

Notes on Case Stacking and Pseudo-ECM Constructions^{*}

Hee-Don Ahn¹ & Sungeun Cho^{2†}

¹Konkuk University, ²Yeungnam University

ABSTRACT

This study investigates the mechanisms for licensing structural cases within a minimalist framework, focusing on two key approaches: case-by-agreement and the dependent case. The case-by-agreement model assigns grammatical cases through agreement with functional heads, such as T or v, based on feature matching via the Agree operation. In contrast, the dependent case approach posits that case assignment is determined by the presence of competing nominals within a local domain. By examining case stacking and pseudo-ECM(exceptional case marking) constructions in Korean, this study demonstrates the limitations of case-by-agreement in accounting for unexpected case marking, such as accusative-marked subjects. The dependent case model, with its relational view of case, offers a more flexible explanation, particularly for complex phenomena such as Korean case stacking. Additionally, parallels between PP/NP subjects in English and major/grammatical subjects in Korean suggest universal principles of case assignment and subject behavior. This study argues that the dependent case approach provides a more robust, minimalist-consistent framework for analyzing cross-linguistic case phenomena.

Keywords: case theory, case-by-agreement, dependent case, case stacking, pseudo-ECM, PP subjects in English

1. Introduction

Case theory addresses the syntactic mechanisms involved in licensing structural case to noun phrases (DPs). Within the minimalist framework, this process involves a functional head checking a feature on the DP, as illustrated in (1).

(1) The Case-by-Agreement Approach

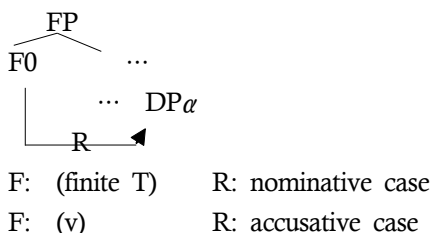
* We would like to sincerely thank the three anonymous reviewers of this journal for their constructive and insightful comments. Their feedback has been instrumental in refining our analysis and improving this work's overall clarity and rigor. This paper was supported by Konkuk University in 2022 (First author).

† Corresponding author: scho1007@ynu.ac.kr



Copyright © 2024 Language Education Institute, Seoul National University.

This is an Open Access article under CC BY-NC License (<http://creativecommons.org/licenses/by-nc/4.0>).



This approach, referred to as the case-by-agreement approach (cf. Baker 2015; Levin 2017), posits that the grammatical case of a noun or pronoun is assigned through an agreement mechanism with another syntactic element, typically a functional head such as T or v. The Agree operation entails feature matching and valuation between a probe and a goal under the c-command condition. During this process, the probe (e.g., T) searches its c-command domain for a goal (e.g., a DP). Once the probe identifies an appropriate goal, it values its own features based on those of the goal, while simultaneously assigning a case value to the goal. For instance, when T agrees with a DP, the DP receives nominative case; when v agrees with a DP, the DP receives accusative case. This approach aims to explain case assignment in a manner that adheres to minimalist principles, striving for the most economical and unified explanation of case licensing, in line with the overarching goals of simplicity and efficiency.

However, there are instances where case-by-agreement approaches fail to provide an adequate explanation. One such example is the accusative-marked embedded subject in Sakha, a Turkic language, as illustrated in (2).

- (2) Keskil [Aisen-y kel-bet dien] xomoj-do.
 Keskil Aisen-ACC come-NEG.AOR.3sS that become.sad-PAST.3sS
 ‘Keskil became sad that (because) Aisen is not coming.’
 (Vinokurova, 2005:366)

In this instance, the embedded subject *Aisen* is marked with accusative case, despite the absence of a transitive verb in either the embedded or matrix clause. Under case-by-agreement approaches, feature matching between an intransitive v and the embedded subject should be impossible; nonetheless, *Aisen* still receives accusative case marking. Notably, sentence (2) features an intransitive verb, whereas standard ECM constructions typically involve a transitive verb. Consequently, we refer to this construction as a pseudo-ECM construction. This

pseudo-ECM pattern is not accounted for by case-by-agreement mechanisms, thereby exposing a limitation in their explanatory capacity for such data.

