

# What Makes Negative Imperative So Natural for Korean [psych-adjective +*-e ha-*] Constructions?\*

Ilkyu Kim

Department of Linguistics and Cognitive Science  
Hankuk University of Foreign Studies  
Mohyeon, Yongin, Gyeonggi, 449-791, South Korea  
onefinedayjazz@hufs.ac.kr

**Abstraction.** Regarding Korean psych-adjectives and their *-e ha-* counterparts, e.i., [psych-adjective + *-e ha-*] constructions, what is at issue is how to capture the semantic difference and similarity between the two. Concerning this issue, one of the most controversial and difficult problems is whether the psych-construction has Action (Agency) as part of its meaning. The purpose of this paper is to solve this problem by answering the question why psych-constructions are much more natural when they are used as negative imperative than when they are used as positive imperative. First, in order to figure out why positive imperative is not allowed, we show that *-e ha-* adds the meaning of non-volitional action to psych-adjectives, using Jackendoff's Conceptual Semantics. Secondly, in accounting for why negative imperative is so natural, we show, with Talmy's Force Dynamics theory, what the speaker requires from the hearer is internal volitional action.

**Keywords:** psych-adjectives, [psych-adjective + *-e ha-*] constructions, Action, imperative, Conceptual Semantics, Force Dynamics theory

## 1. Introduction

Korean psych-adjectives and their *-e ha-* counterparts, e.i., [psych-adjective + *-e ha-*] constructions (psych-constructions<sup>1</sup>) have attracted many researchers with respect to their

---

\* An earlier version of this paper was presented in the weekly meeting of the BK21 research team of Linguistics and Cognitive Science Department at HUFs, October 12. I thank the audiences for comments and questions. I also thank two anonymous reviewers of this paper. All errors and misinterpretations are of course mine.

meaning (e.g. Hong, K-S 1991, Kim, H-S 1989, Kim, K-H 2003, Kim, Y-J 1990, Kim, S-J 1994, Lee & Lee 2005, Nam, S-H 2007, Yeon, J-H 1996). With most semanticists agreeing with the idea that the meanings of the two constructions are certainly different from each other, what is at issue is how to capture the difference and similarity between the two. Regarding this issue, one of the most controversial and difficult problems is whether the psych-construction has Action (Agency) as part of its meaning (Kim S-J 1994).

The purpose of this paper is to solve this problem by answering the question why psych-constructions are much more natural when they are used as negative imperative than when they are used as positive imperative. In answering this question, first, we show that *-e ha-* adds the meaning of non-volitional action to psych-adjectives, thus making the whole construction a kind of action. This characteristic of the psych-construction and its difference from psych-adjectives are captured by Jackendoff's (1990, 2002a, 2002b, 2007) Conceptual Semantics, particularly its mechanism of distinguishing thematic-tier and macrorole tier. Then, we show, with Talmy's (1985, 2003) Force Dynamics theory, in the negative imperative of the psych-construction, what the speaker requires from the hearer is internal volitional action.

The content of the rest of the paper is like the following. In section 2, we will first introduce the concept of Action and Actor on which our analysis is based. Then, in section 3, we will analyze the meaning of psych-constructions, particularly the values they take for the features [VOLITION] and [ACTION], in order to answer our first question: why is positive imperative for psych-constructions impossible or unnatural at least? In doing so, we will focus on the difference between the conceptual structure of psych-constructions and that of psych-adjectives, working under the framework of Jackendoff's (1990, 2002a, 2002b, 2007) Conceptual Semantics. After that, in section 4, we will answer the second question which is, we believe, much more interesting: why is negative imperative for psych-constructions so natural? We will analyze negative imperative of psych-constructions with Talmy's (1985, 2003) force dynamics theory, showing that it can naturally account for why negative but not positive imperative is possible, or at least much more natural, for psych-constructions. In section 5, we support our argument by expanding the scope of predicates that go naturally along with only negative imperative and figuring out their semantic similarity with respect to the features [VOLITION] and [ACTION]. Finally, our conclusion will be given in section 6.

