Language Change: From Syntactic Incorporation to Lexical Compounding¹

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Han, Ho. 1998. Language Change: From Syntactic Incorporation to Lexical Compounding. Linguistics, 6-2, 67-81. This study explores ongoing structural change with respect to light verb ha- constructions (henceforth, LVC) in Korean. The ha- LVC generates through the process of combining a Sino-Korean(SK) noun with the LV ha-. In the literature this process is considered to be involved with some sort of incorporation in Baker's (1988) sense. In negating an LV complex as V, only one type of negatives is judged perfect. However, it will be shown that there is age variance in terms of acceptability of the other type of negatives. With language acquisition data and historical linguistic theories, I will argue that the structure of the LV ha- complex appears to be currently under change. (Ajou University)

1. Introduction

Korean has a verb complex containing the, so called, light verb(LV) ha^{-} 'do'.² Many researchers have been concerned with the light verb construction with ha^{-} (ha^{-} LVC) because the light verb complex, which contains the light verb and a Sino-Korean (Chinese-originated) noun or

^{1.} This paper is a revised version of my paper presented at the South East Conference on Linguistics 97' at the University of North Carolina-Charlotte. Special thanks go to Byong-seon Yang, Jeong-Seok Kim, and an anonymous reviewer for their comments and references. I also thank Dorothy Disterheft for her critical comments on the earlier version of this paper. A usual disclaimer applies.

^{2.} The use of the term 'light' verb is due to its lack of semantic information. After combining with a host noun or adjective, 'light' verbs become 'heavy' enough to carry over semantic information. Korean has several other light verbs besides ha -, but I will take only the verb ha- in this study.

an adjective, sometimes seems to behave as an independent V and, other times, not.

In this paper I will explore the categorial label of the LV complex and its ongoing change, using placement of Korean negative particle an 'not'. In Section 1, a general account of the LVC will be given. The negative placement in Korean will be introduced in Section 2. Section 3 will show some results of our survey on the change of categorial label of the LV complex and introduce some acquisition data based on which we will argue for abductive approach of language change.

1. Korean Light Verb ha - Constructions

The grammatical function of this verb is almost equivalent to that of English do, so that it is used for negative or as a pro-form of a verb. For such function, I assume ha- support just as do-support in English. Sentence (1b) is a negative form of sentence (1a), and sentence (2) illustrates how the verb ha- is used as a pro-form³.

- (1) a. John-i chayk-ul ilk-ess-ta.

 John-NOM book-ACC read-PAST-DEC

 'John read the book.'
 - b. John-i chayk-ul ilk-ci an ha-yess-ta
 John-NOM book-ACC read-N not do-PAST-DEC
 'John did not read the book.'
- (2) John-i Seoul-ul ttena-ss-ko, Mary-to kureke John-NOM Seoul-ACC leave-PAST-CONJ Mary-also so ha-yess-ta

NOM = nominative case marker

ACC = accusative case marker

DAT = dative case marker

GEN = genitive case marker

DEC = declarative morpheme

PRES = present tense morpheme

PAST = past tense morpheme

N = nominalizer morpheme

CONJ = conjunctive morpheme

^{3.} I will use the following abbreviations in this paper.

do-PAST-DEC

'John left Seoul, and also Mary did so.'

Another interesting property of this verb is that it sometimes combines with a noun, mainly Sino-Korean nouns.4 and inherits semantic information from the combined noun via a process of transfer of semantic information, as Grimshaw and Mester (1988) described. Some examples are given as follows:

(3)	<u>noun</u>	LV complexes	LV complexes			
	(a) kongpu 'study'	kongpu + hata	'to study'			
	cakkok 'composition'	cakkok + hata	'to compose'			
	nolay 'song'	nolay + hata	'to sing'			
	(b) kenkang 'heath'	kenkang + hata	'to be healthy'			
	pikon 'tiredness'	pikon + hata	'to be tired'			

The group (a) includes verbal LV complexes, while the group (b)

^{4.} The LV sometimes combines with a phonologically variant form of an adjective and generates a verb which denotes some feeling expressed by the combined adjective;

(i)	adjectiv	re	light verb construction		
	kippe	'happy'	kippe + hata	'feel happy'	
	sulpe	'sad'	sulpe + hata	'feel sad'	

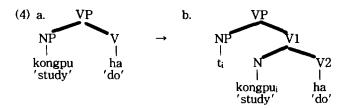
This type of LVCs patterns differently with the other type of LV complex generating through the combination of the LV and a Sino-Korean noun. The difference is observed in negation as in (ii):

In this type of LVCs like (iia), it seems that the LV complex is formed in the lexicon, while kippe 'pleased' is an independent adverbal in the construction in (iib).

