

On the Interaction of Morphology
and Syntax of the Agglutinative Languages

— A Contrastive Study of Japanese, Korean, and Turkish — *

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0. Introduction

According to the linguistic typological classification, Japanese, Korean, and Turkish we will deal with in the present paper, all belong to the category of the agglutinative languages. A characteristic of this category is that several bound forms denoting the grammatical meanings are successively affixed to the stem denoting the substantial meaning. Although this agglutination is a property of all three languages and appears, at first sight, to manifest itself in an identical way in each, closer investigation shows that this is in fact not the case. Moreover, such morphological differences often influence the syntactic structures and behaviors. The goal of the present paper is to examine in what way the morphology and the syntax of Japanese, Korean, and Turkish interact.

1. Postulate of the Complex Underlying Structure

It has been postulated and demonstrated by generative grammarians that the following Japanese constructions form a complex structure at the underlying level.¹

(1) causative construction

- a. Taroo-ga Hanako-ni tegami-o kak-ase-ta.
Taro-NOM Hanako-DAT letter-ACC write-CAUS-PAST
'Taro caused Hanako to write a letter.'
- b. [Taroo-ga [Hanako-ga tegami-o kak-] sase-ta]

(2) indirect passive construction

- a. Taroo-ga tuma-ni sin-are-ta.
Taro-NOM wife-DAT die-PASS-PAST
'(Lit.) Taro was died on by his wife.'
- b. [Taroo-ga [tuma-ga sin-] rare-ta]

(3) potential construction

- a. Taroo-ga oyog-e-ru.
Taro-NOM swim-POT-PRES
'Taro can swim.'
- b. [Taroo-ga [Taroo-ga oyog-] rare-ru]

(4) desiderative construction

- a. Watasi-ga koohii-o nomi-tai.
I -NOM coffee-ACC drink-DES-PRES
'I want to have a coffee.'
- b. [Watasi-ga [watasi-ga koohii-o nom-] tai]

(5) "---te morau" construction

- a. Kodomo-ga hahaoya-ni monogatari-o yon-de
child-NOM mother-DAT story-ACC read-COMP
morat-ta.
receive-PAST
'The child got the story read by its mother.'
- b. [Kodomo-ga [hahaoya-ga monogatari-o yom-] morat-ta]

(6) "---te hosii" construction

- a. Watasi-ga Hanako-ni uta-o utat-te hosii.
I -NOM Hanako-DAT song-ACC sing-COMP want-PRES
'I want Hanako to sing a song.'
- b. [Watasi-ga [Hanako-ga uta-o utau-] hosii]

For the surface structures like the respective (a) sentences to be derived from the underlying structures taking a complex form as shown in the respective (b)'s, the operations of Equi NP Deletion, Verb Raising, Tree Pruning, Case Marking, etc. must be passed through. When Verb Raising takes place, the suffixes such as sase-ru, rare-ru, and tai in (1)-(4) which stand as the matrix verbs combine with the embedded verbs. On the other hand, the matrix verbs morau 'receive, get' in (5) and hosii 'want' in (6), which are free forms, follow the embedded verbs obligatorily accompanied by the complementizer te.

Now we turn to Korean. Among the six Japanese constructions in (1) through (6), it is only for the causative construction of (1) and for the desiderative construction of (4) that we can assume the complex underlying structure exists in the same way also in Korean.²

(7) causative construction

- a. Taloo-ka Hanakko-eykey phyenci-lul ssu-i-ess-ta.
Taro-NOM Hanako-DAT letter-ACC write-CAUS
'Taro caused Hanako to write a letter.' -PAST-IND
- b. [Taloo-ka [Hanakko-ka phyenci-lul ssu-] i-ess-ta]

(8) desiderative construction

- a. Nay-ka khephi-lul masi-ko siph-ta.
I-NOM coffee-ACC drink-COMP want-IND
'I want to have a coffee.'
- b. [Nay-ka [nay-ka khephi-lul masi-] siph-ta]

In the underlying structures of the causative constructions, Korean as well as Japanese sets the suffix i as the matrix verb. In the underlying structures of the desiderative constructions, however, there is a difference between Japanese and Korean in that the former's matrix verb is the suffix tai, while the latter takes the auxiliary predicate siph-ta 'want' as the matrix verb, inserting the complementizer ko after the embedded verb in the course of the derivation.