As noted by Baker (2015) and Levin (2017), case stacking presents significant challenges for case-by-agreement approaches, which generally assume a one-to-one correspondence between DPs and case markers. An illustrative example of case stacking can be observed in Amis (a Formosan language spoken in Taiwan), as demonstrated in (3):

- (3) Ma-fana' kako **to-ko-ni** Panay
 IPFV.STAT-know 1SG.NOM **ACC-NOM-GEN.PN** Panay
 mi-liyas-to inacila.
 IPFV.AV-leave-ASP yesterday
 'I know that [Panay]_{CT} left yesterday.' (Chen, 2018:21)

In this example, the embedded subject *ni Panay*, which bears genitive case, undergoes contrastive topicalization, marked by nominative case. Upon moving into the matrix clause, it is further assigned accusative case, resulting in case stacking. Case stacking poses a challenge for agreement-based theories that assume a one-to-one correspondence between probes and goals. Baker and Vinokurova (2010) propose a framework that integrates case-by-agreement and dependent case theory within a single language system. Chen (2018) adopts the dependent case approach to explain how case feature values are determined and accounts for multiple case assignments arising from multiple agreement mechanisms.

Levin and Preminger (2015), however, argue that such a reconciliation is unwarranted. Building on their insights, we offer an analysis of both case stacking and case alternation in the pseudo-ECM construction within the framework of the dependent case approach. This analysis sheds light on the complexity and flexibility of language structures, advancing our understanding of case theory and broadening our perspective on case licensing processes. By examining how multiple case markers can be assigned to a single noun phrase and identifying the specific contexts in which case alternation occurs, we deepen our understanding of the syntactic mechanisms governing case licensing and their application in Korean.

This paper addresses the case phenomena in Korean within the framework of the dependent case approach. The paper is structured as follows: Section 2 examines case alternation in pseudo-ECM contexts under the dependent case approach, while Section 3 investigates case stacking in Korean. Concluding remarks are provided in Section 4.

2. Pseudo-ECM and Dependent Case Model

In Korean, as demonstrated by Sakha, an embedded clause can have an accusative subject, as illustrated in example (4).

- (4) Chelswu-ka Yenghi-lul kapcaki cwukesstako wuwulhayhayssta.
 C.-NOM Y.-ACC suddenly died depressed.felt
 ‘Lit. Chelswu felt depressed that Yenghi died.’

In this example, although the embedded subject *Yenghi* could theoretically participate in an Agree operation with the finite T in the embedded clause, it is marked accusative rather than nominative. This further raises questions about the adequacy of case-by-agreement approaches in accounting for such instances of case marking in Korean.¹⁾

In line with the accusative subject in Sakha, the accusative subject in Korean cannot be licensed by the matrix predicate *wuwulhayhayssta* ‘felt depressed’, as it cannot function as a transitive verb capable of assigning accusative case, as demonstrated in (5).²⁾

1) Numerous insightful analyses have been proposed for standard ECM constructions in Korean (Lee, 1988; J. M. Yoon, 1989, 1991, 1993, 1998; Lee, 1991, 1995; Park, 1994; Yoon, 1996, 2004; Hong, 1997; H. Park, 2001; Kim & Kim, 2003; Choi, 2009; among others). These analyses generally assume that the matrix transitive verb licenses accusative case for the embedded subject, as illustrated in (i):

- (i) Chelswu-nun Yenghi-lul_i [_i chencay-iessta-ko] mitmunta.
 C.-TOP Y.-ACC genius-was-C believes
 ‘Chelswu believes that Yenghi was a genius.’

However, none of the existing analyses address pseudo-ECM constructions in Korean. In traditional ECM (Exceptional Case Marking) phenomena, the accusative case of the subject in the subordinate clause is typically analyzed as being assigned by the matrix verb. By contrast, in pseudo-ECM constructions, the accusative case of the subject in the subordinate clause cannot be attributed to the matrix verb, as the latter is not a transitive verb capable of licensing an accusative case. This study is therefore significant in that it offers a unified account of both traditional ECM and pseudo-ECM constructions through the theoretical framework of dependent case theory.