⁽ii) a. Sue-ka an kippe-ha-yess-ta Sue-NOM not pleased-do-PAST-DEC b. Sue-ka kippe an ha-yess-ta Sue-NOM pleased not do-PAST-DEC

contains adjectival LV complexes. Since they do differ in many respects, it has been suggested that the verbal LV complex is syntactically derived, but the adjectival ones generate in the lexicon.⁵ In this paper, I will focus on the verbal (syntactically derived) LV complex.

Kim (1990) and Chung (1993) among others argue that some structural change, a sort of incorporation process proposed by Baker (1988), occurs in the formation of a LV complex.⁶ This is shown in (4):



This is a synchronic model of the generation of LV complexes. But this model of change accounts for the diachronic change of some aspects of this construction. Some evidence for this account is obtained from the fact that Korean has an alternative to the LVC. (5a) is the usual LVC and (5b) an alternative one.

(5) a. Mary-ka kongpuha-yess-ta Mary-NOM study-PAST-DEC

b. Mary-ka kongpu-lul ha-yess-taMary-NOM study-ACC do-PAST-DEC

^{5.} See Choi (1993) for a different view. In his system, both types of LV complex are derived syntactically. However, it behaves like one lexical unit, for instance, in terms of negation, as we will see in Section 2.

^{6.} In early generative syntax and morphology as in Chomsky (1970) and Aronoff (1978), such compounding as observed in the formation of the LV complex was considered a pre-syntactic process done in the lexicon. If so, newly created LV complexes must behaves as new verbs. However, in fact, some tests like negative placement show that is not the case. For this reason, Kim (1990) argues for post-syntactic word formation for the LV complex.

'Mary studied'

As seen in the above examples, the noun kongpu 'study' combines with the LV in (5a) and creates a new verb, while it is an independent complement of the LV in (5b). There are two possible analyses of the relationship between (5a) and (5b). One is that the former stems from the latter by means of deletion of the accusative case marker ul, undergoing the structural change in (4), and the other is that the noun is segregated from the LV complex and is assigned the accusative case marker to be focused. I suspect the former approach might be right since Korean allows free deletion of case markers and. moreover, it corresponds to the synchronic model in (4). This being the case, we may posit the same model for diachronic change of the LVC construction.

Some supporting evidence for the former analysis comes from placement of negative adverb. In what follows we will see syntactic formation of negatives in Korean and its implication on the LVC.

2. Negative Placement in Korean

It is well known that Korean has two types of negatives, short form negative and long form negative:

(6) a. Affirmative:

Mary-ka chavk-ul ilk-ess-ta book-ACC read-PAST-DEC Mary-NOM 'Mary read the book.'

b. Short form negative:

Mary-ka chavk-ul ilk-ess-ta an Mary-NOM book-ACC not read-PAST-DEC

c. Long form negative:

Mary-ka chavk-ul ilk-ci ha-yess- ta an Mary-NOM book-ACC read-N not do-PAST-DEC 'Mary did not read the book.'

The rule of short form negatives is to place the negative particle (an adverb) an 'not' just before a verb. On the other hand, for long form negatives, we nominalize the target verb for negative, support ha-'do', and locate the negative particle before the verb ha-.7

Two types of negatives of the LVC are given as follows:

(7) a. Short form negative:

Mary-ka kongpu an ha-yess-ta Mary-NOM study not do-PAST-DEC 'Mary did not study.'

b. Long form negative:

Mary-ka kongpu-ha-ci an ha-yess-ta
Mary-NOM study-do-N not do-PAST-DEC
'Mary did not study.'

What is interesting in (7) is the short form negative. (7a) shows that the genuine verb part of the LV complex is the LV ha- and the LV complex seems to be not a verb unit (a V-label category). This is contradictory to the incorporation analysis seen in (4). If the LV complex is a V-label category resulting from the analysis in (4), then the negative adverb must be able to appear before it as in (8);

- (8) a. ??Mary-ka an kongpu-ha-yess-ta
 Mary-NOM not study-do-PAST-DEC
 'Mary did not study.'
 - b. ?*Mary-ka mos kongpu-ha-yess-ta Mary-NOM not.able study-do-PAST-DEC

In the literature the form of negative like (8a) is considered

^{7.} See Park (1990) for a V-movement analysis of Korean negative.

unacceptable or at least strange. Furthermore, (8b) with the negative particle meaning 'not able' sounds very bad.

