Multiple Case Marking as Default Case Copying: A Unified Approach to Multiple Nominative and Accusative Constructions in Korean

Byong-Rae Ryu

Department of Linguistics
Chungnam National University
99 Daehak-ro, Yuseong-gu, Daejeon, 305-764, South Korea
ryu@cnu.ac.kr

1 The Puzzles

Basic Data   Given the common assumption that there is at most one subject per clause, the multiple occurrence of subject-like, nominative-marked NPs is puzzling. This puzzling phenomenon can be noticed in various constructions in Korean, notably including inalienable possession constructions (1a) and adjunct nominative constructions (1b).[1]

(1)   a.   [$_{NP_1}$ thokki-ka]   [$_{NP_2}$ kuy-ka]   kil-ta.
           rabbit-NOM   ear-NOM be.long-DECL

   'The ears of rabbits are long.'

   b.   [$_{NP_1}$ yelum-i]   [$_{NP_2}$ maykcwu-ka] masiss-ta.
           summer-NOM   beer-NOM   be.tasty-DECL

   'It is summer in which beer is tasty.'

The key question now arises whether all nominative-marked NPs are subjects, and if not, what is the grammatical status of the nominative-marked non-subject NPs. Despite the ample literature, there remain this and many other related questions unsettled.

Previous Proposals and Problems   Regarding the key question, two main streams of proposals are basically discernible. One stream maintained that both NP_1 and NP_2 are subject, trying to define various notions of subject: e.g., Yu (1909) called them big and small subject, Yoon (2003, 2007) major and grammatical subject, and Lee (2007) subject [Spec, RefP] and subject [Spec, TP], respectively. The other stream posited that only NP_2 is subject, proposing that NP_1 is topic or focus: e.g., Hong (1991) topic vs. subject; Rhee (1999) topic/focus vs. subject; Yoon (1986), Schütze (2001), Kim (2000, 2001, 2004), Kim & Sells (2007), and Kim, Sells & Yang (2007) focus vs. subject; Park (2003) focused subject vs. subject; Choi (2012) sentential specifier vs. subject.

But there remain many essential problems unsolved in the first stream of reasoning, as partly pointed out by Chae & Kim (2008) among others. First of all, a clause with more than one subject is highly odd from a perspective of theory of grammar. Second, there is no straightforward answer to the question of what the logical structure of the clause looks like. Third, the relationship between the various notions of subject – be it big or small, or major or grammatical – is extremely vague. Fourth, there is no convincing independent evidence for

---

[1] The following abbreviations are used in the glosses: NOM (nominative), ACC (accusative), DECL (declarative), PRES (present), PAST (past), REL (relativiser), C (complementizer), LOC (locative), CONJ (conjunction), PASS (passive), and CL (classifier). Note that NOM and ACC have two allomorphs, *i* and *ka* and *lul* and *ul*, depending on the phonological environment.

assuming the various notions of subject in this language and cross-linguistically. Fifth, there are clear difficulties in answering the question as to how the clauses can be interpreted. Finally, there is one more problem which has been touched on from time to time but not explored in detail. This problem comes from the observation that the multiple case-marking phenomenon is not restricted merely to nominative cases, but also observed in accusative case marking. For these reasons, any attempt to wrestle with the various notions of subject may result in confusion of the issue.

Most analyses advancing the second stream of reasoning have been proposed within the framework of Head-driven Phrase Structure Grammar (Sag, Bender & Wasow (2003)). Kim (2004) and Kim, Sells & Yang (2007), most notably, proposed an analysis which basically has three components: First, the feature SPR and the Head-SPR rule, besides SUBJ, are introduced as in (2a). Second, the value of SPR is introduced via SPR Lexical Rule (2b) under the constraint of *subordinate*, a notion borrowed from Na & Huck (1993).[2] Third, NP$_1$ – the value of SPR – is nominative-marked by the constructional constraint *focus-clause*, as formalized in (2c).