- 2) A reviewer contends that *wuwulhayhayssta* ‘felt.depressed’ functions as a transitive, similar to *yeppehata* ‘cherish’.

- (i) Yenghi-ka ai-lul yeppehayssta.
 Y.-NOM child-ACC cherish
 ‘Yenghi cherished a child.’

However, as we will see later in example (12), while *wuwulhayhayssta* ‘felt.depressed’ is a two-place

- (5) Chelswu-ka (*chinkwu-uy cwukum-ul) wuwulhayhayssta.
 C.-NOM friend-GEN death-ACC depressed.felt
 'Intended: Chelswu felt depressed over his friend's death.'

Additional examples of intransitive verbs that exhibit the same pattern as *wuwulhayhayssta* 'felt depressed' include:³⁾

- (6) a. Chelswu-ka Yenghi-lul kapcaki cwukesstako pamsaytolok wulessta.
 C.-NOM Y.-ACC suddenly died all night cried
 'Lit. Chelswu cried all night that Yenghi died.'
 b. Chelswu-ka Yenghi-lul kapcaki cwukesstako khukey cwacelhayssta.
 C.-NOM Y.-ACC suddenly died deeply devastated

predicate, it cannot license an internal argument marked with the accusative case, unlike a transitive verb such as *yeppehata* 'cherish'.

- (ii) *Chelswu-ka Chinkwu-uy cwukum-ul wuwulhayhayssta.
 C.-NOM friend-GEN death-ACC depressed.felt
 'Intended: Chelswu felt depressed over his friend's death.'

Both *sulphehata* 'feel sad or grieve' and *wuwulhayhata* 'feel depressed' share the morphological form *-ehata* 'feel'. However, the former demonstrates stronger transitivity, whereas the latter exhibits relatively weaker transitivity. Independent of the discussion on the possibility of accusative case marking presented in the main text, an additional piece of evidence lies in the availability of imperative or propositive forms. While *sulphehata* 'feel sad' allows for imperative/propositive usage to some extent, *wuwulhayhata* 'feel depressed' does not permit such usages.

- (iii) a. (Yenghi-uy cwukum-ul/-ey) sulphehala/sulphehaca.
 Y.-GEN death-ACC/-for grieve/let's.grieve
 'Grieve for Yenghi's death/Let's grieve Yenghi's death.'
 b. # (Yenghi-uy cwukum-ul/-ey) **wuwulhayhala/wuwulhayhaca**.
 Y.-GEN death-ACC/-for feel.depressed/let's.feel.depressed.
 'Let's feel depressed for Yenghi's death/Let's feel depressed Yenghi's death.'

3) A reviewer observes that the grammaticality of (6a) is questionable, possibly reflecting variation among speakers. We consider sentence (6a) to be acceptable, though somewhat awkward, akin to the following examples.

- (i) a. ?Jisu-nun atul-ul salacyessta-ko pwulanhayhayssta.
 J.-TOP son-ACC disappeared-C felt.anxious
 'Jisu felt anxious that her son had disappeared.'
 b. ?Minswu-nun chinkwu-lul melli isakassta-ko sewunhayhayssta.
 M.-TOP friend-ACC far.away moved felt.sad.
 'Minswu felt sad that his friend moved far away.'
 c. ?Tongswu-nun anay-lul cwukessta-ko oylowehayssta.
 T.-TOP wife-ACC died-C felt.lonley
 'Tongswu felt lonely that his wife died.'

‘Lit. Chelswu was deeply devastated that Yenghi died.’

- c. Chelswu-ka Yenghi-lul kapcaki cwukesstako khukey pwunnohayssta.
C.-NOM Y.-ACC suddenly died extremely angry
‘Lit.Chelswu was furious that Yenghi died.’