However, this is not in accord with the analysis given in (4), since a V1 is created by incorporation and thus it must be possibly preceded by the negative marker an 'not'. Why do the sentences in (8) sounds bad? To resolve this problem, I propose the following rule-ordering. advocating the analysis in (4):

(9) Affirmative LVC

- (i) Deletion of case marker
- (ii) Movement of a complement N
- (iii) Generation of a new V category

Negative LVC

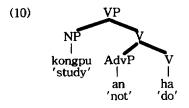
- (i) Placement of negative particle
- (ii) Deletion of case marker
- (iii) No movement of a complement NP

The formation of affirmative LVC is accounted for by (4), i.e., the accusative case marker is deleted and the object NP adjoins to V1 with generating a verb complex. On the other hand, in the negative LVC, placement of the negative marker precedes formation of the LVC. As mentioned above, the placement of the negative particle is done in the lexicon, as a lexical item is selected from the lexicon and is located at an appropriate position in a sentence in the conceptual and semantic component of grammar. However, the formation of the LV complex is done in the post-lexicon through purely syntactic NP movement. In this ordering an 'not' blocks the movement of the complement NP.

Since an 'not' syntactically behaves as an adverbial as argued in Han and Park (1995)8, we can posit the following structure for short form

^{8.} Han and Park (1995) treated the Korean negative particle an as an adverbial, on the basis of the evidence by Cho (1993) that it behaves like a lexical item, not like a functional element, in co-occurrence with a floating plural

negative of the LV complex according to Kim's (1990) system:



In (10), the AdvP an 'not' occurs in its appropriate position, movement of the noun kongpu 'study' is blocked by a maximal projection AdvP. As mentioned before, (8a) is considered an hardly acceptable sentence, but corresponding the adjectival LVC is perfect as in (11a).

(11) John-un an kenkangha-ta John-TOP not healthy-DEC 'John is not healthy.'

Sentence (10) shows that unlike the verbal LV complex, adjectival LV complexes are probably lexical units.

marker. See the following examples, where APM represents tul, the agreement plural marker:

- (i) aitul-i pakk-(*tul)-eyse sikkulepkey nol-(*tul)-ko kids-NOM outside-APM-at noisily play-APM-and iss-(*tul)-ss-ta be-APM-PERF-APM-DEC
- (ii) ?aitul-i pap-ul an(i)-tul mek-ess-ta kids-Nom food-Acc not-APM eat-Perf-Dec 'The kids did not eat food'

In the preverbal negation the APM can occur bewteen the negative marker and the main verb as illustrated in (ii), while neither between an NP and an affixal postposition nor between affixal verbal morphemes as shown in (i). Consequently, (i) and (ii) demonstrate that the negative marker behaves differently from inflectional affixes which constitute functional categories.

However, in the next section, it will be shown that young people tend to accept (8a) and Korean children produce sentences like (8a) in the course of development of negation.

3. Evidence for the Change in the LV Complexes

3.1. Experiment

My query on the LVC resulted from my own judgment of the negative LVC such as (8a), which is considered unacceptable. I felt and sometimes observed that some sentences like (8a) are almost acceptable, particularly in some context in actual conversation. My observation implies that some change of rule-ordering in (9) is occurring, i.e., negative placement applies at the final step. This further means that even verbal LV complexes may generate in the lexicon. Since negative placement is done in the lexicon, the structural change in (4) must be considered a pre-syntactic compounding as argued by Chomsky (1970) and Aronoff (1978). To confirm my judgment and observation, I have done an experiment. The research hypotheses are:

- (I) The order of rules in (9) is changing.
- (II) Younger people consider sentences like (8a) acceptable.
- (III) The change may be evident in informal conversation more than formal writing since such change of language is led in speech rather than in writing.

The respondents are forty there corean people. The respondents' age and distribution are shown in the Table 1.

Age	19	20	24	28	29	34	38	42	50+	
Number	11	13	4	4	2	ო	1	1	4	T=43

Table 1. The age of respondents

The test used in this experiment is a judgment test, in which the

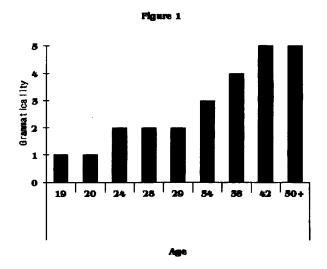
respondents are given 15 sentences of the negative LVC such as (8a). Among 15 sentences, 3 sentences are those that are used in conversation, and they contain some verbal ending signaling colloquial expression. I inserted 2 long form negatives of the LVC as control sentences. 10 sentences are short form negatives of the LVC used in written context. The scale of grammaticality is provided as follows;

Grammaticality	Perfect	Almost perfect	A little strange	Strange	Incorrect
Score	1	2	3	4	5

Table 2. The scale of grammaticality

In this scale, the lower is the score, the more grammatical/acceptable is the relevant sentence.

Some results of the judgment test is shown in Figure 1.



The hypothesis II appears to be supported by the results. Younger people tend to accept the sentences like (8a) given in the test more

than older people. Moreover, the sentences like (8a) are more or less acceptable for most respondents. As we have the limited number of respondents whose ages range from 19 to more than 50, the result in Figure 1 may not strongly confirm the hypothesis II. However, I suspect that such correlation between two variables shown in Figure 1 will be evident in a future experiment with a group of respondents having a wider range of ages.