(2)   a.   Head-SPR Rule (= (33), Kim (2004); cf. (12), Kim, Sells & Yang (2007))

$$\left[\textit{hd-spr-ph}\right] \quad \rightarrow \quad \boxed{1}\text{NP}, \quad \mathbf{H}\left[\text{SPR} < \boxed{1} >\right]$$

     b.   SPR Lexical Rule (= (12), Kim, Sells & Yang (2007); a revision of (34), Kim (2004))

$$\textit{v-stative} \quad \rightarrow \quad \begin{bmatrix} \textit{v-spr} \\ \text{VAL}\begin{bmatrix} \text{SPR} & < \boxed{2}\,_i> \\ \text{SUBJ} & <\left[\text{SPR} < \boxed{2} >\right]_j> \end{bmatrix} \\ \text{SEM} \mid \text{RELS} \left\langle ..., \begin{bmatrix} \text{RELN} & \textit{subordinate} \\ \text{ARG1} & i \\ \text{ARG2} & j \end{bmatrix}, ... \right\rangle \end{bmatrix}$$

     c.   *focus-clause* (= (14), Kim, Sells & Yang (2007); a revision of (37), Kim (2004))

$$\left[\text{RELS}\left\langle \begin{bmatrix} \text{PRED }\textit{characterized-by} \\ \text{ARG1 } h3 \\ \text{ARG2 } h4 \end{bmatrix}\right\rangle\right] \quad \rightarrow \quad \text{NP}\begin{bmatrix} \text{GCASE} & \textit{nom} \\ \text{FOCUS} & + \\ \text{LBL} & h3 \end{bmatrix}, \quad \text{S}\left[\text{LBL } h4\right]$$

This analysis, however, encounters at least three non-trivial problems. First, given the general consensus that Korean is a specifier-less language, the rule in (2b) lacks empirical independent motivation. Note that, unlike in English or German, a (common) noun does not subcategorize for a specifier in Korean.[3] Second, this analysis in such form as formalized in (2b) cannot account for multiple nominative constructions, since the Head-SPR rule may be applied at most once. For multiple nominative constructions, Kim (2000), but not Kim (2004) and Kim, Sells & Yang (2007), assumed that SPR takes a list with more than one NP as its value. But, this analysis again faces the first problem.

The first and the second problem become more evident in the sentences where a proper noun such as [$_{\text{NP}}$ *Payktamsa-ka*] occurs in the multiple nominative constructions as shown in (3).

(3)   Selaksan-i   [$_{\text{NP}}$ Payktamsa-ka]   tanpwung-i   alumtap-ta.
     Mt. Selak-NOM   Paekdamsa Temple-NOM autumn leaves-NOM be.beautiful-DECL
     'Autumn leaves are beautiful around Paekdamsa Temple in Mt. Selak.'

Third, the semantic constraint *subordinate* is obviously not enough to correctly predict the grammaticality of the sentences. For example, the relationship between *tomato* and *worm* is

---

[2]Choi (2012) proposed a similar analysis, according to which the initial NP is a sentential specifier. As a condition on licensing of the sentential specifier, he assumed a (pragmatic) notion of *aboutness* instead of *subordinate*. He disputed the position that the initial NP is a focus. The focus analysis was criticized by Yoon (2007) in detail.

[3]Moreover, the feature SPR is *ad hoc* in the sense that it is assumed exclusively for double/multiple nominative constructions.

not subsumed by *subordinate*, but the sentence (4a) is grammatical. The relationship between *father* and *son* is a type of *subordinate*, but the sentence (4b) is ungrammatical.

(4) a. thomatho-ka pellye-ka tulkkulh-nun-ta.   b. *apeci-ka atul-i pwuca-ita.
      tomato-NOM worm-NOM be.infested-PRES-DECL   father-NOM son-NOM be.rich-PRES-DECL
      'Tomatoes are infested with worms.'