Once again, it is important to emphasize that the matrix predicates in these examples are all intransitive verbs, which disallow nominal complements.

- (7) a. Chelswu-ka (*chinkwu-uy cwukum-ul) pamsaytolok wulessta.
C.-NOM friend-GEN death-ACC all night cried
‘Intended: Chelswu cried all night over his friend’s death.’
b. Chelswu-ka (*chinkwu-uy cwukum-ul) khukey cwacelhayssta.
C.-NOM friend-GEN death-ACC deeply devastated
‘Intended: Chelswu was deeply devastated by his friend’s death.’
c. Chelswu-ka (*chinkwu-uy cwukum-ul) khukey pwunnohayssta.
C.-NOM friend-GEN death-ACC extremely angry
‘Intended: Chelswu was was furious over his friend’s death.’

Interestingly, the embedded clause subject in (4) can alternatively be marked nominative, as demonstrated in (8).

- (8) Chelswu-ka Yenghi-ka kapcaki cwukesstako wuwulhayhayssta.
C.-NOM Y.-NOM suddenly died depressed.felt
‘Chelswu felt depressed that Yenghi died suddenly.’

This variation raises the question of how case theory accounts for the differing case licensing mechanisms between (4) and (8). An adequate theoretical framework should be able to explain the factors that lead to the nominative-accusative alternation observed in these examples.

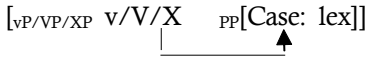
Marantz’s (1991) dependent case model fundamentally differs from the case-by-agreement approach. In the dependent case framework, the case assigned to a nominal depends on the presence of other nominals—referred to as “case competitors”—within the same local syntactic domain. In this model, case is understood as the morphological form a nominal takes based on the syntactic configuration it occupies and, crucially, the presence or absence of other case competitors in that configuration. The process of case assignment can be divided

into three categories, as outlined in (9).⁴⁾

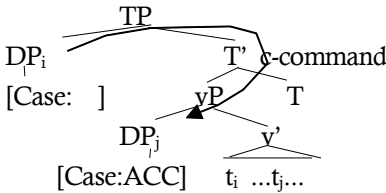
(9) Case in the Dependent Case Approach

(cf. Levin & Preminger, 2015, Levin, 2017, Fong, 2020)

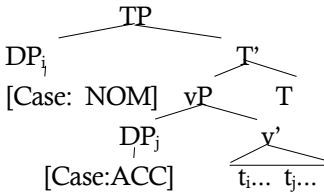
a. Assign lexical/inherent cases.



b. Assign dependent case to a remaining caseless DP in the case domain that has a case competitor. If a caseless DP α c-commands a caseless DP β , assign dependent case to β :



c. Assign unmarked case to DPs that have not yet been assigned case.



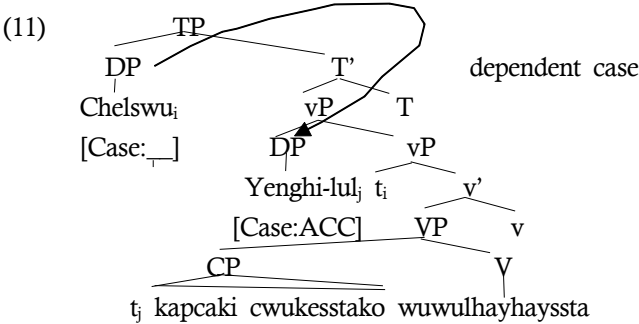
Case assignment proceeds in a hierarchical order from (9a) to (9c). First, as shown in (9a), lexical case is assigned to a PP by *v*, *V*, or *X*, and is realized on the preposition (*P*). Here, the term ‘assigned’ is used in a theory-neutral sense, without necessarily invoking its ‘structural’ interpretation as understood in standard syntactic theory. Second, as illustrated in (9b), DPs that have not yet received case within the same domain are considered case competitors. In nominative-accusative languages like Korean, if a caseless DP is c-commanded by another caseless DP,

