

Case Mismatches in Korean

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1 Korean Case Alternations*

In various case alternation constructions in Korean a nominal can be expressed in either the DAT case or with some other case marking. For example, the goal arguments in (1) and (2) can be marked either DAT or ACC and the locative in (3) can be either DAT or NOM.¹

(1) Chelswu-ka Swuni-eykey/-lul chayk-ul cwu-ess-ta.
    C.-NOM S.-DAT/-ACC book-ACC give- PST-IN
    ‘Chulsoo gave Sooni a book.’

(2) Kim-sensayngnim-i Sewul-ey/-lul ka-si-ess-ta.
    K.-teacher,HON-NOM Seoul-DAT/-ACC go,HON- PST-IN
    ‘Prof. Kim went to Seoul.’

(3) Semyukongcang-ey/-i pwul-i na-ss-ta.
    textile factory-DAT/-NOM fire-NOM break out- PST-IN
    ‘Fire broke out in the textile factory.’

Such constructions raise several important issues for the syntactic analysis of Korean. First, should the same syntactic structure be assigned both versions of each sentence despite the difference in case? If so, what level of structure should the clauses share: deep structure, surface structure, or both? And second, where do the two different cases come from?

Gerds (1991) proposed the following answers to these questions. The sentences in (1)-(3) are syntactically identical at all levels of structure, regardless of case marking. They all have two levels of structure: an initial level where the NP is a goal or locative and a final level where the NP is linked to the object or subject position. Case marking proceeds as in (4).

(4) Korean Case (partial):
   a. S-Case
      NOM (-i/-ka) is licensed by a “subject”
      ACC (-ul/-lul) is licensed by an “object”
   b. I-Case
      DAT (-eykey for animates, -ey for inanimates) is licensed by a Goal, Exp, Loc, Ben, etc.

The relevant NP can either appear in DAT, by virtue of its semantic relation, or in NOM or ACC case, by virtue of its final relation. Although some languages, e.g. Icelandic, demand that an I-case such as DAT appear on a dative subject, Korean has no such requirement. Thus, either DAT or NOM case is possible on Korean dative subjects, as in (3). Also, either DAT or ACC is possible on Korean dative objects, as in (1) and (2). In sum, Korean lacks a case resolution rule that would

give priority to either DAT case or NOM/ACC case, and the result is something of a case free-for-all.

In this paper, we discuss three constructions, partwhole contructions, quantifier + classifier constructions, and comparatives, that interact with Korean case alternations. These constructions show that the sort of options that are implied by the lack of a case resolution rule are necessary not only in basic clauses but also in more complex ones.

2 Case Mismatches

First is the part/whole construction. As seen in (5), (6), and (7) the whole and the part NP can both bear case.

(5) Swuni-ka  elkwul-i yeppu-ta.
    S.-NOM  face-NOM  pretty-IN
    ‘Sooni’s face is pretty.’

    Y.-NOM  S.-ACC  hand-ACC  hold- PST-IN
    ‘Yangsoo held Sooni by the hand.’

    I-NOM  Y.-DAT  arm-DAT  shot-ACC  give- PST-IN
    ‘I gave Yumi a shot in the arm.’

These structures have been variously analyzed as ascensions (Chun 1986, Gerdts 1991), unions (Gerdts 1992, Mirto and Rosen 1993), movements (Choe 1987, Kang 1986), and predications Kim 1990). If taken to be unions or movements, data like (7) present a problem, since the indirect object position is not usually considered to be a landing site in Korean (Gerdts 1993). Under a predication analysis, the whole NP is an argument and the part NP is a predicate NP licensed by agreement. Maling and Kim (1992) have pointed out, however, that the agreement analysis cannot be maintained in the face of data such as (8)-(10).

