

A Study on Case Stacking and Case Alternations in Korean: A Base-Generated Approach

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1 Issues

There are at least two conflicting views as the number of *-kas* found in Korean. Schütze (2001) claims that there are two *-ka* - a nominative case marker and a focus marker, which can be used to distinguish *-ka* in (1a) from that 'stacked on top of' the dative *-eykey* in (1b). Following Yoon's (2001) argument, I define that the latter has [+foc] while the former, [+nom].

- (1) a. Georgia-ka pap-ul mek-ess-ta.
 -Nom rice-Acc ate-Decl 'Georgia ate rice.'
- b. Georgia-eykey-ka ton-I manh-ta.
 -Dat-Nom money-Nom many-Decl 'Georgia has much money.'

Contrary to Schütze's claim, Yoon (2001) argues for one morpheme with two functions: [+nom] and [+nom, +foc]. Under Yoon's (2001) analysis, the *-ka* in (1a) has the [+nom], while that in (1b) has the [+nom, +foc], which indicates a non-nominative subject. Though both of these analyses have merit, only Yoon's analysis passes the Cleft Copula Construction (CC) test, where no element with [+nom] can appear immediately before the copula *-i*, as in (2).

- (2) a. *pap-ul mek-un kes-un Georgia-ka-i-ta.
 rice-Acc eat NM-Top -Nom-COP-Decl
 'It is Georgia who ate rice.'
- b. *ton-i manh-un kes-un Georgia-eykey-ka-i-ta
 money-Nom many- NM-Top -Dat-Nom-COP-Decl
 'It is Georgia who has a lot of money.'

In other words, both the *-ka* in (1a) and the one in (1b) cannot occur immediately in front of the copula, as illustrated in (2a) and (2b). This test demonstrates that Yoon's analysis, where *-ka* can function as either [+nom] or [+nom, +foc], can account for why *-ka* cannot appear immediately before the copula, whereas Schütze's analysis cannot explain why the focus marker *-ka* cannot occur in the CC as in (2b). Hence, Yoon's analysis seems to be better able to describe the grammatical properties of *-ka* in Korean.

However, it still cannot explain the full extent of the *-ka* phenomena; *-ka* in (3a) is attached to the locative PP ‘into the box’ and it can occur just before the copula as in (3b).

- (3) a. Georgia-ka sangca-ey-ta-ka ton-ul neh-ess-ta.
 -Nom box-at-Foc money-Nom put-Decl
 ‘Georgia put money into the box.’
 b. Georgia-ka ton-ul neh-un kes-un sangca-ey-ta-ka-i-ta
 -Nom money-Acc put- NM-Top box-at-Nom-Cop-Decl
 ‘It is the box which Georgia put the money into.’

In this paper, I assert that there is a third use of *-ka*, as in (4), whose function is to focus on the non-subject to which it is attached. So I argue that in Korean, *-ka* functions in three different ways, as shown in (4): *ka1* and *ka2* stand for [+nom, +/-foc] and [-nom, +foc], respectively.

(4)	<u>Morpheme</u>	<u>Function</u>	<u>Notation</u>	<u>Slot</u>
	-ka	[+nom, +/-foc]	ka1	Z-Lim
		[-nom, +foc]	ka2	before Delimiter (after (-ta))

Specifically, *ka1* with [+nom, +/-foc] can occur either in the normal subject position as in (1a) or in a so-called case-stacking position headed by existential predicates as in (1b). However, *ka2* of ‘(-ta)-ka’ with [-nom, +foc] in (3) may occur with predicates requiring various thematic roles such as Locative or Instrumental ones. To support my claim that there is a third use of *-ka* in which it functions as a pure focus marker, I will provide data on its working applications.

This paper is organized as follows: In section 2, the distributional behavior and basic properties of the focus *-ka* are introduced. Section 3 outlines how my base-generated approach can explain the properties and distributional behavior of the focus *-ka*. In section 4, I conclude by discussing the consequences of my hypothesis and the residual problems, which may require further study.