The hypothesis III is also supported as shown in Table 3.

Sentence Type	Colloquial Speech Style	Formal Style
Mean Score	1.8	3.7

Table 3. The correlation between sentence style and grammaticality

It is evident that people tend to accept the sentences like (8a) with colloquial style more than with formal style. It is a well-known fact that language change usually occurs in speech first and only later shows up in writing. From Table 3, it would be argued that the change of the rule ordering in forming LVC complex is going on now, particularly in speech.

With the results in Figure 1 and Table 2, we can claim that the order of rules in (8) is being changed as in (12).

(12) Negative LVC

- (i) loss of accusative case marker
- (ii) compounding of a noun and the LV
- (iii) negative placement

The negative LVC exhibits the ongoing transition of categorial label of the LV complex. As mentioned before, negative placement is done in the lexicon. The current survey indicates that for younger speakers, the formation of the LV complex is done before negative placement in the lexicon as seen in (10). In other words, the LV complex is formed

through lexical compounding, which gives the category label V to the LV complex:

- (13) [vp [v kongpuha-]]
- 3.2 Some Evidence from Language Acquisition Data

The ongoing change of the rule ordering is observed in acquisition data. Korean children usually produce the forms like (8a) repeated below, which is considered incorrect in the standard Korean grammar.

(8a) *Mary-ka an kongpu-ha-yess-ta Mary-NOM not study-do-PAST-DEC 'Mary did not study'

Korean children seem to apply negative placement to the LV complex, which they regard as an independent verb but not as a compound of a noun plus the LV. And little negative evidence is given to children since caretakers are not usually concerned with such syntactic errors in (8a), but rather with semantic errors (de Villiers and de Villiers, 1978). Consequently, children will produce such ill-formed sentences as in (8a) for a while until they formulate indirect negative evidence, using positive evidence. If children listen to sentences like (8a), which may be produced by adults such as our respondents, then they will keep the ill-formed forms like (8a) until their errors are corrected, for instance, by elementary school teachers.

The developmental stage of a short form negative of the LV complex and its ongoing change mentioned above can be also explained by the abductive theory of language change. Anderson (1973) and Disterheft (1990, 1992) give some convincing argument for the abductive theory with respect to change of phonological and/or syntactic component. The abductive inference starts from observed results, invoke some laws, and proceed to some probable cases. For instance, in the syllogism in (11),

we may relate the fact "Socrates is mortal" to the law, and conjecture that Socrates is a human.

(11) Case: Socrates is a human

Law: All humans are mortal

Result: Socrates is mortal.

According to the abductive theory of language change, if children produce some grammar which is different from the adult grammar and they realize the discrepancy, there are two ways of handling the discrepancy. First, children would revise their incorrect grammar immediately. Second, they would design adaptive rules to adjust their incorrect output to the adult grammar. As for the latter option, since adaptive rules are stylistic rules, they tend to be eliminated in future. Obligatory adaptive rules mask the actual change of language and keep the change from being observed until incorrect abduction is accepted by adult speakers and it shows up (Disterheft 1990: 183-84). Due to such peculiar process of change, the abductive inference is hard to observe. Only through deductive inference, which appears on surface, we can observe the abductive change.

For the change of the structure of the LV complex, we can claim that some adults like our respondents would be tolerable to children's production of the negative forms like (8a), and, thus, children would add that negative formation rule to their grammar. Or, once children find some discrepancy between their negative forms and the adult ones, they will invent some adaptive rule to follow the reserved norm and later the negative forms like (8a) will show up if application of the adaptive rule is lessened.

4. Conclusion

We have explored ongoing change of category label of the LV

complex, i.e., whether the LV complex is a $[v \ [v \ V \ N]]$ or a V in the lexicon. If it is a $[v \ [v \ V \ N]]$, then we need the analysis shown in (4) which is done in the post-lexicon, and (8a) is not well-formed. If it is a compound V from the lexicon, (8a) is well formed. Our judgment task shows that young people regard sentences like (8a) as not completely wrong but acceptable sentences. The positive attitude is observed particularly in the colloquial style of sentences. In addition, data from the acquisition of Korean negatives explain about possible change in the structural origin of the LVC.

This research is not complete but, rather, a preliminary one. First of all, the number of subject in the survey is not large enough to observe the ongoing change. Second, the range of age of respondents is not wide enough to come to a conclusion that the LV complex will be regarded as a compound verb in the future. Third, as Byoung-Seon Yang (personal communication) pointed out, there are other types of LVCs which I need to consider. I hope I can resolve these shortcomings in near future.

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