    I-NOM  Y.-DAT/-ACC  arm-DAT/-ACC  shot-ACC  give- PST-IN
    ‘I gave Yumi a shot in the arm.’ (Maling and Kim 1992)

(9) Nay-ka  kongcang-ey/-ul chango-ey/-lul ka-ss-ta.
    I-NOM  factory-DAT/-ACC  storeroom-DAT/-ACC  go- PST-IN
    ‘I went to the factory’s storeroom.’

(10) Kongcang-ey/-i chango-ey/-ka pul-i na-ss-ta.
    factory-DAT/-NOM  storeroom-DAT/-NOM  fire-NOM  break out-PST-IN
    ‘A fire broke out in the factory in the storeroom.’ (Maling and Kim 1992)

Here we see part/whole constructions in case alternation clauses. Maling and Kim note that for some Korean speakers clauses such as (8) can have four different case arrays. Both the whole-NP and the part-NP can be either DAT or ACC. In two of these, where both the whole and the part are DAT or both are ACC, agreement pertains. But for the other two clauses, where Yumi is ACC and phal is
DAT or vice versa, there is a case mismatch. Maling and Kim conclude that the agreement analysis cannot be maintained and propose instead a Direct Case analysis:

(11) Direct Case Hypothesis (Maling and Kim 1992)
   a. the part-NP is assigned case directly by V
   b. the whole-NP is assigned case either by V or by Infl, depending on its surface position.  

The whole-NP and the part-NP both get case directly assigned to them. Following Yoon (1989, 1990), they claim that the part-NP is an argument of the verb and thus receives case directly from the verb. The whole-NP is bound to an unsaturated position within the part-NP. Together the whole-NP and the part-NP theta-bind the verb and thus the whole-NP also can be assigned case by the verb. Given this extra bit of theta-theory, case assignment in part/whole constructions can proceed as usual. In some instances, for example the unaccusative locative inversion clause in (10) above or the passive in (12), the whole-NP moves to subject position and is thus assigned NOM by Infl.

    S.-NOM face-NOM/*ACC Y.-by draw-PAS-PST-IN
    ‘Sooni’s face was drawn by Yangsoo.’

In other cases the whole-NP is assigned case within VP. The part-NP, which is never moved from its VP internal position, always receives case there. In other words, the part and whole NPs share a theta-role, even though each is allowed its own syntactic position and therefore its own case.

After showing that an agreement analysis is also handicapped by the fact that predicate nominals do not generally agree anyway, Maling and Kim go on to claim that case-agreement is limited to so-called Quantifier-floating. In Korean, quantifiers can appear discontinuously from the NPs they modify, can occur with a classifier, and in addition can carry case, as (13)-(15) show.

    student-PL-NOM three-CL-NOM go- PST-IN
    ‘Three students went.’

    J.-NOM student-PL-ACC three-CL-ACC meet- PST-IN
    ‘John met three students.’

    ‘John gave books to two students’

It is generally assumed that some kind of agreement is responsible for the case on the quantifier + classifier. However, if we examine quantifiers in case alternation constructions, we find that, like part/whole constructions, case mismatches are possible for some speakers of Korean.
Following Maling and Kim’s logic regarding part/whole constructions, we must conclude that case in quantifier + classifier constructions does not arise through agreement. Furthermore, we can ask if a Direct Case account along the lines of (11) could handle these data. Leaving aside the issue of the initial structure that would be necessary in order to invoke the theta-theoretical devices necessary, we nevertheless see that data like (13) are problematical for (11). The quantifier, in parallel to the part-NP, should be assigned case verb internally. However, unergative verbs such as the one in (13) are not inherent case assigners. So we find that we cannot implement the Direct Case hypothesis for quantifier + classifier constructions. We nevertheless want to keep the insights of the Maling and Kim analysis, namely that case mismatches arise only in case alternation contexts.

Comparatives are a third construction exemplifying case mismatches. Jhang (1994) discusses NP-comparatives like those in (19)-(21).

(19) Mary-pota John-i (te) hyenmyengha-ta.
     M.-than J.-NOM more smart-IN
     ‘John is smarter than Mary.’

