A Comparative Study on the Aspectual Classification of Korean and Japanese Verbs in Relation to '-ess-' '-essess-' in Korean and 'sudeni' in Japanese

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Abstract. This paper deals with an aspectual classification of Korean and Japanese verbs based on Vendler (1967). Both of Korean and Japanese verbs are classified into 12 distinctive aspectual categories by their restrictions on time adverbials, progressive tenses and logical entailments. A well-established aspectual verb classes provide us not only with a better understanding of both languages, but also with an explicit explanation concerning some grammatical phenomena relevant to time. The aspectual classes of Korean verbs clarify the ambiguous semantic functions of so called Korean tense forms '-ess-' and '-essess-', while those of Japanese verbs elucidate the semantic functions of 'sudeni', the equivalent of 'already' in English, when it occurs with a variety of verbs in sentences.

Keywords: aktionsarten, temporal properties, internal temporal structure, telicity, resultative

1 Introduction

This paper presents an aspectual classification of Korean and Japanese verbs in terms of the temporal properties which are considered inherent in the lexical meanings of the verbs, and also shows that the aspectual verbal classes provide an explicit explanation for some time relevant linguistic phenomena. We classify Korean and Japanese verbs into 12 distinct aspectual classes respectively on the basis of Vendler (1967).

The temporal characteristics of the Korean verbs are closely related to a variety of the interpretations of the Korean past tense forms '-ess-' and '-essess-' which have been controversial, and also the semantic distinctions of 'te iru' form of Japanese verbs combined with 'sudeni' result from the internal time structure of the verbs. Of the temporal properties inherent in the verbs, telicity¹ plays a significant role in relation to linguistic phenomena. Tense and aspect are concerned with time, but in different ways. Tense is a deictic category which locates a situation in time, while aspect is a non-deictic category which is a different way of viewing the internal constituency of a situation (Comrie,1976).

Two different definitions of aspect are given, i.e. one is the aspectual classes of verbs and the other is the aspectual forms of verbs. The first is called aktionsarten and the second is what are called the progressive, perfect, and resultative which the verbs show when combined with aspect markers. The verbs which have the same internal temporal structure form a certain aspectual class and the verbal behaviors of each aspectual class are differentiated syntactically and semantically.

2 Vendler's Classification of Verbs

Vendler classified English verbs into four aspectual classes by means of their compatibility with the three time adverbials, i.e. for-time interval, in-time interval, at-point of time; the possibility of progressive form and logical entailments. He distinguished states, activities, accomplishments and achievements. **States** lack the progressive form and co-occur with time adverbial 'for-phrase' which

¹ Telicity means some verbs necessarily involve an end or goal in a way that other verbs don't.

shows the situation described by the verb lasts for a certain period of time. Activities can take the progressive form and co-occur with the time adverbial 'for-phrase'. Accomplishments can take the progressive form and co-occur with the time adverbial 'in-phrase'. 'In-phrase' represents the time which it takes for the situation to reach the goal. They have necessarily terminal points in their internal structures. Achievements lack the progressive form and occur with time adverbials 'in-phrase' and 'at-phrase.' The adverbial 'at-phrase' indicates the point of time at which the situation described by the verb takes place. It should be noted that activities co-occur only with 'for-phrase', while accomplishments co-occur only with 'in-phrase. Vendler's four verbal classes can be covered by the term 'situation'

3 The Aspectual Classes of Korean and Japanese Verbs

The Korean and Japanese counterparts of time adverbials 'at', 'for', and 'in' are 'ey', 'tongan' and 'maney' in Korean and 'ni', 'kan' and 'de' in Japanese respectively. The Korean and Japanese equivalents of progressive markers are '-ko issta' and '-te iru'², which are shown in table 1.