The range of realization of Korean indirect passive constructions is even more restricted than that of Japanese; the intransitive indirect passive such as (2) is not possible in Korean. Korean does not possess the suffix expressing potential which corresponds to rare of Japanese, and uses periphrastic expressions such as ---l swu iss-ta and ---l cwul al-ta in expressing potential. The verb pat-ta 'receive, get' in Korean which is equivalent to the verb morau 'receive, get' in Japanese can be made use of as a sole verb, but

cannot function like an auxiliary following another verb. And in Korean, there exists no predicate that precisely corresponds to hosii 'want' in Japanese, so that it is also impossible to get an equivalent for the Japanese ---te hosii construction.

According to my current investigations, it has come to light that in Turkish, among the Japanese constructions given in (1) through (6), only the causative can strictly be regarded as taking a complex underlying structure, as follows:

(9) causative construction

- a. Taro Hanako-ya mektup yaz-dir-di.
Hanako-DAT letter write-CAUS-PAST 3SG
'Taro caused Hanako to write a letter.'
- b. [Taro [Hanako mektup yaz-] dir-di]

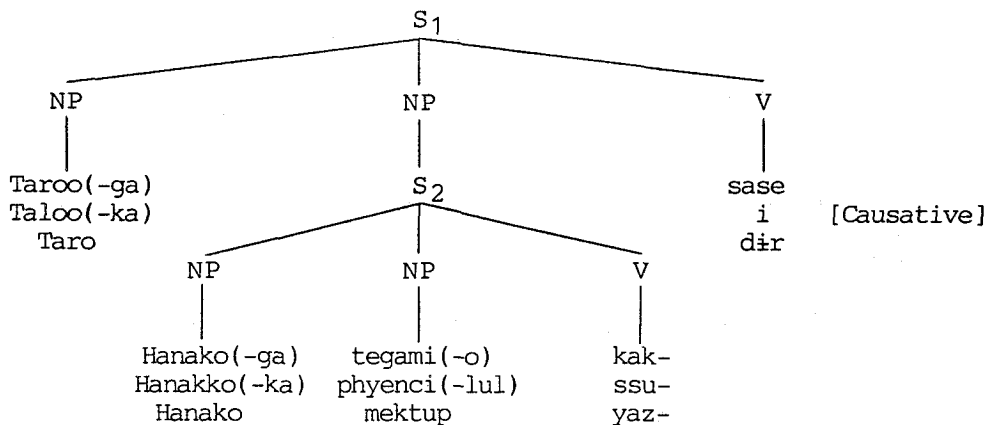
The most important point in this section (which has not yet been directly stated) is that Japanese has a comparatively large number of constructions for which we can postulate a complex underlying structure, whereas Korean and Turkish have far fewer such constructions.

2. Possibility of the Function of the Syntactic and Semantic Behaviors in the Embedded Sentences

As observed in the previous section, Japanese, Korean, and Turkish have one property in common, i.e. the causative construction where the complexly formed structure can be provisionally assumed at the stage of the underlying structure. In the present section, we will proceed with the discussion, making use of the causative construction.

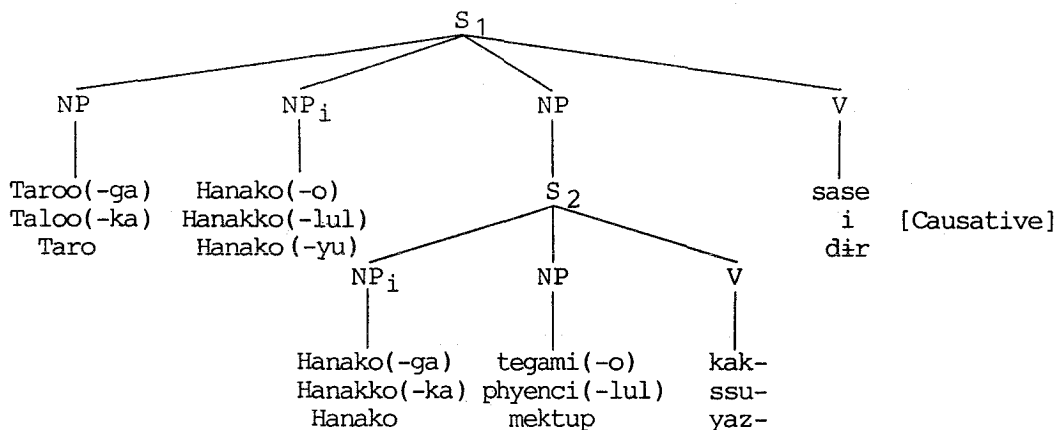
The tree diagrams for the underlying structure of the causative construction are as follows:

(10) a. Dative Causative [ni (Japanese), eykey (Korean),
(y)E (Turkish)]



'Taro let Hanako write a letter.'

b. Accusative Causative [o (Japanese), lul/ul
(Korean), (y)I or \emptyset (Turkish)]



'Taro made Hanako write a letter.'