(20) John-i sakwa-pota kamca-lul (te) manhi mek-ess-ta.
     J.-NOM apple-than potato-ACC more many eat-PST-IN
     ‘John ate more potatoes than apples.’

(21) John-i Yumi(-eykey)-pota Mary-eykey senmwul-ul (te)
     J.-NOM Y.(-DAT)-than M.-DAT gift-ACC more
     manhi cwu-ess-ta.
     many give-PST-IN
     ‘John gave more gifts to Mary than to Yumi.’

NOM and ACC case do not co-occur with the comparative postposition -pota, as (19) and (20) show. However, DAT can optionally co-occur with -pota, as in (21). In (22)-(24) we see what happens when case alternation constructions are combined with comparatives.
The compared NP can optionally take DAT case. Furthermore, there is no way to invoke a Direct Case approach to these data since this would entail a claim that the target and the object of comparison share a single theta-position. In summary, we have seen three instances of case mismatches, in part/whole, quantifier + classifier, and comparative constructions—all in case alternation contexts of the sort observed in basic clauses. We also see that an analysis given for case in part/whole constructions, the Direct Case hypothesis, cannot be extended to account for case on quantifiers or NPs of comparison. So, if we want a single explanation for case mismatches, some other analysis must be proposed.

The remainder of the paper will be devoted to briefly presenting such an analysis. We will review the analysis of comparatives given by Jhang (1994), show how case mismatches can be handled, and then extend this analysis to account for the other structures with case mismatches.

### 3 Comparatives as Tandem Structures

Recent analyses of coordination have relied on three-dimensional structures. For example, Goodall (1987) adopts a view of syntax that allows pairs of nodes to exist in parallel, such that neither one dominates or precedes the other. These so-called parallel structures are used in the treatment of coordination and causatives. For example, a coordinate clause such as (25a) can be represented as the parallel structure in (25b); beer and whiskey simultaneously occupy the object position in the clause, though on different dimensions.


\[\text{John drinks } \leftarrow \text{beer and whiskey}\]

They are subject to identical semantic and syntactic conditions, including case assignment: all such conditions will apply in duplicate.
In a recent dissertation, Moltmann (1992) refines Goodall’s treatment of coordination and extends it to comparative structures. The crux of her analysis is that comparatives have two syntactic structures simultaneously: a 3-dimensional coordinate structure (26b) and a two-dimensional subordinate structure (26a).

(26) (a) The same amount of alcohol makes a woman more drunk than a man.

(b) The same amount of alcohol makes NP $\triangleleft$ t-much drunk

a woman

a man

This double structure is difficult to conceptualize, no less to represent. We will refer to this as a **tandem** structure, since we have found that the informal metaphor that helps to conceptualize this dual structure is a tandem bicycle. When viewed from the side, we see the two coordinated cyclists, pedaling together, but when viewed from the front, we see the first cyclist as the leader and, the subordinated second cyclist (if visible at all) as following.

This duality accounts for some otherwise paradoxical properties of comparatives. For example, comparatives act like subordinate structures with respect to the Coordinate Structure Constraint (27) and Topicalization (28).

(27) (a) Who t saw Mary earlier than Bill saw Sue?
    (b) Who t came more often than Mary?
    (c) Who did Mary earn more money than t?

(28) (a) Than John, certainly no one has done more. (Napoli 1983)
    (b) *And/or John, Mary saw Bill. (Napoli 1983)

Jhang (1994) has shown that Korean comparatives also behave like subordinate structures in topicalization (29), and not like coordinate structures (30).

(29) John-pota(-nun) pwunmyenghi Mary-ka (te) pwucilenha-ta. J.-than(-TOP) certainly M.-NOM more diligent-IN
    *‘Than John, certainly Mary is more diligent.’

(30) *John-kwa/kuliko(-nun) pwunmyenghi Mary-ka pwucilenha-ta. J.-and(-TOP) certainly M.-NOM diligent-IN
    *‘And John, certainly Mary are diligent.’