## 2. Action, Actor and Macrorole Tier

Following Culicover & Wilkins (1986) and Talmy (1985), Jackendoff (1990:128) argues that “conceptual roles fall into two tiers: a *thematic tier* dealing with motion and location, and an *action tier* dealing with Actor-Patient relations.”<sup>2</sup> In addition, he adds two more conceptual

---

<sup>1</sup> Throughout this paper, we will call [psych-adjective + *-e ha-*] constructions “psych-constructions” just for convenience.

<sup>2</sup> Later, Jackendoff (2002a) suggests two more tiers, *referential tier* and *information structure tier*.

roles, Experiencer and Stimulus, to the *action tier* and call it *macrorole tier* (Jackendoff 2002b). Now, two conceptual functions are on the level of the macrorole tier: AFF and EXP, each of which takes as its arguments Actor and Patient, and Experiencer and Stimulus.

By postulating the macrorole tier, the traditional notion of Agent can be dissected into a number of independent parts. Jackendoff (1990:129), for example, analyzes the sentence *Bill rolled down the hill* like the following.

- (1) Bill rolled down the hill.  
 Go ([BILL], [DOWN [HILL]])  
 a. AFF<sub>+vol</sub> ([BILL], ) (willful doer)  
 b. AFF<sub>-vol</sub> ([BILL], ) (nonwillful doer)  
 c. AFF ( , [BILL]) (undergoer)

Then, how can we define Action, or the function AFF? Jackendoff (1990, 2002a, 2002b, 2007) suggests the frame *what X did was ...* as a means of testing whether a predicate is Action or not.

- (2) a. The ball rolled to the wall. What the ball did was roll to the wall.  
 b. The wind made Bill sneeze. What the wind did was make Bill sneeze.  
 c. Bill entered the room. What Bill did was enter the room.  
 d. The ball was in the corner. \*What the ball did was be in the corner.  
 e. The wall surrounded an orchard. \*What the wall did was surround an orchard.  
 f. Bill owned a VW. \*What Bill did was own a VW.

(Jackendoff 2007:198)

Thus, (2a-c) shows *rolled*, *made*, and *entered* are Actions and accordingly, *the ball*, *the wind*, and *Bill* are Actors, while the subjects and the predicates of (2d-f) cannot be Actors and Actions.

### 3. Why Positive Imperative So Unnatural?

Jackendoff (2007:266) argues that “[i]mperatives require the understood subject YOU to be a volitional Actor.” That is, if a word has [+VOLITION, +ACTION] it allows imperative, but if a word does not have [+VOLITION, +ACTION] it cannot. This is why, from syntactic perspective, most Korean verbs can take imperative endings but adjectives cannot. What is interesting is that although there is a variability of acceptability, psych-constructions does not go along naturally, if not impossible, with positive imperative as in (3-4).

- (3) a. \*apenim-uy sosik-ul kwungkumhay hay-la!

father-of news-ACC wonder AUX-IMP

'Be curious about father's news.'

b. \*pwulanhay hay.

be uneasy IMP

'Don't be uneasy/Be uneasy.'

c. ?mincwucwuuy-uy cwukum-ul sulphe hay-la!

democracy-of death-ACC sad AUX-IMP

'Be sad about the death of democracy!'

(Kim S-J 1994:73)

(4) a. \*simsimhay hay-la!

bored AUX-IMP

'Be bored!'

b. ?\*yay-tul-a. sulphe hay-la. apeci-ka tolakasy-ess-ta

child-PL-VOC sad AUX-IMP father-NOM pass away-PAST-DEC

'Children. Be sad. Father has passed away.'

c. ?\*ku salam-uy chesa-lul sepsephay hay-la.

that man-of behavior-ACC sorry AUX-IMP

'Be sorry for his behavior.'

(Kim S-J 1994:78)

This is very different from other “normal” verbs which allow both positive and negative imperatives very naturally as in (5).

