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LIGHT VERB JUST AS A LITTLE *v**

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Abstract: In this paper I argue that the light verb *ha* in Korean is an overt realization of the *v* head. *Ha/ci* alternation in Korean psych verbs makes a strong case for DO/BECOME meanings of *v*, whose semantic contribution is undetermined and contextualized in English. For Korean, the absence of the class of English type denominal verbs is morphological evidence for this view. This study of Korean light verb constructions clarifies Harley's (1995, 1999) suggestion that recognizing the complements of *v* ($\sqrt{P}$) as a predicative structure denoting events, things, or states helps to contextualize the interpretation of little *v* along with its determining environments. But the argument that no lexical content for *v* need be posited is challenged in Korean light verb *ha*.

1. Denotation of $\sqrt{P}$ and *v* head

The addition of *v*P on top of the basic VP shell in much recent work in Distributed Morphology (Hale & Keyser 1991, 1993) or Minimalist program of Chomsky (1996) has given an impression of a return to a Generative Semantics-style analysis of causative-inchoative alternations as illustrated below in (1):

(1) a. John opened the door / The door opened.
    b. John broke the window / The window broke.
    c. John grew the vegetables in the garden / The vegetables grew in the garden.

The nominalization of an alternating verb like "grow" does not allow an agentive interpretation, whereas that of a non-alternating verb like "destroy" does. This was noted by Chomsky (1970) and used as a counterexample against the Generative Semantics argument for the identity between the Deep structure and the semantic representation, as below:

(2) a. *John's growth of vegetables.
    b. The army's destruction of the city.

By arguing that the derived nominals, which are clearly nouns in surface structure, are not transformationally derived from verbs, but that they are inserted at deep structure as nouns, Chomsky (1970) proposes the Lexicalist Hypothesis for integrity of lexical items that transformations do not perform morphological derivation, but the latter belongs to the lexical component prior to syntactic underlying structure.

But Marantz (1997) and Harley & Noyer (1998) explain the difference by the different inputs in the verbal frame, whereby the genitive possessor is given an agentive/ non-agentive interpretation according to whether its input is either the simple V root selecting internal arguments, or the v head selecting an agent argument, respectively. The inputs here are roots that are assumed to belong to basic event classes (including state, change of state Achievements/ Activities/Accomplishments in the terms of Vendler 1967, and causation). √$desir$ class denoting 'externally caused change of state' is distinct from √$grow$ class denoting 'internally caused change of event'. The roots √$grow$, √$open$, or √$break$ themselves only refer to some kernel of meaning. We will get different types of predicates according to the structure in which the root is inserted. For example, √$grow$, inserted in a non-causative structure, yields the unaccusative $grow$, and when it is embedded under a causative structure, it yields the causative transitive $grow$.

The contribution in meaning that the v head makes seems to be CAUSE in the underlying representation of the causative version of the verb, "grow" in (1), as Harley (1999) illustrate in (3):

(3)
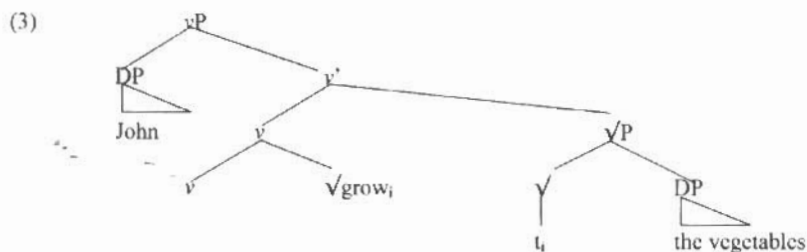
Harley (1995) argues that vP decides the introduction of event (not eventuality but dynamicity[1]) for these causative/inchoative verbs. For the inchoative version ('The vegetables grow'), vP headed by v meaning BECOME has as its complement √P[2], a predicative structure denoting a state, the end result of the change of state introduced by the v head. On the other hand, the causative version ('John grow the vegetables') will have vP headed by a CAUSE v, which replaces the BECOME v, rather than adding to it in a higher vP, and which selects an external argument in its specifier. The agent argument that is projected brings up to the change of state introduced by the v head, a causative interpretation rather than a spontaneous meaning.

