

## Adverbial Phrases and Aspectual Expressions in Korean: Co-occurrence and Semantic Constraints

Wako, Masakazu<sup>†</sup> and Kaoru Horie<sup>‡</sup>

Graduate School of International Cultural Studies, Tohoku University

<sup>†</sup>6m36wako@intcul.tohoku.ac.jp

<sup>‡</sup>khorie@intcul.tohoku.ac.jp

### 1. Introduction

This study investigates how aspectual interpretations are constrained by the co-occurring adverbial phrases in Korean. Yazawa(1985) has pointed out that, in Japanese, aspectual interpretations of the Verb + *teiru* form (e.g. *siteitru*), ranging over “Progressive”, “resultative”, “Perfect” and “Iterative/Habitual”, are delimited by the co-occurring adverbial phrases. This study investigates whether the constraints imposed on by adverbial phrases (or adverbials) are applicable to Korean aspectual forms corresponding to the Japanese *siteitru*, i.e. *hako issta*, *hay issta* and *hayssta*.

### 2. Delimitation of the aspectual interpretations of *siteitru* by adverbials

Japanese aspectual form *siteitru* encodes the Progressive, Resultative-Static, Perfect and Iterative/Habitual meanings (Yoshikawa1976, Kudo 1995). While previous studies have paid attention to the interaction between lexical aspect of a verb and aspectual meanings indicated by *siteitru*, Yazawa (1985) has pointed out that some adverbials delimit the meanings of *siteitru*.

Yazawa classified adverbials into five categories, i.e. Stative Adverbials, Manner Adverbials, Process Adverbials, Occurrence Adverbials, and Frequency Adverbials. Stative Adverbials modify the resultant states of an event. Manner Adverbials modify the manner of an action. Process Adverbials modify the process of a progressive change of state. Occurrence Adverbials and Frequency Adverbials respectively modify the manner of an occurring event and the frequency of events repeated over some period of time.

Based on this classification, Yazawa has analyzed how adverbials delimit the availability of aspectual interpretations of *siteitru*, as in (1a-1c):

- (1) a. Process Adverbials delimit the Resultative-Static interpretation of *siteitru*.
- b. Occurrence Adverbials delimit the Progressive and Resultative-Static interpretations.
- c. Frequency Adverbials delimit the Progressive, Resultative-Static and Perfect interpretations.

- (2) a. A *sya-no kabu-wa neagarisi-te iru.*  
company-GEN stock-TOP rise-ASP  
'The stock price of company A is rising. (Progressive) /  
The stock price of company A keeps is in the state of  
having risen. (Resultative) / The stock price of company  
A has (continuously) risen (and it still does). (Iterative/Habitual)'
- b. *Masako-ga kao-ni beni-wo usuku nut-te iru*  
-NOM face-on rouge-ACC thinly spread-ASP  
'Masako is spreading rouge on her cheek thinly. (Progressive) /  
Masako has her cheek rouged thinly. (Resultative) /  
Masako has (recently) rouged her cheek thinly.  
(and continues to do so). (Iterative/Habitual)'

In (2a), where no adverbial occurs, *siteitru* can be interpreted as encoding the Progressive, Resultative-Static, Perfect or Iterative/Habitual aspect without any constraint. A Stative Adverbial *usuku* ('thinly') occurs in (2b), but it does not restrict the meaning of *siteitru*, although the Resultant-State of the event denoted by the VP *beni-wo nuru* ('spread rouge') is highlighted by *usuku* and the Resultative-Static interpretation seems most suitable.