2 Basic Properties

2.1 Distributional Behavior

As mentioned above, *ka1* with [+nom, +/-foc] can occur in the normal subject position or in a case-stacking position headed by existential predicates. By contrast, we can distinguish between *ka2* with [-nom, +foc] and the other *-ka* usages by virtue of its occurrence with predicates requiring various thematic roles such as Locative or Instrumental roles, as illustrated in (5).

- (5) a. Georgia-ka siliel-ul wuyu-ey-ta-ka2 pwue mekess-ta.
 -Nom cereal-Acc milk-Loc-Foc pour ate-Decl
 ‘Georgia ate some cereal with milk.’
 b. Georgia-ka Kim-ul khal-(lo)-(-ta)-ka2 cwuki-ess-ta.
 -Nom -Acc knife-Instr-Foc kill-Past-Decl

‘Georgia killed Kim with a knife.’

In (5a), *ka2* is attached to the locative PP subcategorized by the predicate, *pwue mekess-ta*, and can also be attached to the instrumental PP as in (5b). In the Kyungsang dialect, the instrumental PP, *khal-lo-ta-ka*, can be used as either *khal-lo-ka2* or *khal-ka2*. This may challenge the traditional view held by, amongst others, Shim et al (1999) that *-ta* is a shortened form of *-taka*. In addition to Locative and Instrumental PP, *ka2* can occur with Commutative ‘-hako’ or Comparator ‘-pota’ as in (6).

- (6) a. ne-pota-ka2-(nun) nay-ka (te) nas-ta.
 you-than-Foc I-Nom (more) better
 ‘I am better than you.’
- b. i os-i ne-hako-ka2 cal mac-nun-ta.
 this dress-Nom you-with-Foc well match-Decl
 ‘This dress matches with you well.’

Furthermore, *ka2* can also be attached to Adverbial Negative Polarity Items (Ad-NPI) such as *totayche* (‘on earth’) and *tomwuci* (‘in the least’) as in (7).

- (7) Georgia-ka tomwuci/totayche(-ka2/*?-lul) pap-ul an mek-e.
 -Nom in the least/on earth (-Foc/-Acc) rice-Acc not eat-Decl
 ‘Georgia won’t eat any meal at all.’

The aforementioned Ad-NPIs, however, cannot co-occur with the morpheme *-lul*, which seems to suggest that the occurrence of *ka2* is difficult to explain by means of the foregoing analyses. Specifically, since those analyses claim that *-ka* and *-lul* can be attached to durative or frequency adverbs depending on the agentivity or stativity of the predicate, it is difficult to explain how the adverbs occur only with *-ka*. In sum, *ka2* can co-occur with various elements headed by or selected by various predicates, but yet it has some form of complementary relationship with the other *kas*.

2.2 Multiple Occurrence of *-ka* in a Word

The second property of *ka2* is that, even in a CC sentence, it is only when *ka2* is present that more than one ‘-ka’ can be attached to a nominal element. For clarity, we begin by introducing Copula construction in Korean. The Copula can be classified in two different ways: positive copula ‘-i’ and negative copula ‘-ani’. One of the characteristics of Copula construction is that a complement with case-markers such as *-ka* can occur with negative copula (NC), but not with positive copula (PC), as demonstrated in (8).

- (8) a. *Georgia-ka kyoswu-ka i-ta.
 -Nom professor-Nom PC-Decl ‘Georgia is a professor.’
- b. Georgia-ka kyoswu-(ka) ani-ta.
 -Nom professor-(Nom) NC-Decl ‘Georgia is not a professor.’

Given this, it is not difficult to find the data which illustrates the presence of two *-kas* as in (9). It is worthwhile noting that it is only when *ka2* is involved that more than one ‘-ka’ can be attached to a

nominal element in a CC sentence.