English	Korean	Japanese					
at	ey	ni					
for	tongan	kan					
in	maney	de					
be~ing	-ko issta	-te iru					

 Table 1 : Time adverbials and progressive markers in Korean and Japanese

The first step of the aspectual classification of Korean and Japanese verbs is to separate two verbal families by the possibility of the progressive, and then to sub-classify each family in terms of restrictions on time adverbials, that is, whether or not the verb can co-occur with each of the time adverbials. Now we have 16 possible aspectual classes by means of Vendler's four classificatory criteria which are applied independently of each other. Finally we get 12 different Korean aspectual classes as in table 2 and 12 different Japanese aspectual classes as in table 3.

In these tables, O is marked when the verbs combined with '-ko issta' or '-te iru' exhibit progressive meaning, , whereas X is marked when they don't. When the verbs combined with Korean 'T-ey' or Japanese 'T-ni' exhibit the moment at which pun.ual situations have taken place, O is marked, otherwise X is marked. When the verbs combined with Korean 'T-tongan' or Japanese 'T-kan' indicate that the situations described by the verb go on for the period of time, O is marked, otherwise X is marked. It should be noted that when the verbs combined with 'T-tongan' or 'T-kan' express the resultative meaning, which implies the state following the termination of the event, X is marked even though the sentences are grammatically correct. When Korean 'T-maney' or Japanese 'T-de' exhibit the time it takes for the situations described by the verb to terminate, O is marked. However, when they exhibit ingressive meaning, X is marked. The internal temporal structure of the verbs is established as in Figure 1.



internal stage resultative stage

Figure 1: The internal temporal structure of the verbs

² '-ko-' in Korean and '-te-'in Japanese are inflexional suffixes. 'issta' and 'iru' are the same as 'be' in English.

16	х	Х	Х	Х		talmta (resemble) incephata (adjoin)		
15	х	Х	Х	0				
14	x	Х	0	Х		kippehata (rejoice) sulpehata (grieve) salanghata (love) mitta (believe)		
13	х	Х	0	0				
12	Х	0	Х	Х	Х	ponayta (send) cwuta (give) patta (receive) pillita (borrow)		
11	х	0	Х	0	0	(nwun) kamta (close) capta (seize) alta (learn) salta (be alive) kamchwuta (hide)		
10	Х	0	0	Х		salta (live), sojuhata (own)		
6	х	0	0	0		poita (see) (hear) (feel)		
8	0	X	X	X				
L	0	X	X	0	0	(hayka) ttuta (rise) kata (go) ota (come) yemsaykhata (color) ipta (wear, put on) cista (build)		
9	0	х	0	Х	X	wulta (cry) wusta (laugh) (pi)ota (rain) pwulta (blow) ketta (walk)		
5	0	Х	0	0	0	oywuta (memorize, remember) mouta (save) cwulta (decrease) nulta (increase)		
					X	mekta (eat) (eat) ilkta (read) ssuta (white) (white) (boil) mantulta (make)		
4	0	0	X	X		a a		
3	0	0	Х	0	0	cita (lose) ikita (win) tochakhata (arrive) (arrive) (depart) kuchita (stop)		
2	0	0	0	х	X	chata (kick) twutulita (knock)		
					0	thata (ride, get on)		
1	0	0	0	0	x	chacta (search, find)		
	progressive	T-ey(at)	T-tongan(for)	T-maney(in)	resultative			

Table 2: The aspectual classification of Korean verbs.