Harley's (1999) claim that the BECOME meaning *v* is replaced in causative by the CAUSE meaning *v* distinguishes itself from the generative semantics and the generative lexicon style approach, where the BECOME meaning component is added on by the CAUSE meaning component (e.g. CAUSE to BECOME....). From the study of Japanese lexical causatives and inchoatives (Harley 1995), she argues that the causatives never demonstrate stacking morphology and that the CAUSE morphology is rather in complementary distribution with the BECOME morphology.

2. Psych-verbs in Korean

The case study which I will discuss here is that of Korean psych verbs relevant to the light verb *ha*. Psych verbs, verbs denoting psychological states, usually fall into two main groups: Subject Experiencer verbs (i.e. *fear*), which realize their experiencer participant as the subject and Object Experiencer verbs (i.e. *frighten*), which realize their Experiencer as the object. My discussion will be concerned only with Subject Experiencer verbs. Korean psych verbs exhibit their unusual behavior in that a psych root can form three possible verbs.

2.1. Psych verbs and Property adjectives

There are three classes of psych verbs that share the same root but differ only with respect to the presence / absence of light verb -*ha*-/ inchoative verb *ci*-. They constitute minimal pairs of predicates exhibiting different case marking as below:

(4) a. Na-nun/-eykey-(nun)   ku-euy moksori-ka coh-*a*-ss-ta.
         I-Top/Dat-(Top)   his   voice-Nom   be.likable-Past-Dec
         'I was fond of his voice/I liked his voice.'   (stative reading at a time)

   b. Na-nun/*y*-ka   ku-euy moksori-ka coh-*a*-**ci**-ess-ta.
         I-Top/Nom   his   voice-Nom   be.likable-BECOME-Past-Dec
         'I came to like his voice.' (non-stative reading)

   c. Na-nun/*y*-ka   ku-euy moksori-lul coh-*a*-**ha**-yess-ta.
         I-Top/Nom   his   voice-Acc   be.likable-LV-Past-Dec
         'I liked his voice.' (non-stative agentive reading)

As in the case of regular transitive verbs, (4c) has its Theme NP marked with accusative case, while (4a) and (4b) take nominative case for the Theme, and Dative case for Experiencer even though they take two arguments (Experiencer, Theme) just like regular transitives. I will refer to the former type (4c) as '*ha* form' psych verbs, and to latter one (4b) as '*ci* form' psych verbs, and, lastly, to the root type (4a) as 'bare form' psych verbs. [-stative] is characteristic of *ci* form (4b) and *ha* form (4c) of psych-verbs while [+stative] of bare form psych-verbs (4a), which is attested by Progressive formation universally known to be a test for stativity. The agentivity tests (Kim 1990:74-75) including Imperative, Propositive[3], Embedding under agentive control

verbs, and Embedding under coercive verbs, make *ha* form psych verbs distinct from *ci* form and bare form psych verbs.

Note that there often exists a possibility of confusing the [-agentive] psych verbs with (perceptible) property verbs (i.e. adjectives) due to their having the same surface forms, as in the following examples:

(5)   a.   ku-euy   moksori-ka   coh-*a*-ss-ta.
           his   voice-Nom   good-Past-Dec
           'His voice was good.' (stative reading at a time)

      b.   ku-euy   moksori-ka   coh-*a*-**ci**-ess-ta.
           his   voice-Nom   good-BECOME-Past-Dec
           'His voice became good.'   (non-stative reading)

The relationship between the psych verbs and perceptible property verbs can be captured with the same root as a shared piece of lexical material between them, and complex syntactic structures: when the root is combined with another verbal head "BE" predicate (V_{BE}) suggested in Harley (1995), it yields a "psych" meaning ('likable') from a property meaning ('good'). The head is always stative and its complement denotes a property (be at a place/mental state, or have a property) which is predicated on its external argument. The structural difference can be illustrated as below:

(6)

a.

```
          VP
         /  \
    DP/PP    V
     /  \    / \
 I /to Me vP   V
      / \      \
 Voice  t₁  √good₁  V_BE
```

b.

```
        VP
       /  \
     DP    V
    /  \   / \
 Voice₁   vP
         / \
       t₁  √good
```
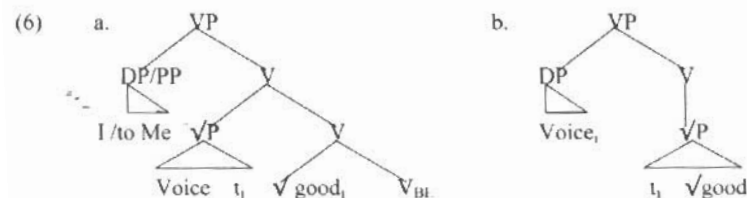
2.2. Three semantic interpretations for *v*: DO *v*, BECOME *v*, V_{BE}

Harley's (1999) proposition that *v*P structure is responsible for CAUSE/BECOME meaning distinctively can be applied in the analysis of the alternation of *ha/ci* forms on the bare form psych verbs shown in (4). Further examination of where the event comes from in the representation in *v*P structure, however, does not support the original assumption that √P denotes a state, and the *v* head denotes CAUSE, introducing eventiveness. When the incorporated root nominal denotes an event, the *v* head means DO, as in "Mary danced," and the eventiveness seems likely to be introduced by the nominal root itself. On the other hand, when the nominal denotes a thing, the *v* head seems to be interpreted as MAKE, as in "The mare foaled". So far, then, we have four different interpretations (BECOME, CAUSE, MAKE, DO) for *v*. Harley

(1999) argues that the semantic "primitive" associated with *v* is fully determinable in context and thus no lexical content for *v* need be posited. But Korean Morphology shows the other way of linking, as we will see in the next section. For *v* in Korean, the light verb *ha* corresponds to agentive head DO *v* or V_{BE} "BE predicate". Inchoative verbs *ci/toy* are associated with BECOME *v* while all the verbs can be involved in characterizing CAUSATIVE/ PASSIVE *v*, but an extended discussion will be beyond the scope of this paper. It suffices to grasp the double linking nature (DO *v* or V_{BE}) of ha for *v* head in *v*P structure.

Harley's (1995) additional concept of "BE" predicate (V_{BE}), as mentioned above, also allows us to make a distinction between bare form psych verbs and non-psych property verbs, which are perceived as objective rather than subjective. A "psych" root can thus form three possible verbs: it can combine with a DO *v* / a BECOME *v*, thus forming [+agentive] / [-agentive] non-stative verbs, or with another verbal head V_{BE} forming [+stative] psych verbs. The following are the syntactic structures corresponding to the three types of psych verbs in (4), respectively.

c.

ku-euy moksori t_i
'his voice'
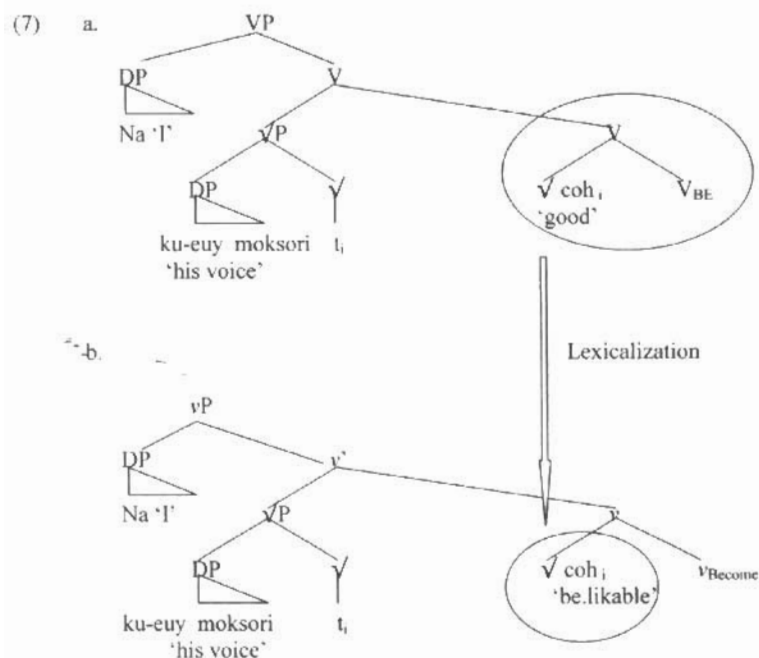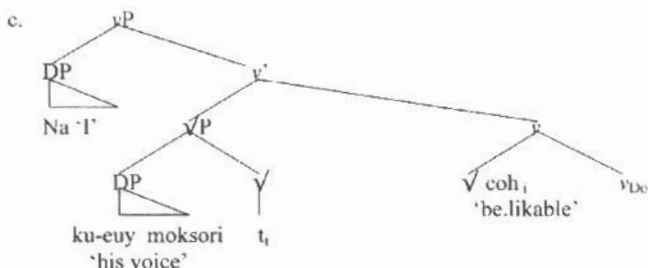
I argue that the composite entries of [$\sqrt{good}$ + V_{BE}] go through another lexicalization, which induces a slightly different meaning due to the "psych flavor" in a mental process of lexical decomposition like 'x [FEEL $\sqrt{good}$ AT y]'. The morphological spell-out here for V_{BE} is $\emptyset$, so that the bare form psych verb in (4a) and the property verb are homonymous. However, alternation of ha/ci in a class of Korean verbs whose roots originated from attributive adjectives shows the evidence for the morphological existence of V_{BE} as well as the BECOME v head.