So far, we showed that the multiple case marking phenomenon is still puzzling in Korean linguistics. The key question mentioned above drives us further to the following questions: (i) what is the grammatical status of the additional NPs, (ii) how the additional NPs are case-marked, (iii) how they are licensed, and (iv) how to process its semantic and pragmatic contributions to the whole sentence.

2 Proposal

The purpose of this paper is to tackle these questions and to argue the following four points: (i) only the right-most NP is the subject or object, and the other additional NPs are adjuncts, (ii) the additional NPs are case-marked via case sharing between the two consecutive NPs, (iii) the additional NPs may optionally be a focus, but it may not assign a case, and (iv) the licensing condition for the additional NPs is *conceptual linking* (henceforth *c-linking*), which I suggest to be assumed cross-linguistically in specifier-less languages.

Multiple Nominative and Accusative Marking   Previously ignored is the insight that multiple identical case marking should be examined in more general contexts in Korean linguistics. There are many pieces of evidence for the insight that multiple case marking is systematically possible in the object as well as in the subject position. This shows that, contrary to previous views, multiple case marking is neither restricted to stative verbs nor to the sentence-initial position.

First, multiple case marking is noticed in the clauses with various predicate types including activity verbs (cf. (8a)), transitive verbs (cf. (5)), light verbs (cf. (7)), and ditransitive verbs (cf. (8b)). This sentence disputes the correctness of the Head-SPR rule, too.

(5) John-i   [$_{NP_1}$ thokki-lul/*ka] [$_{NP_2}$ kuy-lul/*ka]   cap-ess-ta.   (active)
    John-NOM   rabbit-ACC/*NOM   ear-ACC/*NOM grab-PAST-DECL
    'John grabbed the ears of rabbits.'

Second, unduly evaluated is the observation that the licensing of the multiple nominative and accusative NPs is basically constrained by the same condition. It is clear that the conceptual relationship between NP$_1$ and NP$_2$ is identical in the active (5) and in the passive (6). It is also noted that the two NPs are marked with the identical case marker, accusative in (5) and nominative (6).

(6) [$_{NP_1}$ thokki-ka/*lul] [$_{NP_2}$ kuy-ka/*lul] John-eykey cap-hi-ess-ta.   (passive)
        rabbit-NOM/*ACC   ear-NOM/*ACC John-BY   grab-PASS-PAST-DECL
    'The ears of rabbits were grabbed by John.'

More evidence comes from the light verb constructions (LVCs) as in (7), floating quantifier constructions (FQCs) as in (8).

(7) a. John-i   [$_{NP_1}$ thokki-lul] [$_{NP_2}$ kuy-lul] yenkwu-lul   ha-ess-ta.   (active LVCs)
       John-NOM   rabbit-ACC   ear-ACC research-ACC do-PAST-DECL
       'John studied the ears of rabbits.'
    b. [$_{NP_1}$ thokki-ka] [$_{NP_2}$ kuy-ka] yenkwu-ka   toy-ess-ta.   (passive LVCs)
           rabbit-NOM   ear-NOM research-NOM do-PAST-DECL
       'The ears of rabbits were studied.'

(8)   a.   [$_{NP_1}$ haksayng-i]   [$_{NP_2}$ twu myeng-i]   o-ass-ta.   (nominative FQCs)
           student-NOM   two person-NOM come-PAST-DECL

           'Two students came.'

     b.   John-i   [$_{NP_1}$ haksayng-ul] [$_{NP_2}$ twu myeng-ul]   ponay-ess-ta.   (accusative FQCs)
           John-NOM   student-ACC   two person-ACC send-PAST-DECL

           'John sent two students.'

It should be noted that the conceptual relationship between NP$_1$ and NP$_2$ is identical in (5)-(7), and that they are marked with the identical case marker in each sentence. NP$_1$ and NP$_2$ are marked with the same case marker in (8a) and (8b), standing in the same conceptual relation. These data allow us to draw a conclusion that an integrated approach to the multiple identical case marking is promising. We show that this new insight enables us to solve many previously unsettled puzzles.