In other respects, comparatives behave like coordinate structures. For example, Across the Board Movement (31) and Right Node Raising (32) are possible (Napoli 1983).

(31) Mary, I have seen more pictures of t than books about t.
(32) More people admire than love this woman I met yesterday in the park.

Also, the object of comparison and the target of comparison seem to be subject to identical semantic and syntactic requirements, parallel to the treatment of conjunct NPs. Conditions seem to apply in duplicate, once per NP.
In addition, Moltmann claims on the basis of the German data in (33) that NP-comparatives require that the object of comparison receive the same case as the target.

(33) Hans hat dem Jungen mehr gegeben als dem Mann.

'John has given the boy (DAT) more than the man (DAT).'

We have seen, however, that in the case of Korean comparatives this claim is too strong, since case mismatches are possible, as the data in (22)-(24) show. How can we maintain the claim that the object of comparison and the target of comparison are subject to the same case assignment rules? After all, if both NPs have identical semantic and syntactic relations at all relevant levels of structure, and case is sensitive to these, how could they fail to have the same case?

What we claim is that, in fact, the case assignment rules already familiar to us, namely those in (4), apply in tandem to each NP. Both DAT and NOM or ACC are licensed by the case assignment rules. Where the NPs can diverge however, is in the application of case resolution. As in simple clauses, in the situation where either DAT or NOM/ACC is available, the NP can license either case. In Korean it does not matter which case surfaces. In Korean comparatives, it simply does not matter twice.

So our claim then is that case assignment proceeds in Korean, as in other languages, in a tandem fashion in comparatives, as expected by Moltmann. The difference between Korean and languages like German with respect to case in comparatives is not how or when case is assigned, but rather how multiple case assignment is resolved.

4 Other Tandem Structures

Now let’s return to the other structures that allow case mismatches in Korean and see if the tandem analysis can be extended to them. It is easy to conceive of both the quantifier + classifier construction and the part/whole construction as tandem structures. Their coordinate structures would be represented as in (34) and their subordinate structures would be paraphrased as in (35).

(34) Coordinate structure:
   a. students > went
   b. Sooni Yangsü held <
      three people hand

(35) Subordinate structure:
   a. The students (numbering) three went.
   b. Yangsöoh held Sooni (by) the hand.

Moreover, conceiving of the structures in this way helps accommodate some of their paradoxical properties. First, both NPs contribute to clausal meaning and must meet selectional requirements. In most cases, a grammatical sentence results, even if only one NP is present (see (36) and (37)).

(36) Sey-myeng-i ka-ss-ta.
    three-CL-NOM go- PST-IN
    ‘Three (people) went.’
In the case of part/whole constructions, it has been argued by some (for example, Kim 1990) that the whole-NP should be regarded as the argument and the part-NP as the modifier on the basis of the part’s optionality (as in (37); while others including Maling and Kim (1992) and Mirto and Rosen (1993) have argued that it is the part and not the whole that can be considered optional on the basis of examples like the following:

     I-NOM Y.-DAT (arm-DAT) shot-ACC give-PST-IN
     ‘I gave Yumi a shot (in the arm).’

Under a tandem analysis, both NPs contribute to the meaning. They both meet selectional requirements. They present alternative viewpoints on the same entity. Specialized conditions are simply a matter of verb semantics. Nevertheless it is clear that the two NPs are not equal in all respects. The quantifier or part NP cannot precede, as (39) and (40) show, and moreover they cannot be relativized, as (41) and (42) show.

(39) *Sey-myeng-i haksayng-tul-i ka-ss-ta.
     three-CL-NOM student-PL-NOM go- PST-IN
     ‘Three students went.’

(40) *Elkwul-i Swuni-ka yeppu-ta.
     face-NOM S.-NOM pretty-IN
     ‘Sooni’s face is pretty.’