(8)

Basic Form	Contracted Form
a. ire-ha-ta	ireh-ta
like.this-LV-Dec	be.like.this-Dec
'be (like) this'	'be (like) this'
b. cere-ha-ta	cereh-ta
like.that-LV-Dec	be.like.that-Dec
'be (like) that'	'be (like) that'
c. kure-ha-ta	kureh-ta
like.so-LV-Dec	be.like.so-Dec
'be so/such'	'be so/such'

(9)   *ha* form stative verbs and their Contracted forms
     A. Composite Predicates in demonstratives   B. Composite Predicates in color adjectives

a. **ire**-n + ha- ➔ ireh-	a. $\sqrt{\textbf{nora}}$-n + ha- ➔ norah-
like.this-Mod LV 'be (like) this'	yellow-Mod LV 'be yellow'
b. **cere**-n + ha- ➔ cereh-	b. $\sqrt{\textbf{phara}}$-n + ha- ➔ pharah-
like.that -Mod LV 'be (like) that'	blue-Mod LV 'be blue'
c. **kure**-n + ha- ➔ kureh-	c. $\sqrt{\textbf{haya}}$-n + ha- ➔ hayah-
like.so-Mod LV 'be so/such'	white-Mod LV 'be white'

(10) *ci* form non-stative verb formation from demontrative and color adjectives

a. **kure**-n + ci   → kur*a*e-ci   b. √**haya**-n + ci   →   hay*a*e-ci
    like.so Inchoative 'become to be so'   white inchoative 'become to be white'

(the other verbs in (9) follow the same pattern in forming the ci form non-statives)

As Jung (2001) noted the parallelism between the adjectives (or stative verbs) derived from demonstrative attributive and post-verbal (or long-form) negations in Korean, we can extend the parallelism to the alternation of attributive color adjectives and their derived ha/ci form verbs, as shown in (9) and (10). This observation provides additional evidence for lexical specifications for V_{BE}, BECOME v, and DO v that we have discussed so far.

3. Denominal Activity Verbs and Light Verb constructions

In English, there is a substantial class of denominal verbs which can be sub-classified according to the kinds of denotation of their nominal bases, including events, things to make, locations to put, things to be put, and activities to do with. They exhibit different properties in relation to the spatial dimension of the count/mass distinction and the temporal dimension of the bounded/unbounded distinction (as noted by Gruber 1967 and Talmy 1978, Tenny 1992, Dowty 1991 among others) as shown below:

(11) a. Mary **danced** *in an hour/for an hour.   (event-activity)
       b. The mare **foaled** in an hour/*for an hour.   (thing)
       c. Bill **shelv**ed the computer in an hour/*for an hour.   (location)
       d. John **greas**ed the chain in an hour/for an hour.   (locatum)
       e. Amy **brush**ed the horse in an hour/for an hour.   (activity)

It is a surprising fact that Korean doesn't have any class of denominal verbs whose nominal forms exhibit no special morphology but are homophonous with their bare verb.
That is why in English they are alleged to be formed by conversion ($\varnothing$-derivation) from noun to verb. As for Korean, it needs much morphological work to have verbs derived from the nominal base. What is most interesting is that the light verb *ha* is always involved in such morphological derivation.