- (9) a. Georgia-ka siliel-ul pwue mek-un kes-un mwul-ey-ta-ka2-ka1 ani-ko
 -Nom cereal-Acc put eat NM-Top water-at-Foc-Nom NC wuyu-ey-ta-ka2
 i-ta
 milk-Loc-Foc PC-Decl
 ‘Georgia ate cereal not with water but with milk.’
- b. *ton-i manh-un kes-un Georgia-eykey-ka1-(ka1) i/ani-ta
 money-Nom many- NM-Top -Dat-?-? PC/NC-Decl
 ‘It is Georgia who has a lot of money.’

The fact that two *kas* can be acceptably attached to the locative PP in (9a) shows that if *-ka* functions only as [+nom, +/-foc], it is difficult, under Yoon’s analysis, to account for why (9a) is acceptable and (9b) is not. On the other hand, if *ka2* is a third use of *-ka*, i.e. [-nom, +foc], then the first *-ka* can be regarded as *ka2* and the second, as *ka1*. Moreover, though the complement immediately before the PC should not have a nominative case, the phrase *wuyu-ey-ta-ka* in (9a) has *-ka*, and is still acceptable. While this would be a puzzle under Yoon’s analysis, it is easily supported by my hypothesis.

2.3 Interaction of Locative ‘-ey’ and Dative ‘-eykey’ with *ka2* and ‘-lul’

It is interesting to note that *ka2* can be attached to the NP assigned a Locative by verbs such as ‘deposit’ while the morpheme ‘-lul’ can be attached to the optional complement NP assigned a Directive by verbs such as ‘go’, as shown in (10).

- (10) a. Georgia-ka ton-ul unhayng-ey-ta-ka2/(*-lul) mathki-ess-ta.
 -Nom money-Acc bank-Loc-Foc/(*-Acc) deposit-Past-Decl
 ‘Georgia deposited her money to the bank.’
- b. Georgia-ka hakkyo-ey-lul/(*-ta-ka2) ka-ss-ta.
 -Nom school-Dire-Acc/(-Foc) go-Past-Decl
 ‘Georgia went to school.’

In addition, *ka2* tends to be attached to the object NP with a more Locative –like *-ey/-eykey* which is subcategorized by ditransitive verbs such as ‘give’, but both *ka2* and *-lul* cannot be attached to the PP with a Source Role subcategorized by ‘receive’, as shown in (11).

- (11) a. Georgia-ka ton-ul yanglowen-ey-ta-ka2/(??-lul) cwu-ess-ta.
 -Nom money-Acc a home for the aged-Loc-Foc/(??-Acc) give-Past-D
 ‘Georgia donated her money to a home for the aged.’
- b. Georgia-ka ton-ul Tom-eykey-*(ta-ka2)/(*-lul) pat-ass-ta.
 -Nom money-Acc -Dat-*Foc/(*-Acc) receive-Past-Decl
 ‘Georgia received her money from Tom.’

The aforementioned observations lead us to conclude that if a Dative case is assigned to an element due to

Goal or Source so that *-ey/-eykey* can be attached to it, *ka2* cannot co-occur with it. Rather, *ka2* can be freely attached to the element with a Locative. It appears that the occurrence of *ka2* and *-lul* is not influenced by the agentivity or stativity of the predicate. Though I still need to determine which thematic role corresponds to which case particles, I can now classify *-ka*, *-lul*, *ey/eykey* as follows:

- | | | | |
|------|-----------------|----------------------|-----------------|
| (12) | <i>-ka</i> | <i>ka1</i> | [+nom, +/-foc] |
| | | <i>ka2</i> | [+nom, -foc] |
| | <i>-lul</i> | <i>lul</i> | [+acc, +/-foc] |
| | <i>ey/eykey</i> | <i>dat & loc</i> | [+dat] & [+loc] |

2.4 The Status of *ka2* in Slot Assignments of Nominal Affixes

If *ka2* functions differently from the other *kas*, then the question of where the morpheme *ka2* can rightfully appear must be answered. To do so, I propose that *ka2* can occur between the Conjunctives and the X-Lim in the sense of the Slot Assignments of Nominal Affixes as suggested by Cho & Sells (1995) and as illustrated in (13).