     B.-NOM Mary-ACC hand-ACC held- PST-IN
     ‘Bill held Mary’s hand.’

     b. *[Bill-i Mary-lul cap-un] son (Choi 1988)

     Bill-NOM cook-ACC two-CL-ACC eat- PST-IN
     ‘Bill ate two of the cookies.’

     b. *[Bill-i (ku) kwaca-lul mek-un] twu-kay (Choi 1988)

A subordinate structure, as paraphrased in (35b), can accommodate these asymmetrical properties.

So we see that not only is a tandem structure conceivable for quantifier + classifier and part/whole constructions, but this structure captures some of the paradoxical properties of these constructions. As for case in quantifier + classifier and part/whole constructions, the rules in (4), together with freedom of choice as to which case appears on the surface, will accommodate the array of cases found in these structures, including case mismatch data.12
5 Conclusion

In conclusion, we have posited that Korean comparative, quantifier + classifier, and part/whole constructions are tandem structures (that is, they are simultaneously coordinate and subordinate structures). This dual structure accounts for some otherwise paradoxical properties of these structures. Furthermore, the NPs occupy parallel syntactic positions. The usual case assignment rules apply in tandem structures, only twice. Each NP undergoes all the relevant case assignment rules; the same cases are assigned to each NP.

Given this, how do we account for case mismatches? In case alternation constructions in tandem structures, the choice of I-case versus S-case is made twice, once for each NP. This follows from the lack of a case resolution rule in general in Korean. Languages that are not liberal with respect to case resolution will not tolerate case alternation constructions and so, even if these languages have advancements and tandem structures, case mismatches will not arise. Case mismatches of the sort found in Korean will doubtlessly be extremely unusual in the languages of the world.

The approach to case mismatches given here is very similar in spirit to the Direct Case hypothesis of Maling and Kim (1992). They both capture the insight that the most efficient account of the data is to let whatever case assignment rules apply in simple structures apply in complex structures, only twice. Our approach differs in a couple of key respects, however. First, we use parallel structures rather than an implied possessive relation to allow the NPs to share a theta-position. So we can treat case mismatches in quantifier + classifier and comparative constructions as well as part/whole constructions. Also, our analysis depends crucially on a two-level view of case assignment in Korean as in (4). In case alternation constructions, the relevant NP is assigned case twice, then a resolution rule, or, more precisely, the lack of it, allows either case to be phonologically realized. More case gets assigned than actually appears. This view allows the tandem nominals to share a syntactic position in the clause-level syntax. The same case rules will apply to both NPs.

Furthermore, we claim that the two NPs will operate in tandem in the clause-level syntax. So, for example, in our analysis of the passive in (12), both the part and the whole are initial objects (one in each dimension) and both NPs advance to occupy the subject position and thus both are assigned NOM case. This contrasts with the Direct Case analysis, which uses the two-part rule in (11). The part- and the whole-NPs can, in fact, get the same case but for different reasons. Maling and Kim point out that under their analysis only one NP can move to [Spec, IP]. The part-NP(s) will always be VP-internal. Thus, the part gets NOM VP-internally while the whole gets NOM from Infl. Since double NOM part/whole constructions seem to be limited to passives and unaccusative contexts, Maling and Kim’s analysis seems to be equally efficacious as the tandem structures analysis. However, it does not account for quantifier + classifier structures, since double NOM is possible in unergative and ergative contexts. See, for example, (13). So we conclude that a tandem structures analysis, since it accounts for all the case in three types of constructions, is a more adequate account of the case mismatch data than the Direct Case analysis.
Notes

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1The structure of (1) is discussed in Gerds 1986, the structure of (2) in O’Grady (1991), and the structure of (3) in Gerds and Youn (1988, 1990).

2There is some variation of opinion about the grammaticality of these various sentences. Maling and Kim (1992) give the sentence with Yumi in DAT and phal in ACC a single question mark. Most of the people we have consulted judge this to be ungrammatical. Following Maling and Kim’s lead, we will construct a grammar that can generate all of the case possibilities. We presume that various surface constraints on certain sequences of case held by some but not all speakers will rule out the ungrammatical sentences.