Adjuncthood   If we adhere to the traditional view on valence values, the only valence available is the adjunct. We propose that the additional case-marked NPs are adjuncts. There are many pieces of evidence supporting this proposal, though not all of them are sufficient and necessary. First, there is no theoretical limit of the number of the additional NPs occurring in the multiple case marking constructions. Second, the additional NPs are not subcategorized for by the predicate. Third, unlike in English or German, a (common) noun does not subcategorize for a specifier in Korean. Fourth, even proper nouns can occur in the multiple case marking constructions.

Case-Copying   The focus analysis such as in (2c) has been challenged by many researchers (cf. Yoon (2007), among others). The main argument against the focus of the additional NPs centers around the observation that not all the additional NPs function as focal points. Partly agreeing with Yoon (2007), I assume that only a subset of the additional NPs can be interpreted as focus, within the topic-focus framework of the functional sentence perspective dating back to Prague school (cf. Gundel (1988) and Vallduvi (1996) among others). I argue against the claim that a non-truth-conditional notion, like focus, functions as a case assigner. Instead, I try to show that case is simply shared between the two consecutive NPs.

On the basis of these pieces of evidence, I propose Head-Modifier Rule as in (9) which is responsible for the generation of the multiple nominative-marked as well as accusative-marked NPs.

(9)   Head-Modifer Rule

$$
\left[phrase \right] \rightarrow
\begin{bmatrix}
phrase \\
\text{MOD} < \boxed{1} > \\
\text{INDEX } i \\
\text{CASE} \,|\, \text{GCASE} \,/\, \boxed{2}
\end{bmatrix},
\mathbf{H}\boxed{1}
\begin{bmatrix}
\text{NON-HD}
\begin{bmatrix}
\text{CASE} \,|\, \text{GCASE} \; \boxed{2} \\
\text{INDEX } j \\
\text{SEM} \,|\, \text{RESTR} \left\langle ..., \begin{bmatrix} \text{RELN} & \textit{c-linking} \\ \text{ARG1} & i \\ \text{ARG2} & j \end{bmatrix}, ... \right\rangle
\end{bmatrix}
\end{bmatrix}
$$

The Head-Modifier Rule in (9) integrates three ideas: (i) the added NP is a modifier, (ii) the grammatical case of the added NP is structure-shared by default with that of the non-head element – be it subject, complement, or adjunct – immediately dominated by the phrasal node being modified, and (iii) the additional NP is licensed by a conceptual constraint which I call *conceptual linking*.

Conceptual Linking Constraints   One of the unsettled questions concerns the licensing condition for the additional NPs. I propose the following hierarchy as a licensing condition for the additional NPs, for which I extend and modify the conceptual mereology proposed in Winston, Shaffin & Hermann (1987). More specifically, I propose the nominative case is shared between the two consecutive NPs, if one of the *conceptual linking* holds between them, while the accusative case is shared between the two consecutive NPs, if one of the *intrinsic linking*

holds between them. In this sense, multiple accusative marking is more restrictive than multiple nominative marking, as previously noticed (cf. Chae & Kim (2008) among others).