- (3) a. A *sya-no kabu-wa kyuugekini neagarisi-teiru.*  
company-GEN stock-TOP rapidly rise-ASP  
'The stock price of company A is rising rapidly. (Progressive) /  
The stock price of company A has experienced a rapid rise. (Perfect) /  
The stock price of company A has (always) rapidly risen (and it still  
does).(Iterative/Habitual)'
- b. *Masako-ga kao-ni beni-wo*  
-NOM face-on rouge-ACC  
*patapatato usuku nut-teiru.*  
in a flirting manner thinly put-ASP  
'Masako is spreading rouge on her cheek thinly with  
her rouge brush flirting. (Progressive) / Masako has  
spread rouge on her cheek thinly with her rouge brush  
flirting. (Perfect) / Masako has continued to spread  
rouge on her cheek thinly with her rouge brush flirting  
(and she still does). (Iterative/Habitual)'

In (3a), a Process Adverbial *kyuugekini* ('rapidly') delimits

and preempts the Resultative-Stative interpretation. In (3b), the Resultative-Stative interpretation, which can be highlighted by a Stative Adverbial *usuku* ('thinly') as in (2b), is preempted by a Manner Adverbial *pataptatato* (a manner of flapping or flirting something)'.  
(3) c. A *sya-no* *kabu-wa* *totuzen* *kyuugekini*  
company-GEN stock-TOP suddenly rapidly  
*neagarisi-teiru*.  
rise-ASP  
(Perfect or Iterative/Habitual Interpretations: cf. 3a)

- d. *Itumo* A *sya-no* *kabu-wa* *totuzen*  
always company-GEN stock-TOP suddenly  
*kyuugekini* *neagarisi-teiru*.  
rapidly rise-ASP  
(Iterative/Habitual Interpretation only)

In (3c), an Occurrence Adverbial *totuzen* ('suddenly') preempts the Progressive and Resultative-Stative interpretations. Accordingly, *siteiru* in (3c) can only be interpreted as encoding Perfect or Iterative/Habitual. In (3d), a Frequency Adverbial *itumo* ('always') only allows for the Iterative/Habitual interpretation despite the presence of other co-occurring adverbials.

### 3. Tense-aspect expressions in Korean

Korean has two periphrastic aspectual forms which correspond to *siteiru* in Japanese, i.e. "Progressive" *hako issta* and "Resultative-Stative" *hay issta* (Hamanoue 1991, 1992):

- (4) a. *Cenghwa-ka* *twi-ko* *iss-ta*.  
-NOM run-ASP-DECL  
'Cenghwa is running now.'  
b. *Cenghwa-nun* *os-ul* *ip-ko* *iss-ta*.  
-TOP cloth-ACC wear-ASP-DECL  
'Cenghwa is putting on a cloth / has a cloth on.'  
c. *Cenghwa-nun* *hakkyo-ey* *ka-a* *iss-ta*.  
-NOM school-LOC go-ASP-DECL  
'Cenghwa has gone to school (and is still there).'

*Hako issta* (V-stem + Conjunctive suffix *-ko* + *issta* 'exist/be') primarily expresses an on-going action as in (4a). With verbs of wearing (e.g. *ipta* 'wear', *moca-lul* *ssuta* 'wear a hat') and reflexive action (e.g. *phyoceng-ul* *cista* 'make some expression on one's face'), *hako issta* can also express Resultative-Stative, as in (4b). *Hay issta* form (V-stem + Conjunctive suffix *-el-a-ye* + *issta* 'exist/be'), which expresses Resultative-Stative, as in (4c), can only co-occur with intransitive verbs encoding a change-of- state undergone by the subject NP.

- (5) a. *na-nun* *ecey* *kongpwuha-yess-ta*.  
I-TOP yesterday study-TNS-DECL(Past)  
'I studied yesterday.'

- b. *swul* *masi-ess-ta*.  
alcohol drink-ESS-DECL  
'He has drunk (and stinks of alcohol).' (Ogoshi 1995)  
c. *ce salam* *kwaymchanh-un* *os* *ip-ess-ney*.  
that person good-ADN cloth wear-ESS-EXCL  
'S/he dresses fine!' (Ogoshi 1995)

*Hayssta* (V-stem + past tense suffix '-ess-/ass-/yess-' + ending suffix) primarily encodes Past Tense as in (5a). But as shown in (5b) and (5c), it can also indicate Perfect (Hamanoue 1992, Sohn 1999) and describe a situation existing at the utterance time as a result of the action denoted by the verb (Ogoshi 1995, Sohn 1999). This will be further discussed in Section 4.2.

In the remainder of this paper, we investigate how adverbials delimit the interpretations of tense-aspect forms in Korean.