(5) a. Keki ka-la/ka-ci mala.

there go-IMP/go-COMP NI

'Do/do not go there.'

b. Kongpwu hay-la/ha-ci mala.

study(n) LV-IMP/LV-COMP NI

'Do/do not study.'

Then, three logically possible reasons why psych-constructions cannot take positive imperative are that they do not have either [+VOLITION] or [+ACTION], or neither of them. Let us look at the features one by one to figure out which value psych-constructions have for each feature. First, as for the feature [VOLITION], we can see psych-constructions have a very low degree of, if at all, volitionality. (6-7) shows various ways to test volitionality of action of the psych-construction.

(6) a. \*simsimhay ha-ko siph-ta.

- bored AUX-COMP want-DEC  
 ‘I want to be bored.’
- b. \*simsimhay ha-l cwunpi-ka twoye iss-ta.  
 bored AUX-FUT readiness-NOM become COP-DEC  
 ‘I am ready to be bored.’
- d. \*simsimhay ha-l nunglyek-i iss-ta.  
 bored AUX-FUT ability-NOM COP-DEC  
 ‘I have ability to be bored.’
- e. \*simsimhay hay poa-ss-ta.  
 bored AUX look-PAST-DEC  
 ‘I tried to be bored.’

(Kim S-J 1994:77)

- (7) a. ?ku-uy sengkong-ul kippe ha-ca.  
 he-of success-ACC happy AUX-PROP  
 ‘Let’s be happy for his success.’
- b. \*wuli modwu apenim-uy sosik-ul kwungkumhay ha-ca!  
 we all father-of news-ACC wonder AUX-PROP  
 ‘Let’s wonder father’s news.’
- c. kohyang-ul kuliwe ha-ca.  
 hometown-ACC miss AUX-PROP  
 ‘Let’s miss our hometown.’

(Kim S-J 1994:73)

The above examples show that psych-constructions cannot co-occur with various constructions that imply volitional action, thus do not have [+VOLITION]. In fact, however, there are some cases such as (7c) in which psych-constructions can be used as volitional action.<sup>3</sup> But these cases, as pointed out by Kim S-J (1994), are not normal but either used in special contexts such as literary works or become natural by certain pragmatic factors.<sup>4</sup> Some (e.g. Kim K-H 2003, Hong 1991, Yeon 1996) argue psych-constructions have [+VOLITION] and it is one of the

<sup>3</sup> Some other examples are like the following, all from (Kim S-J 1994:75).

ku salam-ul coha hay-la.  
 that man-ACC like AUX-IMP  
 ‘Like the man.’  
 yay-tul-a! kippe hay-la. Apeci-ka sala-se tolao-sy-ess-ta.  
 child-PL-VOC happy AUX-IMP father-NOM alive-and come back-HON-PAST-DEC  
 ‘Children! Be happy. Father has come back alive.’  
 Ku salam-hanthey com mianhay hay-la.  
 that man-to a bit feel sorry AUX-IMP  
 ‘Feel sorry for him.’

<sup>4</sup> One pragmatic factor suggested by Kim S-J (1994:75) is whether the hearer can get some benefit by following the speaker’s order.

differences between psych-adjectives and their *-eha-* counterparts. In particular, Yeon (1996) does so by insisting acceptability of sentences in (8) which have adverbs *ilpwule/uytocekulo* ‘on purpose’ in them.

- (8) a. *Nay-ka ilpwule/uytocekulo paym-ul mwusewe ha-n-ta.*  
 I-NOM on purpose/intentionally sneak-ACC afraid AUX-PRES-DEC  
 'I am afraid of a sneak on purpose/intentionally.'  
 b. *Nay-ka ilpwule/uytocekulo kohyang-ul kuliwe ha-n-ta.*  
 I-NOM on purpose/intentionally hometown-ACC miss AUX-PRES-DEC  
 'I miss my hometown on purpose/intentionally.'

(Yeon J-H 1996:264)

However, with our linguistic intuition, they are hardly acceptable. Only the possibility of their being acceptable is that the sentences' having some other meaning than what we would normally expect from psych-constructions. That is, if, for instance, the meaning of (8a) is ‘I pretended to be afraid of a sneak on purpose’, the sentence can be acceptable. But in this interpretation ‘my internal psychological state’ is out of concern, which is crucial in the original meaning of psych-constructions.