Figure 1: Conceptual Linking Hierarchy
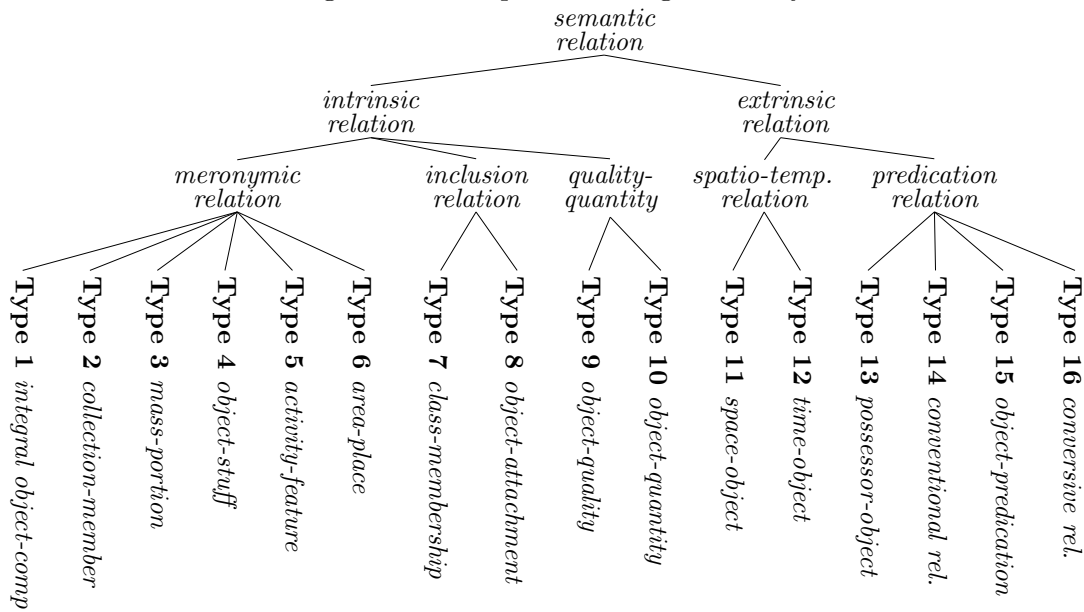
We show that all the conceptual relations are attested in Korean: Type 1 *integral object-component* (elephant-nose; cf (1a)), Type 2 *collection-member* (fleet-submarine), Type 3 *mass-portion* (pie-slice of pie), Type 4 *object-stuff* (KIA car-steel sheet), Type 5 *activity-feature* (golf-putting), Type 6 *area-place* (shoes-sole), Type 7 *class-membership* (flower-rose), Type 8 *object-attachment* (ear-earring), Type 9 *object-quality* (eye-color), Type 10 *object-quantity* (student-two persons; cf (8)), Type 11 *space-object* (tomato-worm; cf (4a)), Type 12 *time-object* (summer-beer; cf (1b)), Type 13 *possessor-object* (person-bag), Type 14 *conventional relation* (car-smell), Type 15 *object-predication* (person-complaint), and Type 16 *conversive relation* (father-son).

The conceptual linking constraints sketched in Figure 1 has many advantages over the previous analyses. It gives an answer to the long standing question how the additional nominative NPs are licensed, bridging the gap found in Na & Huck (1993). It gives also answer to the question as to how to process its semantic and pragmatic contributions to the sentence as a whole. Third, it amounts to the claim that there are at least 16 different types of multiple nominative constructions, exempting such attempts to report further types of multiple nominative constructions as Kim & Sells (2007) did. In addition, it provides us with an answer to the question of in what respects the multiple nominative and accusative constructions are similar and different. In my view, multiple nominative case marking is basically possible if the conceptual relation between the two consecutive NPs is a type subsumed by the types *intrinsic linking* and *extrinsic linking*, whereas the conceptual relation between the two consecutive accusative NPs is a type subsumed by the type *intrinsic linking*.

Further Evidence, Potential Problems, and Solutions A case-sharing mechanism of some sort seems to be necessary in other languages, too. For example, NP-comparatives require that the object of comparison receive the same case as the target, as shown in German.

(10) Hans hat [$_{DAT}$ dem Jungen] mehr gegeben als [$_{DAT}$ dem Mann].
      Hans has the young man more given than the man
      'Hans has given the boy more than the man.' (German, cf. Gerdts and Jhang (1995))

One might think that the following sentences would be potential problems: nominative-locative alternations in (11a), and subject-to-object raising constructions in (12).