## 4. Delimitation of the aspectual interpretations of tense-aspect forms by adverbials in Korean

### 4.1 Interaction of Stative, Manner and Process Adverbials and the aspectual interpretations of *hako issta/hay issta*

With verbs of wearing and reflexive action, i.e. transitive verbs encoding a durative action and its resultant state, *hako issta* can indicate Progressive or Resultative-Stative, as in (6a).

- (6) a. *Cenghwa-ka* *lwucwu-lul* *palu-ko* *iss-ta*.  
-NOM rouge-ACC apply-ASP-DECL  
'Cenghwa is putting lipstick on her lip/Cenghwa has her lip rouged.' (Progressive/Resultative-State)  
b. *Cenghwa-ka* *yeyppukey* *lwucwu-lul*  
-NOM beautifully rouge-ACC  
*palu-ko* *iss-ta*.  
apply-ASP-DECL  
'Cenghwa is putting lipstick on her lip neatly. / Cenghwa has her lip rouged neatly.'  
c. *Cenghwa-ka* *yelsimhi* *yeyppukey* *lwucwu-lul*  
-NOM attentively beautifully rouge-ACC  
*palu-ko* *iss-ta*.  
apply-ASP-DECL  
'Cenghwa is attentively putting lipstick on her lip neatly. / Cenghwa attentively has her lip rouged neatly.'

In (6b), wherein a Stative adverbial *yeyppukey* ('beautifully') occurs, *hako issta* also can be interpreted as encoding Progressive or Resultative-stative, although the latter interpretation is more preferred. On the other hand, in (6c), wherein a Manner adverbial *yelsimhi* ('attentively') occurs as well, only the Progressive interpretation of *hako issta* is available. This clearly shows that Manner Adverbials can preempt the Resultative-Stative interpretation of *hako issta*.

With intransitive verbs encoding progressive change or the subject NP's resultant state after change, *hako issta* encodes Progressive and *hay issta* expresses Resultative-Statative, as in (7a).

- (7) a. *A sa-uy cwuka-ka {ollaka-ko iss-ta/ollaka-a iss-ta}*.  
 company-GEN stock price-NOM rise-ASP-DECL  
 'The stock price of company A is rising. (Progressive) /  
 The stock price of company A is in the state of having  
 risen. (Resultative)'  
 b. *A sa-uy cwuka-ka ppalu-n sokto-lo*  
 company-GEN stock price-NOM rapidly  
 {*ollaka-ko iss-ta / \*ollaka-a iss-ta*}.  
 rise-ASP-DECL  
 'The stock price of A company is rising rapidly.'  
 (Progressive)

In (7b), a Process Adverbial *ppalu-n sokto-lo* 'rapidly' can co-occur with only *hako issta*; and *hay issta* is not appropriate.

#### 4.2 Interpretation of *hayssta* co-occurs with Stative Adverbials and Manner/Process Adverbials

The basic meaning of *hayssta* is Past Tense but it can also describe a state resulting from the action/change existing at the utterance time, as in (8a) and (9a). For example, in (8a), *hayssta* can locate the action of Cenghwa's action of putting lipstick on her lip at some point prior to the utterance time on the time axis. The speaker can utter (8a) to describe the resultant current situation wherein Cenghwa is present with her lipstick on.

- (8) a. *Cenghwa-ka lwucwu-lul palu-ass-ta*.  
 -NOM rouge-ACC apply-PST/ASP-DECL  
 'Cenghwa put lipstick on her lip. / Cenghwa has put  
 lipstick. on her lip.' (Simple Past/Perfect)  
 b. *Cenghwa-ka yelsimhi yeypukey lwucwu-lul*  
 -NOM attentively beautifully rouge-ACC  
*palu-ass-ta*.  
 apply-PST/ASP-DECL  
 'Cenghwa attentively put lipstick on her lip. / Cenghwa  
 has attentively put lipstick on her lip.'  
 (Simple Past/Perfect)  
 (9) a. *A sa-uy cwuka-ka ollaka-ass-ta*.  
 company-GEN stock price rise-PST/ASP-DECL  
 'The stock price of company A rose. / The stock price of  
 company A has risen.' (Simple past/Perfect)  
 b. *A sa-uy cwuka-ka ppalu-n sokto-lo*  
 company-GEN stock price rapidly  
*ollaka-ass-ta*.  
 rise-TNS/ASP-DECL  
 'The stock price of company A rapidly rose. / The stock  
 price of company A has rapidly risen.' (Simple

past/Perfect)