A more difficult issue is whether psych-constructions have [+ACTION], which has caused a lot of conflicts between researchers. While some argue they have action as part of their meaning (e.g. Kim 1990, Lee & Lee 2005, Yeon 1996), others argue they are not actions (e.g. Kim 1994, Hong 1991, Nam 2007). It is important to note that those who maintain psych-constructions have [+ACTION] mostly presuppose their [+VOLITION]. This may be due to the fact that "when the actor of an action is animate, the default interpretation is that the action is performed voluntarily" (Culicover & Jackendoff 2005:427). What we are going to argue, however, is that psych-constructions have [-VOLITION] and [+ACTION] and they take Actor not Experiencer as their subject. Then, two problems are immediately raised both of which are closely related to this issue: 1) what is the evidence of seeing psych-constructions as having [+ACTION] thus taking Actor as their subject? 2) How can we capture the relationship between the meaning of psych-constructions and that of psych-adjectives?

Let us solve the first problem with linguistic data. At first glance, (9), together with (6-7), seems to act as counterevidence to our argument that the psych-construction is some kind of Action, because normal verbs, having action as their meaning, do not have any problem with going along with contexts used in (6-7) and adverbs such as *ellun* ‘quickly’ and *ppalli* ‘quickly’ in (9).

- (9) a. *\*na-nun ellun tungsan-ul cohahay-ssta.*  
 I-TOP quickly climbing-ACC like-PAST  
 'I quickly liked climbing.'  
 b. *\*ku-nun ppalli pwukkulewehay-ssta.*

he-TOP quickly embarrassed-PAST  
 'He quickly felt shy.'

However, a more elaborate study shows the sentences in (6, 7, and 9) are ungrammatical not because psych-constructions are not actions but because they are not volitional actions. As mentioned above, according to Jackendoff (2002b, 2007), in order for a verb to mean Action whether it is voluntary or not, it must pass the *What X did was* test. We can test whether the psych-construction has action in its meaning by putting them in a similar context. The following is one such test using *X-ka/i han kes-ilakon ... ppwun-ita* (*what X did was only*) construction.

- (10) a. Ku-ka han kes-ilakon kunye-lul coha ha-n kes ppwun-ita.  
 he-NOM did COMP-only she-ACC like AUX-PAST COMP only-COP  
 'What he did was only like her.'
- b. \*Ku-ka han kes-ilakon kunye-ka cohun kes ppwun-ita.  
 he-NOM did COMP-only she-NOM like COMP only-COP  
 'What he did was only like her.'

(10a) and (10b) clearly show the difference between psych-adjectives and psych-constructions. The psych-construction *coha ha-* 'like', unlike its counterpart *cohta* 'like', passes the test very successfully, thus showing their having Action as part of their meaning.

Now, we can formalize the conceptual structure of psych-adjectives and psych-constructions and show the relationship between them like the following (of course, one should be much more specific if (s)he wants to give a detailed conceptual structure of the predicates, but for our purpose (11) is specific enough).

- (11) a. Conceptual Structure of the psych-construction *silhe hata* 'dislike'  
 X [(SHOW) [BE/FEEL *silhum* (TOWARD Y)]]  
 X AFF-volition [Y is not a Patient]
- b. Conceptual Structure of the psych-adjective *silhta*  
 X BE/FEEL *silhum* (TOWARD Y)  
 X EXP Y

Many researchers (e.g. Kim S-J 1994, Lee & Lee 2005, Nam S-H 2007, Yeon J-H 1996), although they differ from one another in more detail, agree that the meaning of *-e ha-* in the psych-construction is some kind of "externalization of internal feeling" (Yeon J-H 1996:262). We agree with this analysis and use the function SHOW, first proposed by Kim S-J (1994)<sup>5</sup>, in

<sup>5</sup> The following is what Kim S-J has suggested as the meaning of the psych-construction *silhe hata*:

[EVENT SHOW (x, [STATE BE/FEEL (x, [PLACE AT 싫음][yp])])]

order to capture this meaning. Two important differences should be noted though; first, while Kim S-J argued the macrorole that subject of the psych-construction takes is Experiencer, we argue it is Actor, and secondly, the function SHOW is now parenthesized, which means the psych-construction does not necessarily mean “externalization of internal feeling” any more.; instead, it can just mean just one’s internal feeling, without externalizing it, just like psych-adjectives. This can be proved by two facts; first, sentences like (12a) are very natural, and secondly, many psych-constructions can have *na* ‘I’ as their subject as in (12b-c).

- (12) a. Sekhwuni-nun sok-ulo Ciweni-lul pwulewe ha-myenseto ket-ulo-nun  
 Sekhwun-TOP inside-to Ciwen-ACC envy AUX-although outside-to-TOP  
 pwulewe ha-ci ahn-nun-ta.  
 Envy AUX-COMP NEG-PRES-DEC  
 ‘Although Sekhwun internally envies Ciwen, he does not externalize  
 his feeling.’

(Kim H-S 1989:203)

- b. nay-ka paym-ul mwusewe ha-n-ta.  
 I-NOM Sneak-ACC afraid AUX-PRES-DEC  
 ‘I am afraid of a sneak.’  
 c. nay-ka kohyang-ul kuliwe ha-n-ta.  
 I-NOM hometown-ACC miss AUX-PRES-DEC  
 ‘I miss my hometown.’

(Yeon J-H 1996:262)

Now, we can answer the question why positive imperative with the psych-construction is unnatural. It is because the construction has [+ACTION] but not [+VOLITION]. But note again that the positive Imperative of the psych-construction is not categorically impossible; instead, there is a variability of acceptability for positive imperative as already shown in (3-4), which seems due to the fact that the construction, after all, is a kind of action and some other out-of-semantic factors discussed above.

#### **4. Why Negative Imperative So Natural?**

So far, we have seen why psych-constructions cannot take the positive imperative form. It is because although they have [+ACTION] they lack [+VOLITION] in their meaning which is a crucial element for making imperative possible. What we can expect is, then, negative imperative of psych-constructions must also be unacceptable just like their positive imperative. However, we can see negative imperative forms are much more natural for psych-constructions as in (13).



- (13) a. (?)simsimhay ha-ci ma!  
 bored AUX-COMP NI  
 'Don't be bored!'
- b. yay-tul-a. sulphe ha-ci mala.  
 child-PL-VOC sad AUX-COMP NI  
 'Children. Don't be sad.'
- c. ku salam-uy chesa-lul sepsephay ha-ci mala.  
 that man-of behavior-ACC sorry AUX-COMP NI  
 'Don't be sorry for his behavior.'
- d. apenim-uy sosik-ul kwungkumhay ha-ci mala!  
 father-of news-ACC wonder AUX-COMP NI  
 'Don't be curious about father's news.'
- e. pwulanhay ha-ci ma.  
 uneasy AUX-COMP NI  
 'Don't be uneasy.'
- f. mincwucwuuy-uy cwukum-ul sulphe ha-ci mala!  
 democracy-of death-ACC sad AUX-COMP NI  
 'Don't be sad about the death of democracy!'

Sentences in (13) are all counterparts of their positive imperative forms in (3-4). Note that their acceptability or grammaticality is much better than their positive imperative forms. In section 4, we will solve this problem by looking at the verbs in terms of the force dynamics.

#### 4.1 Basic Idea of Force Dynamics in Language

Force dynamics is a semantic category suggested by Talmy (1985, 2003) that captures and generalizes the meanings of a lot of grammatical words, content words, and linguistic constructions with just a few primitives such as Agonist and Antagonist and their relationship with respect to force. The basic type of force interaction is physical interactions and it further extends to physical/psychological, intrapsychological and sociopsychological interactions. Since force-dynamic pattern in the intrapsychological interaction is the most important pattern with regard to our question, let us examine intrapsychological force dynamics in detail. The following is a minimal pair that contrasts force-dynamically neutral expressions with ones that exhibit force-dynamic patterns on the intrapsychological level (Talmy 2003:412):

- (14) not VP/refrain from VPing                      [*intrapsychological*]
- a. He didn't close the door.
- b. He refrained from closing the door.