5

(11) kongcang-i $\left\{\begin{array}{l}\text{(a) changko-ey}\\\text{(b) changko-ka}\\\text{(c) changko-ey-ka}\end{array}\right\}$ pwul-i   na-ass-ta.

factory-NOM   warehouse-LOC / -NOM / -LOC-NOM   fire-NOM break out-PAST-DECL

'There was a fire at the warehouse in the factory.'   (Kim and Maling (1992))

We suggest that the sentence (11b) is a typical multiple case marking construction, while the sentence (11a) is a case-dropped variation of the sentence (11c), which also shows multiple case marking. In my analysis, the sentence (12a) is a multiply case-shared one, while NP_1 is raised from the embedded clause in (12b). Along the line of Choi (2012) who argued that any element that satisfies the *aboutness* condition can undergo the subject-to-object raising, we can also analyze the sentence (12b) under the assumption of *conceptual linking* constraint and the default case-copying mechanism.

(12)   a. John-un   [[$_{NP_1}$ L.A.-ka] [$_{NP_2}$ kyomin-i]   ceyil manhi san-ta-ko] sayngkakha-n-ta.
            John-TOP   L.A.-NOM   Koreans-NOM most many live-DECL-C think-PRES-DECL

        'John thinks that as for L.A., it has the largest Korean population.'   (cf. Hong (1991))

        b. John-un   [$_{NP_1}$ L.A.-lul] [[$_{NP_2}$ kyomin-i]   ceyil manhi san-ta-ko] sayngkakha-n-ta.
            John-TOP   L.A.-ACC   Koreans-NOM most many live-DECL-C think-PRES-DECL

        'John thinks that as for L.A., it has the largest Korean population.'   (cf. Choi (2012))

If the reasoning above is correct, these potential problems do not pose any difficulties to the proposal made in this paper.

3   Conclusion

This paper presented an integrated unified constraint-based approach to the multiple case marking phenomenon, coping with the multiple nominative and accusative constructions under the same default case-copying mechanism within the framework of Head-driven Phrase Structure Grammar. This paper argued the following four points: (i) only the right-most NP is subject or object, and all the other additional NPs are adjuncts, (ii) the additional NPs are case-marked via case sharing between the two consecutive NPs, (iii) the additional NPs may optionally be a focus, but it may not assign a case, and (iv) the licensing condition for the additional NPs is *conceptual linking*. We showed that this new insight enables us to solve many previously unsettled puzzles without invoking any further *ad hoc* assumptions.

Selected References

Chae, H.-R. & I. Kim. 2008. A Clausal Predicate Analysis of Korean Multiple Nominative Constructions. *Korean Journal of Linguistics* 33, pp. 869-900.

Kim, J.-B. 2004. *Hankwuke Kwukwuco Mwunpep* (written in Korean, *Korean Phrase Structure Grammar*), Seoul: Hankuk Munhwasa.

Kim, J.-B., P. Sells & J. Yang. 2007. Parsing Two Types of Multiple Nominative Construction: A Constructional Approach. *Language and Information* 11, pp. 25-37.

Na, Y. & G. J. Huck. 1993. On the Status of Certain Island Violations in Korean. *Linguistics and Philosophy* 16, pp. 181-229.

Park, B.-S. 2001. Constraints on Multiple Nominative Constructions in Korean: A Constraint-Based Lexicalist Approach. *The Journal of Linguistic Science* 20, pp. 147-190.

Schütze, C. 1996. Korean Case Stacking Isn't: Non-case Uses of Case Particles. NELS 26, pp. 351-365.

Winston, Chaffin & Hermann. 1987. A Taxonomy of Part-whole Relations *Cognitive Science* 11, pp. 417-444.

Yoon, J. H. 2007. The Distribution of Subject Properties in Multiple Subject Constructions. in Y. Takubo *et al.* (eds.), *Japanese/Korean Linguistics* 16, pp. 64-83, CSLI Publications.