Even though in this way we can set up the same type of underlying structure which includes a complement for the causative constructions of Japanese, Korean, and Turkish, detailed investigation shows that the syntactic and semantic behaviors in the embedded sentence are not identical in the three languages.

First of all, we will examine Passivization.³ Aissen (1974: 355) cites the following example sentences offered by Susumu Kuno.

(11) ?Boku-wa Mary-o baka-atukai-s-are-sase-te-wa
 I fool-treat-do-PASS-CAUS-ing
 ok-e-nai.
 stand still-can-not
 'I cannot stand still letting Mary be treated like a fool.'

(12) ?Boku-wa wazato Mary-o nagur-are-sase-te
 I intentionally hit-PASS-CAUS-ing
 oita.
 stood still
 'Intentionally, I stood still, letting Mary be hit.'

In this manner, in Japanese the passive-causative rare-sase comes into existence with relatively high, though not completely sufficient, grammaticality. This is supposed to be due to the fact that in the underlying structure of the causative construction shown in (10), Passivization is capable of application to the embedded sentence, before the operations of Verb Raising and the like occur. Korean and Turkish passive-causatives which correspond to (11) and (12) cannot be accepted. It follows that in Korean and Turkish Passivization is not able to apply to the embedded sentence as indicated in (10).

Secondly, we will consider Reflexivization.⁴

- (13) a. Taroo-wa Hanako-ni zibun-no heya-de hon-o
TOP DAT self-GEN room-LOC book-ACC

yom-ase-ta.
read-CAUS-PAST

- b. Taloo-nun Hanakko-eykey caki-uy pang-eyse
TOP DAT self-GEN room-LOC

chayk-ul ilk-hi-ess-ta.
book-ACC read-CAUS-PAST-IND

- c. Taro Hanako-ya kendi oda-sin-da kitap
DAT self POSS 3SG-LOC book

oku-t-tu.
read-CAUS-PAST 3SG

'Taro caused Hanako to read a book in self's room.'

In Japanese the reflexive pronoun zibun refers to both Taro and Hanako, while in Korean and Turkish the antecedent of the reflexive pronouns caki and kendi is only Taro. The reason that, as is common to the three languages, the reflexive pronoun is interpreted as Taro, is that Taro's being the matrix subject meets the condition of Reflexivization. That the reflexive pronoun zibun can make reference to Hanako in Japanese is the outcome of the occurrence of Reflexivization where Hanako is still a subject in the embedded sentence which is retained before Verb Raising and so forth operate. In Korean and Turkish, on the other hand, such a thing does not take place, because in no case is Hanako the referent of the reflexive pronoun.

Thirdly, we will look at Adverbial Modification.⁵

- (14) a. Sensei-ga gakusei-ni issyoo-kenmei-ni
teacher-NOM student-DAT earnestly

hon-o yom-ase-ta.
book-ACC read-CAUS-PAST

- b. Sensayng-nim-i haksayng-eykey yelqsim-hi
teacher-HON-NOM student-DAT earnestly

chayk-ul ilk-hi-ess-ta.
 book-ACC read-CAUS-PAST-IND

c. Öğretmen öğrenci-ler-in-e şevk ile
 teacher student-PL-POSS 3SG-DAT eagerness with

kitap oku-t-tu.
 book read-CAUS-PAST 3SG

'The teacher caused the students to read a book earnestly.'

In Japanese, the act eagerly performed is looked upon both as the causing event, i.e. the teacher's causing the students to read a book and as the caused event, i.e. the students' reading a book, but in Korean and Turkish, only the former interpretation can be made. That is, in Japanese the adverbials are capable of functioning only inside the embedded sentence as well as in the matrix sentence as a whole, whereas in Korean and Turkish the domain of their functioning is the matrix sentence as a whole, and cannot be restricted to the embedded sentence.