3.1. Denominal Activity verbs with light verb *ha-*

An issue that I raise here is the nature of the parametric difference responsible for this phenomenon. My solution is that the way of compositing √root and the little v accounts for such a difference between English and Korean. Since we have already seen the English way even

though it is too superficial, let us consider the Korean way of how to deal with such concepts like event, things, location/locatum, activity, and even property into lexicalization of verbs.

(12) a. $\sqrt{\text{hammer}}_N$ → $\sqrt{P}[\text{hammer}]_N$ → hammer_V = $v + \sqrt{P}$ (English)
     thing   Activity   'strike/shape/flatten with a hammer'
     mangchi → mangchi-cil → mangchi-cil ha-(ta) = DO with hammer (Korean)
                              cf. *mangchi ha-(ta)

    b. $\sqrt{\text{whore}}_N$ → $\sqrt{P}[\text{whore}]_N$ → whore_V = $v + \sqrt{P}$ (English)
     thing   Activity   'have sex with whores/women'
     kyaecip → kyaecip-cil → kyaecip-cil ha-(ta) = DO with whores/women
     derog.'girl'   cf. * kyaecip ha-(ta)   (Korean)

Examples in (12) contrast the ways of composing $\sqrt{}$root and v head and of realizing the spell-out of v in English and Korean. Korean adds a suffix morpheme indicating 'activity' to the root before combining with v and has a morphological realization for v, whose default meaning is 'DO'. Without resorting to Morphology, English seems to choose the underdetermination approach for the meaning of v, letting the syntactic, semantic environment provide the cues necessary for the appropriate interpretation.

The following example in Korean light verbs shows a case of ambiguity in interpretation, based on whether the incorporated noun denotes an event (activity) or a thing: it indicates that even pragmatic information is needed to get a contextually correct meaning when the information given by the incorporated noun can be equivocal as in (13).

$\sqrt{P}$ dinner 'food of dinner' → cenyek ha-(ta) = Make $\sqrt{}$dinner (i.e.cook)

(13) a. $\sqrt{}$cenyek

lit.'evening' $\sqrt{P}$ dinner 'Activity of dinner' → cenyek ha-(ta) = DO $\sqrt{}$dinner (i.e. eat)

    b. cenyek-**bap** ha-*yss*-e?   = Make $\sqrt{}$dinner (i.e.cook)
       evening-food   LV-Past-Q
       'Did you make dinner?'

    c. cenyek-**siksa**   ha-*yss*-e?   = DO $\sqrt{}$dinner (i.e. eat)
       evening-activity of eating   LV-Past-Q
       'Did you eat dinner?'

This ambiguity in meaning of MAKE/DO also implies the syntactic status of *v* for *ha* in Korean light verb constructions. To some degree, DO itself has an underspecified meaning sensitive to context, which may manifest a kind of maximization of economic efficiency (i.e., use of basic core vocabulary or Procrastinate Principle). If there are some cues given as in (13b, c), such ambiguity disappears in interpreting the sentences.

3.2. Verbal Nouns (VN) and Light verb constructions

Korean/Japanese light verb constructions are composed of nominal elements so-called Verbal Nouns (VN) and light verbs ha-/suru. For some literature (i.e., Grimshaw & Mester 1988), the term '(Japanese) light verb construction' may be confined to such a certain pattern as 'VN-*o* suru', and be distinguished from incorporated forms of 'VN-suru' or Accusative case *o*-free forms of 'VN suru'. As recent studies (Urushibara 1993 and Takahashi 1992, 2000, Jung 2002 among them) argue against the distinction between heavy verb and light verb in Japanese, however, it will be no problem to use the term 'light verb construction' in general to refer to those constructions involving light verbs with an incomplete or skeletal argument structure and Verbal Nouns (VN) or Adjectival Noun (AN) or any θ-assigning category.