16	Х	х	Х	Х	х	sugureru (be exellent) niru (resemble) tomu (be rich)				
15	Х	Х	Х	0	х					
14	х	Х	0	х	х	aisuru (love) yorokobu (rejoice) kanasimu (grieve) sinziru (believe) omou (think)				
13	Х	Х	0	0						
12	Х	0	Х	Х	0	kasu (lend) kariru (borrow) okuru (send) morau (receive)				
11	Х	0	Х	0	0	tootyakusuru (arrive) okuru (send) mitukeru (find) mitukaru (be found) siru (know) wakaru (understand) tuku (reach) sinu(die) umareru (be born)				
						tuburu (close) hazusu (take off) kakureru (hide) kakusu (conceal) suwaru (sit) (sit) tatu (stop) hairu (enter) nigiru (seize)				
10	х	0	0	Х	х	iru (be) aru (be) Sumu (live)				
6	х	0	0	0	х	mieru (see) kikoeru (hear) tukareru (be tired) sibireru (numb) suku (be hungry) kawaku (be thirsty)				
8	0	х	X	х						
7	0	Х	Х	0	0	someru (color) (color) kiru (wear, put on) simeru (fasten) noboru ((sun)rise) kigaeru (change cloths) nugu (tale off) katazukeru (settle)				
					х	tateru (build)				
9	0	х	0	х	x	naku (cry) huru (rain) huku (blow) aruku (walk) hasiru (run) asobu (play) hataraku (work)				
5	0	х	0	0	0	horu (dig) oboeru (memorize, remember) tameru (save) oritu (descend) heru (decrease)				
)	7))	x	yomu (read) kaku (wirte) taberu (eat) moyasu (burn) wakasu (boil) yuderu (cook) utau (sing) odoru (dance)				
4	0	0	х	х						
3	0	0	х	0	0	katu (win) makeru (lose)				
2	0	0	0	х	x	tataku (knock) keru (kick) utu (hit)				
1	0	0	0	0	0	noru (get on, ride)				
	progressive	T-ni(at)	T-kan(for)	T-de(in)	resultative					

Table 3: The aspectual classification of Japanese verbs.

Let us examine some similarities or differences between the syntactic and semantic behaviors of Korean and Japanese aspectual classes.

Class 1: The combination of activities and achievements [-stative] [-punctual] [-telic] (activities) [-stative] [+punctual] [+telic] (achievements)

The Korean verb 'chacta' has two different internal time structures, i.e. those of activities (search) and achievements (find). However, the counterparts of 'chacta' in Japanese, like English, are distinguished as sagasu (search) and sagasisasu or mitukeru (find).



Figure 2: The internal temporal structure of 'chacta'

- (1) a. Kyengchal-un silcongtoyn ai-lul hantal-tongan chac-ass-ta. (Korean) Keisatu-wa yukuehumeini natta kodomo-o ikkagetu-kan sagasi-ta. (Japanese) Police-TOP missing child-ACC one month-for search-PAST-DEC 'The police searched for the missing child for a month.'
 - b. Kyengchal-un silcongtoyn ai-lul ecey chac-ass-ta. (Korean) Keisatu-wa yukuehumeini natta kodomo-o kinou mituke-ta. (Japanese) Police-TOP missing child-ACC yesterday find-PAST-DEC 'The police found the missing child yesterday.'
- Class 3: Achievements with a preliminary stage [-stative] [+punctual] [+telic] ikita (win) cita (lose) tochakhata (arrive) ttenata (leave) (K) katu (win) makeru (lose) *touchakusuru(arrive) *syuppatusuru (leave) (J)

Even though the verbs of this class refer to the punctual situation which takes place at a definite time, they can take the progressive form as in 'we are winning', which represents the process leading up to the terminal point, or the goal.

(2) wuri tim-i iki-ko iss-ta. (K)
 waga timu-ga kat-te iru. (J)
 our team-NOM win-SF be-PRES-DEC
 'our team is winning.'

This progressive meaning in the preliminary stage is true of Japanese verbs 'katu (win)', 'makeru (lose)' but not true of 'toutyakusuru (arrive)', 'syuppatusuru (depart)', i.e. unlike Korean 'toutyakusi-te iru', 'syuppatusi-te iru' always take resultative interpretation.

Class 7: Accomplishments [-stative] [-punctual] [+telic] [+resultative]

kata (go)	ota (come)	ipta (wear, put on)	yemsaykhata (color)	(K)
*iku (go)	*kuru (come)	kiru (wear, put on)	someru (color)	(J)

One of the conspicuous differences between Korean and Japanese verbs is that Korean verbs 'kata (go)'and 'ota (come)' belong to accomplishments, hence these verbs combined with '-ko itta' present either the progressive or the resultative. Japanese, however, 'iku (go)' and ' kuru (come)' belong to achievements and when combined with '-te iru', they allow only the resultative as in the following examples :

- (3) a. tongsayng-i o-ko iss-ta. (Progressive). younger brother-NOM come-SF be-PRES-DEC 'My younger brother is coming.'
 - b. tongsayng-i wa iss-ta. (Resultative).
 younger brother-NOM come-SF be-PRES-DEC
 'My younger brother is here.'
- (4) otooto-ga ki-te iru. (Resultative)Younger brother-NOM come-SF be-PRES-DEC.'My younger brother is here.'