Fourthly, we will describe Replacement by soo suru, kuleh-key hata, and şöyle yap- 'do so'.⁶

(15) a. Taroo-ga Hanako-o suwar-ase-ta. Sosite
 NOM ACC sit-CAUS-PAST and

Zi-roo-mo soo si-ta.
 Jiro-too so do-PAST

b. Taloo-ka Hanakko-lul anc-hi-ess-ta. Kuliko
 NOM ACC sit-CAUS-PAST-IND and

Ciloo-to kuleh-key ha-yess-ta.
 Jiro-too so do-PAST-IND

c. Taro Hanako-yu otur-t-tu, ve Jiro da
 ACC sit-CAUS-PAST and too
 3SG

şöyle yap-ti.
 so do-PAST 3SG

'Taro caused Hanako to sit down. And Jiro did so, too.'

The point the three languages share is that soo, kuleh-key,

and şöyle 'so' mean the act of causing Hanako to sit down, namely the content of the causing event. In addition, Japanese soo conveys the meaning of sitting down, namely of the caused event, which does not exist with regard to Korean kuleh-key and Turkish şöyle.

Finally, we can deal with Quantifier Floating, which has not so far been touched upon in the discussion of the problem in this section.^{7,8}

- (16) a. ?Sensei-ga gakusei-ni yo-nin hon-o
 teacher-NOM student-DAT four persons book-ACC
 yom-ase-ta.
 read-CAUS-PAST
- b. *Sensayng-nim-i haksayng-eykey ney myeng
 teacher-HON-NOM student-DAT four persons
 chayk-ul ilk-hi-ess-ta.
 book-ACC read-CAUS-PAST-IND

'The teacher caused four students to read books.'

In both Japanese and Korean, the quantifiers yo-nin, ney myeng 'four persons' are postposed by the dative noun phrases gakusei-ni, haksayng-eykey '(to) students'; the Japanese sentence is more acceptable than the Korean sentence. This fact is attributable to a discrepancy between the two languages, i.e. that in Japanese it is to a certain extent possible for the Quantifier Floating rule to apply to the embedded subject gakusei(-ga) at the level where the complex underlying structure is preserved, whereas this is not possible in Korean.

The foregoing observations in this section lead us to conclude that, in Japanese, the syntactic and semantic behaviors are very active inside the embedded sentence of the

underlying structure of the causative construction, whereas Korean and Turkish do not possess any phenomena that act on such an embedded sentence.

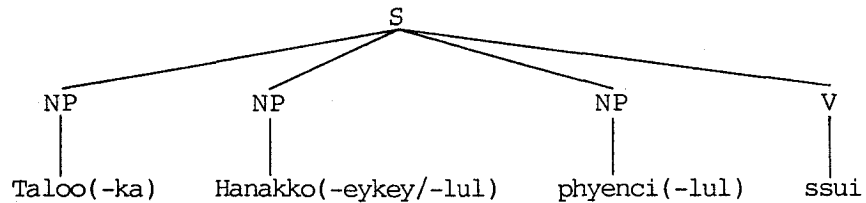
3. Theoretical Implications

The last paragraph of the previous section leads to the following statements. Languages such as Japanese, in which some phenomena are easy to trigger in the embedded sentences, need a lot of information about the embedded sentences themselves for their grammatical description and explanation. On the other hand, such languages as Korean and Turkish, which have no phenomena that take place in the embedded sentences, have little need for information concerning the embedded sentences in establishing their grammars.

In addition to the above-mentioned syntactic aspect, we can point out one characteristic at the morphological level: namely that Korean causative suffixes such as i, ki, li, hi, wu, kwu, and chwu, whose Japanese counterpart sase is productive, are nonproductive ones which are affixed only to the lexically limited stems.

In Korean, accordingly, there is no absolute necessity to set up the complex underlying structure as indicated in (10) for the causative construction, so that an appropriate theoretical description and account can be given by reckoning the complex verb involving a causative suffix as one individual verb and by establishing a flat simplex underlying structure, as follows:⁹

(17)



'Taro let/made Hanako write a letter.'

From the morphological point of view, Turkish causative suffixes dir and t are productive ones that can link up comparatively freely with any verb stem, similar to the Japanese causative suffix sase.¹⁰

Syntactically speaking, however, Turkish differs from Japanese in that, as mentioned earlier, no phenomena operate inside the embedded sentences and no information related to them is required. For this reason, the setting up of the flat simplex underlying structure as in (17) enables us properly to describe and account for a variety of phenomena in Turkish too, on condition that Aissen's (1974) opinions for postulating the complex underlying structures are not accepted as definitive, and above all that the validity of the transformational operation of Verb Raising is called into question.