The class of lexical items called Verbal Nouns (VN) in Japanese as well as in Korean has a hybrid nature, as the term indicates: VNs have some verb-like properties and some noun-like properties. In efforts to solve the basic puzzle, some linguists like Iida (1987), Park (1989), Ahn (1991), and Takahashi (2000) argue that VNs in Japanese/Korean are verbs, contrary to the widely held standard assumption of regarding them as nouns: they are listed as verbs and head a VP unless they are incorporated into a noun before lexical insertion. Takahashi (2000) shows that the following properties are consistent with the VN=V view, while there are some facts unexplainable under the VN=N view:

● VNs have the meaning of verbs and can be used as the main predicates of clauses, which cannot be explained by the traditional view of VN=N.
● VNs have identical syntactic structures as the corresponding regular verb sentences.

But VNs are unlike regular verbs in that VNs cannot support verbal affixes (i.e., Tense, Aspect, Honorific marker) directly and that the dummy verb *su* 'do' must be inserted between the VN and the verbal affixes whenever a VN is used in the place of a regular verb. The verb-like item which follows the VN, *su*, will be inserted in the phonological component to support the tense-marker, similar in many respects to the dummy verb *do* in English. The reason why *su*-insertion is necessary in the simple VN-sentence is that the tense-marker is a bound morpheme and it needs to form a part of a prosodic word with another morpheme, but the VN refuses to be its prosodic word mate because it is a free morpheme. *Su*-insertion is the only way to satisfy both the selectional properties of the VN and the tense-marker, while in the simple regular verb sentence, the verb and the tense-marker can be parsed into a single prosodic word, making *su*-insertion unnecessary.

(14) a. simple regular verb sentence

      keisatu-wa   [sono ziken]-o   sirabe-ta.
      police-Top   [the incident]-Acc   investigate-Past
      'The police investigated the incident.'

  b. simple VN-sentence

      keisatu-wa   [sono ziken]-o   TYOOSA   *(si)-ta.
      police-Top   [the incident]-Acc   investigate   *(do)-Past
      'The police investigated the incident.'

Takahashi (2000) claims that the noun-like properties are a consequence of the fact that VNs are free morphemes required to form a prosodic word on their own whereas regular verbs are bound morphemes, which are unable to form a prosodic word on their own. The reason why VNs are accented like nouns rather than regular verbs (the location of the accent in the accented VNs is unpredictable similar to nouns but unlike regular verbs) can be explicable with the assumption that VNs undergo productive $\emptyset$-nominalization and form VN-nominals, whose surface form gives the impression that VNs can head NPs, supporting the view of VN=N with the fact that regular verbs in Japanese cannot form an NP without overt affixation. But Takahashi argues that it is possible for the VN to head a VP within the VN-nominal, a behavior explainable only under the VN=V view. This view assumes that the head of the VN-nominal is a null noun and that it can nominalize only VNs because it is invisible to phonology.

In the "Case-marking light-*su* construction[4]" such as below, the main predicate of the construction is an Agentive verb *su*, which assigns an Agent theta-role to the subject and an Accusative Case to the VN-nominal which precedes it.

(15)   keisatu-wa   [[sono ziken]-no   TYOOSA]-o   si-ta.
        police-Top   [[the incident]-Gen investigation]-Acc   do-Past
        'The police conducted an investigation of the incident.'

Regarding the VN-nominal as a modifier of *su*, with which it forms a semantic complex predicate, explains many curious properties of the construction: for instance, the "argument-raising phenomenon", which can be explained only if the VN-nominal contains a VP where the arguments of the VN can be assigned. This light verb construction may provide another piece of supporting evidence for the VN=V view.

As for the Korean light verb constructions, the alternation of DO/BECOME shown in the Korean psych verb constructions again reveals a similar pattern here, with the V_{BE} "BE predicate". The difference between the two constructions is that in the light verb construction, the roots (or bases) are Verbal Nouns (VN) instead of stative verbs (i.e. adjectives), the

morphological realizations of *v* are *ha-/toy-* instead of *ha-/ci-*, and the meaning of *toy-* is BECOME-PASSIVE.

(16) A. Korean Verbal Nouns (VN) and their Chinese gloss counterparts

VN	[kwan - ri]ɴ	[hwak-dae]ɴ	[phan-myeng]ɴ	[hyen-myeng]ɴ
CHIˢ	control-govern	enlarge-big	become-clear	wise-clear
	'supervision'	'spread'	'becoming clear'	'being wise'

B.a.