First, (14a) is force-dynamically neutral in that no conflicting forces are shown in the linguistic structure. On the other hand, (14b) shows a force interaction occurring within a single psyche; that is, a man urges to close the door without volition, while, at the same time, the same person volitionally inhibits his desire. The key for explaining the intrapsychological force dynamics and the reason that only negative imperative is possible for psych-constructions is the notion of "divided self" (Talmy 2003:431), the state in which both Agonist and Antagonist simultaneously exist within one mind competing each other. The basic idea is like this: "[t]he Agonist is identified with the self's desires, reflecting an inner psychological state. It is being overcome by an Antagonist acting either as blockage ... or as a spur." (Talmy 2003:432) If Antagonist is stronger than Agonist the self *refrain* or *keep oneself from -ing*. On the contrary, if Agonist is stronger than Antagonist, then one *exerts to VP* or *exerts in -ing*. It is important to note that Agonist's desire is without volition while Antagonist's exertion of force is necessarily a volitional act.

#### 4.2 Negative Imperative Presupposes Divided Self!

We are finally ready to answer our question. Negative imperative of psych-constructions, by default, presupposes divided self and Agonist's desire. By uttering negative imperative sentences (cf. (13)), the speaker, with the presupposition above in his/her mind, requires Antagonist, one part of the hearer, to volitionally act against Agonist's desire. For example, (13b) can be roughly paraphrased like this: '(I believe part of you (Agonist) is and keeps trying to be sad, but) do not give in to the desire and overcome Agonist.' Here, what is within the parenthesis is the content of the presupposition, and what the speaker tells the hearer to do is obviously an internal volitional action. In contrast, positive imperative of the psych-construction does not presuppose divided self and just requires the hearer to conduct a non-volitional action.

### 5. Beyond Psych-constructions: A Typology of Korean Action Predicates

Psych-constructions are not only the predicates that allow only negative imperative. Verbs or constructions that refer to one's physiological actions like *colta*<sup>6</sup> 'drowse', *haphwum hata* 'yawn', *pangkwi kkita* 'fart', *ttelta* 'shiver' also permit only negative imperative as in (16).

- (16) a. \*cola-la./col-ci mala.  
           drowse-IMP/drowse-COMP NI  
           'Drowse./Do not drowse.'
- b. \*ttele-la./telci mala.  
           shiver-IMP/shiver-COMP NI

---

<sup>6</sup> Kim S-J (1994) does not see *colta* as action because it is not volitional. But once we acknowledge the notion of action is divided into two groups according to the feature [VOLITION], we can say the verb is still action even if it is non-volitional.

'Shiver./Do not Shiver.'

We argue this is because these predicates, just like psych-constructions, are non-volitional actions. For example, drowsing and yawning is out of the Actor's control but once the actions (are about to) start, the actor can try to stop doing them with his/her volition. The only difference between the psych-construction and the predicates above is the former can be [-PHYSICAL] when it lacks the function SHOW in its conceptual structure, whereas the latter is always [+PHYSICAL].

Based on the analysis done so far, we can now provide a typology of Korean Action predicates as in Table 1.

Table 1: A Typology of Korean Action Predicates

	+VOLITION	-VOLITION
+PHYSICAL	<i>ttaylita</i> 'hit', <i>chata</i> 'kick', <i>ttwita</i> 'run', etc.	psych-constructions, physiological predicates
-PHYSICAL	<i>kongpwu hata</i> 'study', <i>sayngkak hata</i> 'think', etc.	(psych-constructions)
Kinds of Imperative Allowed	Both positive and negative imperatives	Only negative imperative

As shown in Table 1, Korean Action Predicates can be divided into four groups according to the criteria of [VOLITION] and [PHYSICAL]. Moreover, regardless of their physicality, they can be further divided into two groups according to their possibility of allowing kinds of imperative: predicates allowing both positive and negative imperatives, and predicates allowing only negative imperative. What is crucial in determining kinds of imperative allowed is the feature [VOLITION]. If the predicate has [+VOLITION] it allows both, whereas if it has [-VOLITION] it only allows negative one.