As noted in Section One, Japanese has more constructions for which a complex underlying structure can be postulated than Korean and Turkish. Also we have seen that in Japanese we can postulate a complex underlying structure for causative constructions more appropriately than in Korean and Turkish, as the former requires more information on the embedded sentences than the latter two languages. In other words, we

can say that the structures which the causative constructions form are completely simplex in Korean and Turkish, but not in Japanese. This syntactic fact correlates strongly with the morphological fact that the power of the combination of the stem with the suffixes is weaker in Japanese than in Korean and Turkish.¹¹

The Lexical Grammar Theory of Japanese was originated in 1980, and has been pushed forward ever since.¹² Its fundamental claim is as follows: The causative marker sase, the passive marker rare, etc. should be given the status of a verbal suffix, but not of an independent verb; all derivational word formations such as "verb stem + sase", "verb stem + rare" and so forth are accomplished prior to lexical insertion. Consequently, not only is no complex underlying structure framed but no transformational operation is employed. Instead, "Functional Structure or Propositional Argument Structure" is proposed.

Unlike Korean and Turkish, Japanese needs a lot of information on the inside of the embedded sentences because it permits various syntactic and semantic phenomena to function there. The framework of Lexical Grammar, although it involves no apparently structural embedded sentences, must also be equipped with devices which can exhaustively pick up information on them.

Farmer (1980: 131-132), for instance, schematizes:

- (18) a. (_____ _____ tabe)
 b. (_____ (_____ _____ tabe) sase)

and syntax of Japanese, Korean, and Turkish. The following is a brief summary of the findings obtained in each section. In Section One, we pointed out that in Japanese there are relatively many constructions for which a complex underlying structure can be postulated, while in Korean and Turkish there are far fewer such constructions. The point at issue in Section Two was that Japanese has the syntactic and semantic behaviors which operate inside the embedded sentence of the underlying structure of the causative construction, but Korean and Turkish never have these behaviors. And ultimately in Section Three, we examined in what way the postulate of the sentence structures interacts with the strength of the combination of the stem with the suffixes, and that Japanese imposes more complicated devices upon the Lexical Grammar Theory than Korean and Turkish, and this theory is therefore more difficult to apply to the former than the latter two languages.

Notes

*This paper is an extended version of Section Three of Tsukamoto (1986), and therefore has some portions overlapping with that paper. I would like to express my gratitude to Takashi Masuoka for having given me invaluable comments and suggestions in preparing for this paper. I am greatly indebted to Yeon-Jin Shin for her Korean data and to Nevzat Artik and Mehmet Külekçi for their Turkish data. My thanks also go to Mutsumi Sugawara, who imparted an accurate and profound knowledge of Turkish to me. Needless to say, the responsibility for any remaining errors is all mine.

¹See, for example, Inoue (1976) and Shibatani (1978).

²The Korean causatives treated in this paper are limited

to the ones where the suffixes i, ki, li, hi, wu, kwu, and chwu are added to the stem, and the periphrastic causative expression such as ---key hata, the causative form such as "noun + sikhita", etc. are excluded.

³ See Aissen (1974: 341-342, 355) on Turkish and Japanese.

⁴ See Shibatani (1973a: 25-27, 1976: 247-248) on Japanese; Shibatani (1973b: 291-293) on Korean; Aissen (1974: 342-343) on Turkish.

⁵ See Shibatani (1973a: 13-22, 1976: 245-247) on Japanese; Shibatani (1973b: 285-289) on Korean; Shibatani (1973a: 35-36) on Turkish.

⁶ See Shibatani (1973a: 22-23, 1976: 248-250) on Japanese.

⁷ See Tsukamoto (1986) for detailed observations and discussions of Quantifier Floating in Japanese and Korean.

⁸ The phenomenon of Quantifier Floating in Turkish is excluded, because it has different nature from that of Japanese and Korean, and cannot be discussed equally.

⁹ Shibatani (1973b) also claims that in Korean the lexical causatives which use the suffixes such as i, ki, li, hi, wu, kwu, and chwu should not be derived from the complex underlying structures.

¹⁰ See Aissen (1974: 326-328) and Shibatani (1984: 41).

¹¹ See also Shibatani (1984).

¹² See Ostler (1980), Miyagawa (1980), Farmer (1980, 1984), Inoue (1983), etc.

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