As seen in Section 4.1, Manner Adverbials preempt the Resultative-Statative interpretations of *hako issta* and Process Adverbial can not co-occur with the Resultative-Statative form *hay issta*. In contrast, when co-occurring with Manner Adverbial or Process Adverbial, *hayssta* can express the subject's resultant state deriving from the preceding action/change and existing at the utterance time, as in (8b) and (9b).

But in the cases of (8b) and (9b), it is considered that *hayssta* expresses not only the resultant state but also the preceding action/change. In (8b) the speaker infers Cenghwa's having put on her lipstick attentively from the appearance of Cenghwa's lips which are colored more beautifully than usual. In (9b) the speaker refers to the rapid rise of the stock price of company A with respect to the stock price given at the utterance time. This suggests that *hayssta* forms in (8b) and (9b) attest the Perfect interpretation.

Previous studies have noted that *hayssta* has the Resultative-Statative use (Sohn 1999, Ogoshi 1995). Indeed (8a) can describe the same situation as (6a), i.e. the situation encoded by the *hako issta* in (6a). Similarly, (9a) can describe the situation expressible also by the *hay issta* in (7a). And when a Stative adverbial occurs, as in (10), the Resultative-Statative interpretation seems to be highlighted:

- (10) *Cenghwa-ka yeypukey lwucwu-lul*  
 -NOM beautifully rouge-ACC  
*palu-ass-ta*.  
 apply-TNS/ASP-DECL  
 'Cenghwa has put lipstick on her lip beautifully.'

But as mentioned in relation to (8b) and (9b), when a Manner or Process Adverbial occurs and emphasizes the process of action or change, *hayssta* can be interpreted as encoding Perfect rather than Resultative-Statative. This observation leads us to consider that the aspectual *hayssta* form encodes Perfect as its basic meaning, and that only when the Resultative-Statative interpretation is highlighted contextually or by a Stative Adverbial can it receive the Resultative-Statative interpretation.

#### 4.3 Occurrence Adverbials and Frequency Adverbials

In the present subsection we will investigate how Occurrence/Frequency Adverbials affect the aspectual interpretations of Korean tense-aspect forms.

As seen in (11) and (12), both Occurrence Adverbials and Frequency Adverbials can co-occur with *hako issta*, *hay issta* and *hayssta* without any other syntactic condition.

- (11) *A sa-uy cwuka-ka kapcaki*  
 company-GEN stock price-NOM suddenly

{*ollaka-ko issta / ollaka-a iss-ta / ollaka-ass-ta.*}

rise-ASP/TNS-DECL

'The stock price of company A has started to rise suddenly and is still rising. / The stock price of company A has risen suddenly and it still stays high. / The stock price of company A has risen suddenly.'

(Progressive/Resultative-Stative/Perfect)

- (12) *hangsang* A *sa-uy* *cwuka-mun*  
always company-GEN stock price-NOM  
{*ollaka-ko issta / ollaka-a iss-ta / ollaka-ass-ta.*}

rise-ASP/TNS-DECL

'The stock price of company A is always rising. / The stock price of company A always stays high. / The stock price of company A always rose.'

When an Occurrence Adverbial occurs, e.g. *kapcaki* as in (11), the aspectual meanings of *hako issta*, *hay issta* and *hayssta* do not change; they indicate Progressive, Resultative-Stative and Perfect respectively. When a Frequency Adverbial occurs, e.g. *hangsang* as in (12), each sentence describes a situation occurring habitually, although the process of action/change is highlighted in the *hako issta* sentence, and the state resulting from the past action/change is foregrounded in the *hay issta* sentence.