3Maling and Kim (1992) are assuming that the spec of IP is the only possible landing site in Korean. Thus, the whole NP is assigned ACC or DAT for ACC VP-internally. Their analysis can be easily adapted to the claim that ACC is also a landing site; for example, ACC can be associated with the spec of agrO. For the purposes of our discussion here, nothing crucially depends on which version of the Direct Case Hypothesis is adopted.

4Data like the following, pointed out in Gerds (1993), call into question the claim that there is an unsaturated position, presumably the possessive NP, in the part NP, since a plain or reflexive pronoun can appear within the part NP.

   I-NOM Y.-DAT her/self-GEN arm-DAT shot-ACC give-PST-IN
   ‘I gave Yumi a shot in her arm.’

5We have an alternative account of such data, as discussed in the conclusion.

6Maling and Kim only considered cases of quantifier-float where there was no classifier. As Gerds (1987) and others have pointed out, only NOM and ACC (not DAT) case can appear on plain quantifiers. We have no explanation for the difference in behavior between plain quantifiers and quantifiers with classifiers.

7Some speakers dislike sentence (15). The double DAT case here, they claim, sounds awkward.

8Many speakers dislike the data in (16-18). They prefer the quantifier + classifier to appear without case at all.

9These clauses, in addition to have the given reading, can also mean: ‘Fire broke out in two places within the textile factory.’ This reading is especially strong when semyuikongcang is DAT.

10Data involving both eykey and pota are actually a type of case stacking (Gerds 1991). Not all speakers like such data, greatly preferring simply pota.

11Many speakers accept case mismatches in comparatives even though they do not like case mismatches in part/whole or quantifier + classifier constructions. We have no explanation for this.
To make our claim more precise, only tandem structures, that is tandem structures that have simultaneous coordinate and subordinate structures, will exhibit case mismatches. Some preliminary research has shown that coordinate structures, which are not tandem structures, do not allow case mismatches. For example, the data in (i) shows coordination with the comitative postposition -wa in a case alternation context; the goal can appear in either DAT or ACC case.


For speakers who allow case stacking, DAT can optionally appear before -wa as in (ii-iv), but here ACC case is not possible on the goal or locative.


(iii) Semyukongcang-ey-wa sinpalkongcang-ey/*i pwul-i textile factory-DAT-CONJ shoe factory-DAT/NOM fire-NOM na-ss-ta. break out-PST-IN ‘Fire broke out in the shoe factory and in the textile factory.’


We claim, therefore, that coordination has an additional case matching condition lacking in tandem structures:

(v) Case on a comitative NP, when it appears, must match the case on the NP it is coordinated with.

Actually, there is some disagreement among speakers about the status of ergative multiple NOM constructions. Youn (1989) claims that (i) is ungrammatical, but Choi (1988) claims that (ii) and (iii) are grammatical.

(i) Chelswu-uy/*ka cwumek-i chayksang-ul naylyechi-ess-ta. C.-GEN/NOM fist-NOM desk-ACC smash down-PST-IN ‘Chulsoo’s fist smashed down on the desk.’

(ii) Ku pwun-i moksole-ka wuli-lul wiap-ha-n-ta. the man-NOM voice-NOM we-ACC intimidate-do-PRES-IN ‘The man’s voice intimidates us.’

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The man's behavior gives/is a good lesson to his disciples.

We know of no other speakers that accept the data in (ii) and (iii). Nevertheless, if Choi’s judgements hold for some speakers, they present a series challenge to the Direct Case Hypothesis (11) since the part-NP must receive case VP-internally but transitive verbs do not assign a VP-internal NOM case. Such data also challenge union analyses (Gerds 1992, Mirto and Rosen 1993) since these analyses depend crucially on the 2-hood of the ku pwun.

References