Figure 3: The internal temporal structure of accomplishment

It should be noted that activities allow only 'for-phrase', whereas accomplishments allow only 'inphrase', and that the aspect marker '-e issta' combines only with intransitive telic verbs to denote resultative meaning, but '-ko issta' combines with transitive telic verbs to denote resultative meaning, whereas '-te iru' in Japanese denotes not only progressive meaning but also resultative meaning according to the aspectual classes of the verbs that it combines.

4 Temporal Properties of Aspectual Classes and Linguistic Phenomena Relevant to Time

In this section it will be shown that the semantic interpretations of '-ess-' and '-essess' which are so called Korean past tense forms are related to the aspectual properties inherent in the lexical meanings of the verbs, whereas the sementic functions of 'sudeni (already)' combined with '-te iru' form of Japanese verbs result from the temporal properties of their aspectual classes.

4.1 The Semantic Functions of '-ess' and 'essess' in Korean

In Korean the semantic functions of '-ess' and '-essess' are determined by the internal time structures of the aspectual verbal classes. 'Telicity' especially has an essential role with regard to the semantic differentiation of '-ess' and '-essess-'.

Activities: [-stative] [-punctual] [-telic]

Activities combined with '-ess' or '-essess-' do not exhibit any semantic distinctions between them due to their atelicity³.

(5) ecey-nun param-i manhi pwul-ess-ta/ pwul-ess-ess-ta. Yesterday-TOP wind-NOM much blow-PAST-DEC /blow-PAST.-PAST-DEC 'Yesterday was very windy.'

Accomplishments: [-stative][-punctual][-telic][+resultative]

Accomplishments combined with '-ess-' or '-essess-' show the semantic differences due to their telicity.

- (6) a. Yuna-nun hanpok-ul ip-ess-ta. (present Resultative) Yuna-TOP Korean traditional clothes-ACC wear-PERF⁴-DEC 'Yuna is wearing Korean traditional clothes.'
 - b. Yuna-nun hanpok-ul ip-ess-ess-ta. (past Resultative) Yuna-TOP Korean traditional clothes-ACC wear-PERF-DEC 'Yuna was wearing Korean traditional clothes.'

If '-ess-' or '-essess-' co-occurs with the past time adverbial 'ecey (yesterday)', then they don't exhibit any semantic distinctions. They both denote past state.

(7)	ecey	Yuna-nun	hanpok-ul	ip-ess-ta / ip-ess-ess-ta. (past Resultative)
	Yesterday	Yuna–NOM	Korean traditional	clothes-ACC wear-PERF-DEC/
				wear-PERF-PAST-DEC.

'Yesterday Yuna was wearing Korean traditional clothes.'

The interpretation of the past meaning of '-ess' is possible due to the past time adverbial 'ecey (yesterday)', otherwise only the present state meaning is possible.

Achievements: [-stative][+punctual][+telic]

Achievements take on two different meanings, when combined with '-ess-'. The verbs combined with '-ess-' refer to either the occurrence of the punctual situation at the moment of speaking or the present resultative following the termination of the situation. However, those combined with '-esses-' refer to either the past completion of the punctual situation or the past resultative state as shown in the following examples .

- (8) a. Yuna-ka ap-ey anc-ass-ta. (present)
 Yuna-NOM front-IN sit-PERF-DEC
 'Yuna is sitting in the front.' (present Resultative)
 'Yuna has just sat down in the front.' (present Perfect)
 - b. Yuna-ka ap-ey anc-ass-ess-ta. (past) Yuna-NOM front-IN sit-PERF-PAST-DEC 'Yuna was sitting in the front.' (past Resultative)

States: [+stative][-punctual][-telic]

'States' combined with '-ess-' or '-essess-' show no semantic distinctions as can be seen in the following examples.