4) This version of the dependent case approach departs slightly from the standard formulation, which does not posit a categorical distinction between nominals bearing lexical case and those bearing structural case (i.e., dependent case and unmarked case). The revised approach, as presented in (9), plays a crucial role in our analysis of case-stacking phenomena in Korean. Notably, the lexical/inherent case assignment process illustrated in (9a) is not intended to reflect a “structural or formal syntactic configuration.” Both lexical and inherent cases are assigned early in the derivation, typically during the merge process. These cases are directly linked to the thematic role of the DP and are assigned idiosyncratically based on the lexical properties of the selecting head. Consequently, DPs bearing lexical or inherent case are excluded from structural case competition. However, unlike lexical case, inherent case does not permit case stacking, as nominals marked with inherent case exhibit syntactic behavior similar to predicate nominals. For relevant examples, see footnote 13.

the lower DP receives dependent case, which corresponds to the accusative case realized on the determiner (D). Finally, as shown in (9c), unmarked case is assigned to a caseless DP if no case competitor exists within the case assignment domain. In Korean, nominative case serves as the unmarked case and is also realized on D. We propose that dependent case competition arises exclusively between two caseless DPs, such that lexically or inherently case-marked PPs are unable to serve as case competitors.

Let us now analyze the case marking on the embedded subject in (4), repeated here as (10), within the framework of the dependent case approach.

- (10) Chelswu-ka Yenghi-lul kapcaki cwukesstako wuwulhayhayssta.
 C.-NOM Y.-ACC suddenly died depressed.felt
 ‘Cheswu felt depressed that Yenghi died suddenly.’



Under the structure in (11), *Yenghi*, having undergone fronting, is c-commanded by *Chelswu* within the same case domain, resulting in *Yenghi* receiving accusative case.⁵⁾ *Chelswu*, in turn, receives nominative case as the unmarked case in this

5) Under the standard ECM analysis, an accusative case-marked DP moves to the matrix clause, whereas a nominative case-marked DP remains within the embedded clause. This distinction is evidenced by the following contrast:

- (i) a. John-un Mary-lul elisekkeyto yenglihata-ko sayngkakhanta.
 J.-TOP M.-ACC foolishly intelligent-C thinks
 ‘Foolishly, John thinks that Mary is intelligent.’
 b. *John-un Mary-ka elisekkeyto yenglihata-ko sayngkakhanta.
 J.-TOP M.-NOM foolishly intelligent-C thinks
 ‘Foolishly, John thinks that Mary is intelligent.’ (Yoon, 1996:117)

As shown in (ia), an adverb modifying the matrix predicate can intervene between an accusative embedded subject and the lower predicate. However, as illustrated in (ib), such an intervention is ungrammatical when the embedded subject bears nominative case.

A similar contrast is observed between pseudo-ECMed DPs and their nominative counterparts, as

configuration.

The core of our dependent case approach is grounded in the assumption that accusative case is assigned only when case competition occurs. In other words, when a one-place predicate is present, only a single argument is selected, and case competition does not take place. As a result, accusative-marked nominals do not appear.

It is important to note that *wuwulhayhata* ‘feel depressed’, although not functioning as a transitive verb capable of assigning accusative case, can act as a two-place predicate, as demonstrated in (12):

- (12) a. *Chelswu-ka Chinkwu-uy cwukum-ul wuwulhayhayssta.
 C.-NOM friend-GEN death-ACC depressed.felt
 ‘Intended: Chelswu felt depressed over his friend’s death.’
 b. Chelswu-ka chinkwu-uy cwukum-ey wuwulhayhayssta.
 C.-NOM friend-GEN death-LOC depressed.felt
 ‘Chelswu felt depressed over his friend’s death.’

shown in (ii).

- (ii) a. Chelswu-ka Yenghi-lul congcong kapcaki cwukesstako wuwulhayhayssta.
 C.-NOM Y.-ACC often suddenly died depressed.felt
 ‘Cheswu often felt depressed that Yenghi died suddenly.’
 b. *Chelswu-ka Yenghi-ka congcong kapcaki cwukesstako wuwulhayhayssta.
 C.-NOM Y.-NOM often suddenly died depressed.felt
 ‘Cheswu often felt depressed that Yenghi died suddenly.’