John-i	onul-uy	coep-ul	kwan-ri-(ul)	**ha**-yess-ta.
-Nom	today-Gen	operation-Acc	control-govern-(A)	DO-Past-Dec

'John supervised today's operation.'

a'.

onul-uy	coep-i	John-eyuyhay	kwan-ri-(ka)	**toy**-yess-ta.
today-Gen	operation-Nom	-by	control-govern-(N)	BECOME-Past-Dec

'Today's operation was supervised by John.'

b.

mikwuk-i	cencayng-ul	hwak-dae-(lul)	**ha**-yess-ta.
America-Nom	war-Acc	enlarge-big-(Acc)	DO-Past-Dec

'America spread the war.'

b'.

cencayng-i	mikwuk-eyuyhay	hwak-dae-(ka)	**toy**-yess-ta.
war-Nom	America-by	enlarge-big-(Acc)	BECOME-Past-Dec

'The war was enlarged by America.'

c.

??kyengchal-i	ku-uy	socay-lul	phan-myeng-(ul)	**ha**-ess-ta.
Police-Nom	he-Gen	location-Acc	become-clear-(A)	DO-Past-Dec

'His location became known.'

c'.

ku-uy	socay-ka	phan-myeng-(i)	**toy**-ess-ta.
he-Gen	location-Nom	become-clear-(Nom)	BECOME-Past-Dec

'His location became known.'

d.

John-i	hyen-myeng	**ha**/*toy-ta.
-Nom	wise-clear	BE/*BECOME-Dec

'John is wise.'

It is possible to analyze *toy-* as a lexical passive morpheme rather like *i/hi/li/ki*. But it is much more productive and constitutes consistent oppositions on [-stative] VN with *ha-*, the authentic light verb. It can apply to any [-stative] VN except a few Achievement (instantaneous event) VNs, which seems to be due only to a semantic restriction of BECOME, which seems intuitively to be [-instantaneous]. The following exhibits a paradigmatic "big picture" of relations between causatives and passives in Korean:

(17) Morphological realizations of v in the paradigms of Korean causative/passive[6]

	MORPHEMES	FUNCTION/MEANING
v, lexical head of vP:	ha/ toy/ ci sikhi[7]	DO-BE/ BECOME-PASSIVE/BECOME CAUSE
Syntactic (Peripheral) causative/passive	-key ha -key sikhi -key toy -E ci	Causative [+/- agentive] Causative [+ agentive] Passive [+Affected] Passive
Lexical causative/passive	i/hi/li/ki/wu/kwu/chwu i/hi/li/ki	Causative Passive

Along the lines of such reasoning, I will assume that *toy-* is also one of the morphological realizations of v. It will be beyond the scope of this short paper to go further to an extended discussion.

With the vP structure and the morphological realization of v head for the light verb, combining light verbs with √root rather than the Verbal Noun itself is more plausible in the light verb constructions. This approach to the complex predicate of [√root + v] can explain the whole class of light verb constructions in Korean. Most literature (Ahn 1991, among others) about Korean light verb constructions has observed three sub-classes as follows:

(18) a. KONGPWU-(lul) ha-ta   -------> Type I [-stative] ha-/toy-
          study   -(Acc) DO-Dec
       '(X) studies.'

      b. PHIKON   ha-ta   -------> Type II [+stative] ha-/*toy-
          tiredness   BE[8]-Dec
          '(X) is tired.'

      c. maum-ul   CENG   ha-ta   -------> Type III [1-syllabic] ha-/*toy-
          mind-Acc   fix   DO-Dec
          '(X) decides one's mind.'

      c' maum-ul   KYEL-CENG-(ul) ha-ta -------> Type I   ha-/toy-
          mind-Acc   decide-fix-(Acc) DO-Dec (same as above (18.c))

In example (18), what is interesting and important to note is the Type III sub-class, whose members are monosyllabic Chinese verbs or adjectives. Its light verb construction shows different behavior: it does not allow any particle (i.e., case-markers, delimiters) to intervene

between the light verb and the root, unlike the disyllabic counterpart in (18c'). They are bound morphemes and can't stand alone, and their syntactic category is never Noun but Verb, which means that there is no $\varnothing$-nominalization.

