                        |
|------|------------------------|
| ACC  | accusative             |
| AE   | ACTIONAL EXPERIENTIAL  |
| Appl | applicative            |
| C    | complementizer         |
| DAT  | dative                 |
| DM   | DISTRIBUTED MORPHOLOGY |
| EA   | EXTERNAL ARGUMENT      |
| GEN  | genitive               |
| HON  | honorific              |
| IMP  | imperative             |
| LiVE | light verb ellipsis    |
| NEG  | negation               |
| NOM  | nominative             |
| PROG | progressive            |
| PRS  | present                |
| PST  | past                   |
| TOP  | topic                  |

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