The parallelism between (ia) and (iia) supports the hypothesis that accusative embedded subjects undergo movement to the matrix clause in both standard ECM and pseudo-ECM constructions. We propose that this movement is driven by the Extended Projection Principle (EPP), with the resulting effect being one of focus (cf. Miyagawa, 2009).

One reviewer observed that, in addition to example (iia), a sentence like (iii) is also acceptable.

- (iii) Chelswu-ka congcong kapcaki Yenghi-lul cwukesstako wuwulhayhayssta.
 C.-NOM often suddenly Y.-ACC died depressed.felt
 ‘Cheswu often felt depressed that Yenghi died suddenly.’

We concur with the reviewer’s observation and acknowledge that this distinction warrants further analysis. Two possible analytical approaches can be considered to account for this phenomenon. The first approach is to analyze it as a case of restructuring between the complement clause and the matrix verb, resulting in a “mono-clausal effect” (cf. Ahn, 1992). Under this analysis, the matrix subject and the embedded subject enter into a c-command relationship within the same phase, thereby enabling the embedded subject to receive dependent accusative case.

The second approach is to analyze the phenomenon as the result of adverb scrambling within the structure of (iia). However, given the general constraint that adverbs do not undergo movement, the first approach appears more compelling. We leave a more comprehensive analysis of this issue for future research.

Although *wuwulhayhata* can function as a two-place predicate, when it behaves as a one-place predicate, accusative case marking on the embedded clause subject is not possible, as shown in (13-15).

- (13) a. Chelswu-ka Yenghi-ka kapcaki cwukesski-ttaymwuney wuwulhayhayssta.
C.-NOM Y.-NOM suddenly died-because depressed.felt
'Chelswu felt depressed because Yenghi died suddenly.'
- b. *Chelswu-ka Yenghi-lul kapcaki cwukesski-ttaymwuney
C.-NOM Y.-ACC suddenly died-because
wuwulhayhayssta.
depressed.felt
'Chelswu felt depressed because Yenghi died.'
- (14) a. Chelswu-ka Yenghi-ka kapcaki cwukessul-ttay wuwulhayhayssta.
C.-NOM Y.-NOM suddenly died-when depressed.felt
'Chelswu felt depressed when Yenghi died suddenly.'
- b. *Chelswu-ka Yenghi-lul kapcaki cwukessul-ttay wuwulhayhayssta.
C.-NOM Y.-ACC suddenly died-when depressed.felt
'Chelswu felt depressed when Yenghi died suddenly.'
- (15) a. Chelswu-ka Yenghi-ka kapcaki cwuknun-tamyen wuwulhayhalkesita.
C.-NOM Y.-NOM suddenly die-if depressed.feel.will
'Chelswu will feel depressed if Yenghi dies suddenly.'
- b. *Chelswu-ka Yenghi-lul kapcaki cwuknun-tamyen wuwulhayhalkesita.
C.-NOM Y.-ACC suddenly die-if depressed.feel.will
'Chelswu will feel depressed if Yenghi dies suddenly.'

To summarize, the key distinction between the two-place and one-place uses of *wuwulhayhata* 'feel depressed' lies in the base-generated position of the embedded CP. When *wuwulhayhata* functions as a two-place predicate, the embedded clause is base-generated as a complement clause. This allows the embedded clause subject to move into the matrix clause and engage in case competition with the matrix subject. In contrast, when *wuwulhayhata* functions as a one-place predicate, the embedded clause serves as an adjunct. In this configuration, movement of the embedded clause subject violates the "adjunct island constraint," preventing such movement. As a result, no argument competes for case, rendering accusative case marking impossible.⁶⁾

In contrast to *wuwulhayhata* ‘feel depressed’, *wuwulhata* ‘be depressed’ functions exclusively as a one-place predicate. In this context, the embedded CP is an adjunct, preventing the subject within its clause from moving to the matrix clause. As a result, case competition does not take place, and accusative case marking does not appear, as illustrated in (16):⁷⁾

6) We extend our sincere gratitude to the reviewer for their valuable feedback, particularly for highlighting the relevance of the adjunct island phenomenon, as well as for their many other insightful comments that greatly helped to clarify and refine this explanation.