Another piece of evidence for the reasoning that no $\varnothing$-nominalization is employed in the light verb constructions comes from the variations of Type II, which are regarded as native Korean adjectives with no connection to Chinese adjectival counterparts. Some of these words can function as roots of the mimesis, which usually are expressed by the repetition of the roots. It is also hard to suppose a $\varnothing$-nominalization on roots themselves, because they are never used as Nouns.

(19) a. banccak-ha   'be shiny/flash/twinkle'   →   banccak-banccak 'twinkling'
      b. bancil-*u*-ha   'be slippery/oily/smooth'   →   bancil-bancil   'oily/slyly'
      c. santtut-ha   'be neat/fresh/vivid'   →   santtut-santtut 'freshly/clearly'
      d. kkaykkut-ha   'be clean'
      e. ttokttok-ha   'be clever'
      f. dandan-ha   'be hard/strong'

(20) $\sqrt{clever}_{Adj}$ → $\sqrt{P}[clever]_{Adj}$ → be clever = $V + \sqrt{P}$ (English)

       property   state   'be clever'

       ttokttok   →   ttokttok   → ttokttok ha-(ta) = V_{BE} clever   (Korean)

These examples illustrate that the analysis of light verb constructions as complex predicates of $[\sqrt{P} + v]$ explains a wider range of environments for light verbs to occur than the approach of V-incorporation from VN in lexicon or LF.

4. Conclusion

I have argued that the light verb *ha* in Korean is the overt realization of the *v* head. Further, the *Ha/ci* alternation in Korean psych verbs makes a strong case of DO/BECOME meanings for *v*, whose semantic contribution is heavily contextualized in English. The relationship between the psych verbs and perceptible property verbs can be captured with the same root as a shared piece of lexical material between them, and complex syntactic structures, yielding a "psych" meaning ('likable') from a property meaning ('good') when the root is combined with another verbal head "BE" predicate (V_{BE}).

For Korean, the absence of the class of English denominal verbs like "hammer" or "comb," which are alleged to be formed by conversion ($\varnothing$-derivation) from noun to verb, is morphological evidence for this view. English and Korean contrast the ways of composing $\sqrt{root}$ and *v* head and of realizing the spell-out of *v*. Korean adds a suffix morpheme indicating 'activity' to the root before combining with *v* and has a morphological realization for *v*, whose

default meaning is 'DO'. Without resorting to Morphology, English seems to choose the underdetermination approach for the meaning of *v*, leaving the syntactic, semantic environment to provide the cues necessary for the appropriate interpretation.

As for the Korean light verb constructions, the alternation of DO/BECOME shown in the Korean psych verb constructions reveals a similar pattern again here, with the V_{BE} "BE predicate". The difference between the two constructions is that in the light verb construction the roots (or bases) are Verbal Nouns (VN) instead of stative verbs (i.e. adjectives), and the morphological realizations of *v* are *ha-/toy-* instead of *ha-/ci-*, and that the meaning of *toy-* is BECOME-PASSIVE.

Thus, this study of *ha* in Korean light verb constructions supports Harley's (1995, 1999) claims that the BECOME *v* is in complementary distribution with CAUSE *v*, that non-stative events are always represented in a structure containing a *v*P, and that recognizing the complements of *v* ($\sqrt{}$P) as a predicative structure denoting events, things, or states helps to contextualize the interpretation of little *v* in an appropriate way along with its determining environments.

NOTES

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[1] Dynamicity for events means that representing the *v*P structure is concerned with change of states, not just tangible occurrence of accidents or incidents (cf. Harley 1999:74).

[2] This notation follows Pesetsky 1995 to indicate the root form of the verb. It is read as "Root P".

[3] Propositive *–ca* in Korean is equivalent to *let's* in English.

    i)   (Wuli) thenis-(lul)   chi-ca
          we   tennis-Acc   play-Propositive
          'Let's play tennis.'

[4] This is the same as 'Japanese light verb constructions' labeled by Grimshaw & Mester (1988).

[5] Each character originates from Old Chinese and each has its own meaning.

[6] See Jung (1999) for details of the distinction between syntactic/lexical causativization and passivizaton in Korean.

[7] I did not discuss about this morpheme 'sikhi-'. Without argument I will just assume it for the morphological realization of CAUSE part of *v*. The precise characterization of it will be left for future research.

[8] In the traditional way of glossing, DO is always given to *ha-* without considering its semantic content.

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