## 5. Conclusion

In this paper, we made two main arguments on two interesting phenomena regarding psych-constructions. First, for the phenomenon that psych-constructions cannot take positive imperative, we argued, using Jackendoff's (1990, 2002a, 2002b) conceptual semantics, it is because psych-constructions are actions without volition. Secondly, for the phenomenon that psych-constructions can take negative imperative, we argued, using Talmy's (1985, 2003) Force Dynamics theory, it is because the required action is an internal volitional action. The two

different actions within a single psyche were captured by the force dynamic pattern of intrapsychological interactions. And also, we have suggested that not only psych-constructions but other predicates that have non-volitional action as part of their meaning can go naturally along only with negative imperative, thus showing [-VOLITION] and [+ACTION] as the core condition of allowing only negative imperative.

## Reference

- Culicover, P. W. and R. Jackendoff. 2005. The semantic basis of control in English. In *Simpler Syntax*. Oxford, New York: Oxford University Press.
- Jackendoff, R. 1990. *Semantic Structures*. Cambridge, Mass.: MIT Press.
- Jackendoff, R. 2002a. *Foundations of Language*. Oxford: Oxford University Press.
- Jackendoff, R. 2002b. *Experiencer Predicates, Theory of Mind, and Subjective vs. Objective Valuation*. ms. Brandeis University.
- Jackendoff, R. 2007. *Language, Consciousness, Culture: Essays on Mental Structure*. Cambridge: The MIT Press.
- Hong, K-S. 1991. Verbal Compounds in English. *Language Research* 32-1, 43-60.
- Kim, K-H. 2003. Simli hyengyongsa yenkwu: nonhang kyoche ywuhyengtuluy ehwi uymi kwucolul cwungsimulo (Study of psych-adjectives: focusing on lexical meaning structure of argument changing patterns). *Enehak* 37, 47-68.
- Kim, S-J. 1994. *The Lexico-semantic Structure of the Psychological Predicates in Korean*. Seoul National Univ. Ph.D. dissertation.
- Kim, Y-J. 1990. *The Syntax and Semantics of Korean Case: The Interaction between Lexical and Syntactic Levels of Representation*. Ph. D. dissertation, University of Victoria.
- Lee, I-H and M-H, Lee. 2005. *Simlitongsa-uy uymilon: yenge, hankuke-wa tokile-uy taycoyenkwu* (Semantics of Psych-constructions: comparing English, Korean and German). Seoul: Yeklak.
- Nam, J-S. 1993. Hankuke hyengyongsa kwumwunuy thongsacek pwunlywulul wihaye 1: simli hyengyongsa kwumwun (For classifying Korean adjective constructions 1: psych-adjective constructions). *Language Research* 29-1, 75-106.
- Nam, S-H. 2007. *Hankuke Simliswule-uy Nonhang kwuco-wa saken kwuco Hankuke* (Argument Structure and Event Structure of Korean Psych-predicates). Presented at the monthly meeting of the Korean Society for Language and Information, March 24.
- Talmy, L. 1985. Force dynamic in language and thought. In *Papers from the Twenty-First Regional Meeting of the Chicago Linguistic Society*. Chicago: Chicago Linguistics Society.
- Talmy, L. 2003. Force Dynamics in Language and Cognition. In *Toward a Cognitive Semantics*. Cambridge, Mass.: MIT Press.

Yeon, J-H. 1996. Kwuke Yekyecwue kwumwundy tayhan pemenecek kwancemuy yenkwu (A study of Korean dative-subject construction on cross-linguistic aspects). *Kwukehak (Korean Linguistics)* 28, 241-275.