³ Atelicity means that the verbs do not necessarily have the terminal point at which the situation described by the verb is completed.

⁴ PERF represents the perfect aspect.

- (9) a. na-nun yuna-lul salangha-ess-ta. / salanha-ess-ess-ta. I-TOP yuna-ACC love-PAST-DEC. / love-PAST-DEC. I loved yuna.
 - b. Yuna-nun Pusan-eyse sal-ass-ta. / sal-ass-ess-ta. Yuna-TOP Pusan-IN live-PAST-DEC. / live-PAST-PAST-DEC. 'Yuna lived in Pusan.'

4.2 The Semantic Functions of 'sudeni (already)' and the Aspectual Classess of Japanese Verbs.

In this section we will see the functions of the aspectual adverb 'sudeni' in relation to the temporal properties of the aspectual classes.

Activities: [-stative][-punctual][-telic]

The 'te iru' form of activities modified by 'sudeni' expresses only progressive meaning, not perfect or resultative meaning due to lack of telicity.

- (10) a. sudeni yuki-ga hut-te iru. Already snow-NOM fall-SF be-PRES-DEC. 'It's already snowing.'
 - b. Yuna-wa sudeni zibun-no heya-de ason-de iru. Yuna-TOP already herself-GEN room-in play-SF be-PRES-DEC. 'Yuna is already playing in her room.'

Accomplishments: [-stative][-punctual][+telic]

The verbs of this class combined with 'sudeni' take on two readings, i.e. progressive reading and resultative or perfect reading according to whether or not they have resultativity. The verbs without resultativity modified by 'sudeni' exhibit perfect meaning as in (11), while the verbs with resultativity exhibit resultative meaning as in (12).

- (11) Ken-wa sudeni ie-o tate-te iru. Ken-TOP already house-ACC build-SF be-PRES-DECL.
 'Ken is already building a house.' (Progressive)
 'Ken has already built a house.' (Perfect)
- (12) Yuna-wa sudeni kimono-o kite iru. Yuna-TOP already kimono-ACC wear-SF be-PRES-DECL. 'Yuna is already putting on her kimono.' (Progressive) 'Yuna is already wearing her kimono.' (Resultative)

Achievements: [-stative][+punctual][+telic] Achievements are punctual telic verbs with resultativity, hence they exhibit only the resultative when modified by 'sudeni'.

(13) Ken-wa sudeni okite iru.Ken-TOP already get up-SF be-PRES-DECl'Ken has already gotten up.' (Resultative)

States: [+stative][-punctual][-telic]

State vebs modified by sudeni indicate that the state described by the verb is already reached .

(14) Ken-wa sudeni tukare-te iru.Ken-TOP already tired-SF be-PRES.-DECL 'Ken is already tired.'

5 Conclusion

From the observations above, it is concluded that '-ess-' functions either as the perfect aspect marker when combined with telic verbs, implying present state, or as the past tense marker when combined with atelic verbs. '-Essess-' can be separated into '-ess₁-' and '-ess₂-'. '-Ess₁-' has the same grammatical functions as '-ess-', i.e. '-ess₁-' functions either as the perfect aspect marker or the past tense marker according to the aspectual classes of the verbs that they combine. However, '-ess₂-' functions only as the past tense marker. Therefore '-essess-' functions either as the past tense marker when combined with states or activities, or as the past event or past resultative marker when combined with accomplishments or achievements.

The semantic functions of 'sudeni (already)' can be summarized as follows:

'-te iru' + sudeni	activities	+resultative accomplishments	resultative accomplishments	achievements	states
perfect, resultative	Х	resultative	perfect	resultative	Х
progressive	progressive	progressive	progressive	Х	Х

Table 5: The semantic functions of 'sudeni' according to the aspectual classes

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