7) A comparison of the following two examples indicates that the *-ko* quotative construction functions as a complement in (4), whereas it serves as an adjunct in (16b). For clarity, example (4) is repeated below:

- (4) Chelswu-ka Yenghi-lul kapcaki cwukesstako wuwulhayhayssta.
 C.-NOM Y.-ACC suddenly died depressed.felt
 ‘Lit. Chelswu felt depressed that Yenghi died.’

In other words, although both constructions share the same morphological form (*-ko* quotative construction), they occupy distinct syntactic positions. This distinction is further reflected in the acceptability differences observed in subsequent examples, which pattern similarly to (4) and (16b).

- (i) a. Chelswu-ka Yenghi-lul kapcaki cwuk-unkesey wuwulhayhayssta.
 C.-NOM Y.-ACC suddenly died-about felt.depressed
 ‘Chulsoo felt depressed about Yenghee’s sudden death.’
 b. *Chelswu-ka Yenghi-lul kapcaki cwuk-unkesey wuwulhayssta.
 C.-NOM Y.-ACC suddenly died-about depressed
 ‘Chelswu was depressed about Yenghee’s sudden death.’

Specifically, while both exhibit the same *-un kes* complement clause form, the former serves as a complement to the matrix verb, whereas the latter functions as an adjunct. This difference in syntactic status accounts for the observed acceptability contrast.

Further evidence for the adjunct status of the *-ko* clause in (16b) comes from a comparison with unambiguous adjunct clauses such as *-ki ttaymwun-ey* (cf. (13)-(15)). These clauses exhibit similar syntactic behavior, as illustrated in the following cases:

- (iii) a. *Chelswu-ka Yenghi-lul kapcaki cwukesski-ttaymwuney wuwulhayhayssta.
 C.-NOM Y.-ACC suddenly died-because felt.depressed
 ‘Chelswu felt depressed about Yenghi’s sudden death.’
 b. *Chelswu-ka Yenghi-lul kapcaki cwukesski-ttaymwuney wuwulhayssta.
 C.-NOM Y.-ACC suddenly died-because depressed
 ‘Chelswu was depressed about Yenghi’s sudden death.’

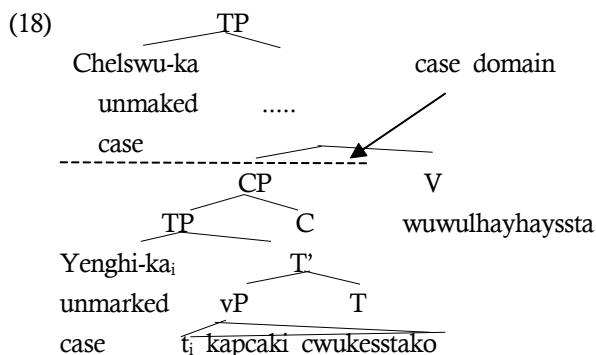
In these examples, the adjunct island violation prevents accusative case marking on the embedded subject, paralleling the behavior observed with the *-ko* clause in (16). The adjunct status of the *-ko* clause in (16) is further corroborated by its semantic flexibility, allowing it to modify the main clause circumstantially rather than forming a direct complement. While the shared morphology of the *-ko* construction might suggest similarity, its syntactic position and resulting constraints differ systematically between (4) and (16b), supporting our distinction between complement and adjunct usage.