## 5. Discussion

Manner/Process Adverbials modify the process of an action/change, while Stative Adverbials modify the subject's state resulting from the preceding action/change encoded by the verb. These adverbials are thus intimately concerned with the semantics of the verb phrase. As observed in section 4.1, Manner Adverbials preempt the Resultative-Stative interpretation of *hako issta* and Process Adverbials can not co-occur with the Resultative-Stative form *hay issta*. This observation leads us to consider that Manner/Process Adverbials take precedence over Stative Adverbials from the viewpoint of aspect.

This also points to the strong interaction between the semantics of a verb phrase and the availability of Perfect and Resultative-Stative interpretations. That is, the Perfect interpretation of *hayssta* is less subject to cancellation than the Resultative-Stative interpretation, as shown in 4.2. When Manner/Progressive/Stative Adverbials co-occur with *hayssta*, the Perfect interpretation is not preempted, although Stative Adverbials make it less distinct from the Resultative-Stative interpretation. This peculiarity of Perfect accords with the observation made in previous studies that Perfect is distinguishable from other aspectual meanings in its affinity to the deictic nature of Tense (e.g. Kudo 1995: 98-105).

Finally, Occurrence adverbials and Frequency adverbials, discussed in 4.3, do not delimit the availability of aspectual forms unlike other adverbials.

## 6. Conclusion

This study explored how adverbials affect the aspectual interpretations of tense-aspect forms in Korean, inspired by Yazawa's (1985) study in Japanese. It finds that the Yazawa's basic insight is at least partially applicable to Korean, whose tense-aspect system is more complex than that in Japanese.

## Abbreviations

ACC: Accusative, ADN: Adnominal, ASP: Aspect, DECL: Declarative, EXCL: Exclamation, GEN: Genitive, NOM: Nominative, TNS: Tense, TOP: Topic

## Acknowledgements

This study was supported in part by the 21st Century Center of Excellence (COE) Program (Ministry of Education, Culture, Sports, Science and Technology) entitled "A Strategic Research and Education Center for an Integrated Approach to Language and Cognition" (Graduate School of International Cultural Studies, Tohoku University). Our thanks go to Sangmok Lee, Hyeonjeong Jeong and Cheongmae Lee for constructive criticism.

## References

- Hamanoue, Miyuki (1991). Gendai tyoosengo no asupekuto kurasu (Aspectual classes of Modern Korean predicates). *Tyoosen Gakuhoo* 138: 1-93.
- Hamanoue, Miyuki. (1992). Gendai Tyoosengo no Kekkasoo = Zyootai Paafekuto: Doosa Paafekuto to no Taihi o Tyuusin ni (Resultative Aspect in Modern Korean = Statal Perfect: with Particular Reference to Its Contrast with Actional Perfect). *Tyoosen Gakuhoo* 142: 41-107.
- Kudo, Mayumi. (1995). *Asupekuto, Tensu Taikeeto Tekusuto: Gendai Nihongo no Zikan no Hyoogen* (Aspect-Tense System and Text: Temporal Expressions in Modern Japanese). Tokyo: Hituzi Syoboo.
- Ogoshi, Naoki. (1995) Tyoosengo Hayssta kei, Hay issta kei (Hako issta kei) to Nihongo Sita kei, Siteiru kei (Tense and Aspectual Systems in Korean and Japanese: HAISDA, HAI 'ISSDA/HAGO 'ISSTDA and SI-TA, SI-TEIRU). *Kenkyuu Hookokusyuu 16* (Occasional Papers 16), 185-205, Tokyo: The National Institute for Japanese Language.
- Sohn, Ho-Min. (1999). *The Korean Language*. Cambridge: Cambridge University Press.
- Yazawa, Makoto. (1985). Zyookee Syuusyoku Seibun to <siteiru> no Imi (Adverbials and Semantics of <siteiru>). *Nihongogaku* 4-2, 63-80.
- Yoshikawa, Taketoki. (1976). Gendai Nihongo Doosi no Asupekuto no Kenkyuu (Research on the Aspect of verbs in Modern Japanese). *Nihongo Doosi no Asupekuto*, ed. Haruhiko Kindaichi, 155-327. Tokyo: Mugi syoboo.