(13) Slot Assignments of Nominal Affixes: (C&S 1995:118)

Postpositions	Conjunctives*	X-Lim	Z-Lim
<i>Eykey(se)</i> 'dative'	<i>hako</i> , 'conjunctive'	<i>man</i> 'only'	<i>(n)un</i> 'topic/focus'
<i>hanthey(se)</i> 'dative'	<i>pota</i> 'comparator'	<i>kkaci</i> 'even'	<i>to</i> 'also'
<i>ey(se)</i> 'locative'	<i>(i)na</i> 'disjunctive'	<i>mace</i> 'even'	<i>(i)lato</i> 'even'
<i>ey</i> , 'directive'	like	<i>cocha</i> 'even'	<i>i/ka</i> 'nominative'
<i>(u)lo</i> 'directive'	<i>pwuthe</i> 'from'	<i>pakkey</i> 'only'	<i>(l)ul</i> 'accusative'
<i>kkaci</i> 'goal'	<i>chelem</i> 'like'		<i>uy</i> 'genitive'
<i>hako</i> , 'comit'			<i>i-</i> 'copula'
<i>(u)lo</i> 'instrumental'			

The morpheme *ka2* can appear immediately after Postpositions such as *-ey*, *-hako*, and *-lo* or Conjunctives such as *-pota* as shown in (5-6). It cannot, however, occur after X-Lim or Z-Lim, as in (7). Specifically, if *-man* in X-Lim or *-i* in Z-Lim precedes *ka2*, the string should be ill-formed.

- (5) a. Georgia-ka siliel-ul wuyu-ey-ta-ka2 pwue mekess-ta.
 -Nom cereal-Acc milk-Loc-Foc pour ate-Decl
 'Georgia ate some cereal with milk.'
- b. Georgia-ka Kim-ul khal-(lo)-(-ta)-ka2 cwuki-ess-ta.
 -Nom -Acc knife-Instr-Foc kill-Past-Decl
 'Georgia killed Kim with a knife.'
- (6) a. ne-pota-ka2-(nun) nay-ka (te) nas-ta.
 you-than-Foc I-Nom (more) better

‘I am better than you.’

b. i os-i ne-hako-ka2 cal mac-nun-ta.
 this dress-Nom you-with-Foc well match-Decl

‘This dress matches with you well.’

(7) ... khal- lo- ta- ka- man -i
 knife- Instr- Foc- ‘only’(X-Lim) – ‘Nom’(Z-Lim)

‘... only with the knife...’

Though the validity of the templatic analysis of inflection affixes is still controversial, I suggest that *ka2* can occur between the Conjunctives and the X-Lim slot in the Slot Assignments of Nominal Affixes as in (13).

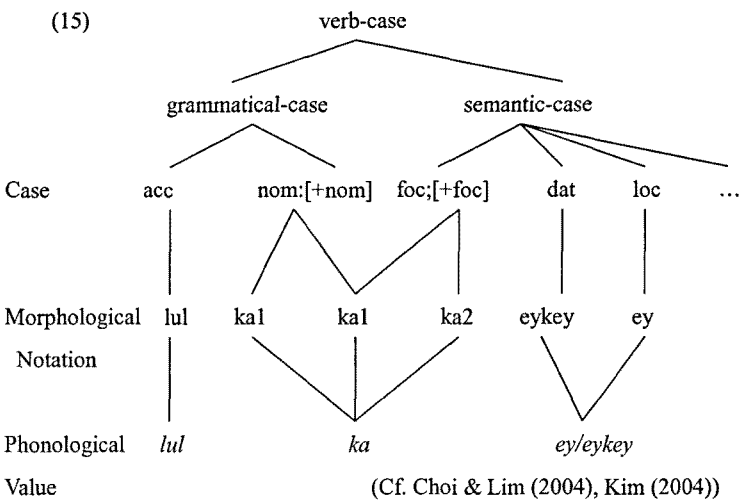
3 A Base-Generated Approach

I have, so far, reviewed the various properties of *ka2* with the aid of the above empirical data. This review can be summarized as follows:

(14) Properties of *ka2*

1. *Ka2* can be attached to the PP with Locative, Instrumental, Commutative and Comparator.
2. *Ka2* may be attached to the Ad-NPIs such as *tomwu-ci*.
3. *Ka* can occur twice in a word only when *ka2* is involved.
4. The occurrence of *ka2* cannot be predicted by the agentivity of the predicate.
5. *Ka2* can be generated between Postpositions and X-Lim.

To accommodate the properties of *ka2* as well as the other *kas* and *ey/eykey*, I provide the following case system for Korean:



This case system specifies that *ka1* and *ka2* must morphologically denote [+nom,+/-foc], and [-nom,

+foc], respectively. If it is assumed that each thematic role should be mapped to a g-case and/or s-case(s) in the lexicon in terms of a linking theory, the set of appropriate phonological realization for a predicate can be predicted by Phonological functions in HPSG.

For clarity, I have used the above data to demonstrate how this system works for the distribution of *-ka*. As mentioned above, *ka1* appears in a normal subject position in (1a) or in a non-nominative subject position in (1b). To account for this, this system can predict which *ka* can appear in which position in a sentence on the basis of the lexical information given in (16).

(16) a. *mek-* 'eat': [ARG-ST <NP[G-CASE *ka1*], NP[G-CASE *lul*]>]

b. *manh-* 'be abundant': [ARG-ST <PP[G-CASE *ka2*, S-CASE *ey/eykey*], NP[G-CASE *ka1*]>]

It is important to note that the subject in (16b), as the first element of ARG-ST list, the value of S(ematic)-Case or G(rammatical)-Case does not have to be realized in Phonological form via Phonological functions. This will explain why Korean particles are used on an optional basis. I have assumed that the occurrence of *ka2* can be regulated by the linking theory mapping a thematic role to case. However, it is clear that *ka2* cannot be easily accounted for under the previous analyses.

4 Conclusions

Though Yoon (2001) provides a neat explanation for the case stacking phenomena, the distributional behavior of *ka2* would be puzzling. The idiosyncratic behaviors of *ka2*, however, are explained by my contention that *ka2* can function as [-nom, +foc]. Consequently, in conjunction with Yoon's analysis, my analysis enables us to account for *-ka*-related Case phenomena in Korean.

My work on this topic can best be described as an on-going project. Although I am not yet in a position to provide a complete explanation of the case system in Korean, I feel that I am able to make a claim of some significance in support of a third use of *ka* in Korean. I intend to pursue further such issues as how to develop a linking theory mapping a thematic role to appropriate case values.

End Notes

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References

- Cho, Y.-M. and P. Sells. 1995. "A lexical account of inflectional suffixes in Korean", *JEAL* 4: 119-174.
- Choi, I.-C. and Lim, K.-S. 2004. "External Arguments and Case Assignment in Korean", Ms.
- Kim, J.-B. 2004. "Korean Case System and Issues in the Computational Implementation", Ms.
- Pollard, C. and I. Sag. 1994. *Head-Driven Phrase Structure Grammar*. Chicago: University of Chicago.

- Schütze, C. 2001. "On Korean 'case stacking': the varied functions of the particles *ka* and *lul*", *The Linguistic Review* 18: 198-232.
- Shim J.-K., et al. 1999. *Phyocwun Kwuke Taysacen*. Kwuklip Kwuke Yeonkwuwen. DooSan Dong-A Publishing Company.
- Yoon, James H-S. 2001. Non-nominative (Major) Subjects in Korean. To appear in *Non-nominative Subject*, Berlin: Mouton de Gruyter.