We appreciate the reviewer’s observation that certain aspects of the discussion in this footnote may be speculative and potentially circular. These points fall outside the primary scope of this paper, and

- (16) a. Chelswu-ka Yenghi-ka kapcaki cwukesstako wuwulhayssta.
 C.-NOM Y.-NOM suddenly died depressed
 ‘Chelswu is depressed that Yenghi died.’
 b. *Chelswu-ka Yenghi-lul kapcaki cwukesstako wuwulhayssta.
 C.-NOM Y.-ACC suddenly died depressed
 ‘Chelswu felt depressed that Yenghi died.’

The nominative case marking on the embedded clause subject in (8), repeated here as (17), is explained as follows in (18).

- (17) Chelswu-ka Yenghi-ka kapcaki cwukesstako wuwulhayhayssta.
 C.-NOM Y.-NOM suddenly died depressed.felt
 ‘Chelswu felt depressed that Yenghi died suddenly.’



As illustrated in (18), the embedded subject *Yenghi* occupies the Spec of T position within its own clause and does not undergo further movement. In this configuration, *Yenghi* is not c-commanded by any nominal within the relevant case domain. The dependent case theory posits that the syntactic arrangement of nominals (DPs) in relation to one another determines their case marking within a specific case domain. The concept of a case domain, as Levin (2017: 456) suggests, is phase-bound, typically defined by vP and CP. Since neither *Yenghi* nor *Chelswu* is c-commanded by a competing nominal within their respective case domains, both receive nominative case as the default unmarked option.

we intend to explore them in greater depth in future research.

3. Case Stacking

3.1. Case Stacking in Korean

Case stacking in Korean is problematic under the case-by-agreement approaches that assume a one-to-one correspondence between DPs and case markers (cf. Gerds & Youn (1988, 1990, 1999), Youn (1990, 1998), Yoon (1996, 2004), Schütze (1996, 2001)). Case stacking is a linguistic phenomenon where a single noun phrase in a sentence receives more than one case marker as shown in (19).⁸⁾

- (19) a. Chelswu-eykey-ka paym-i mwusewessta.
C.-DAT-NOM snake-NOM afraid.was
'Chelswu was afraid of snakes.'
- b. Chelswu-ka hakkyo-ey-lul kassta.
C.-NOM school-LOC-ACC went
'Chelswu went to school.'

In (19a), *Chelswu* has two case markers *-eykey* and *-ka*. In (19b), *hakkyo* has two case markers *-ey* and *-lul*. Under the case-by-agreement approach, nominals participate in an Agree operation with a functional head only once. Hence, double case marking in (19) raises the following question: How can the DPs get case value twice in Korean?

Interestingly, case stacking in (19) is optional, as demonstrated by the examples in (20).

- (20) a. Chelswu-eykey paym-i mwusewessta.
C.-DAT-NOM snake-NOM afraid.was
'Chelswu was afraid of snakes.'
- b. Chelswu-ka hakkyo-ey kassta.
C.-NOM school-LOC went
'Chelswu went to school.'

8) Schütze (1996) proposes that in cases of double marking, the dative should be considered a true case marker, while the nominative and accusative markers function as focus particles. In contrast, Gerds & Youn (1999) and Yoon (2004) challenge this view, arguing that stacked nominative and accusative markers should be regarded as genuine case markers, rather than focus particles.

In (20a), *Chelswu-eykey* ‘Chelswu-DAT’ can appear without the nominative case marker, and in (20b), *hakkyo-ey* ‘school-LOC’ can appear without the accusative case marker. This optionality in case stacking suggests variability in how case markers are applied within these constructions.

Levin (2017) offers a compelling analysis of case stacking in Korean, specifically arguing that only the dependent case approach adequately explains nominative-nominative case stacking in the language.⁹⁾ However, to account for case-stacked data not discussed by Levin (2017), we propose an alternative analysis of case stacking within the framework of the dependent case approach.

We assume that (19a) has the structure similar to (21).^{10) 11)}

9) The key example discussed by Levin (2017) is shown in (i):

(i) *Sensayng-nim-tul-kkeyse-man-i* *kulen* *il-ul* *hasipnita*.
 teacher-HON-PL-H.NOM-only-NOM that.kind work-ACC do
 ‘Only teachers do such work.’ (Sells, 1995)

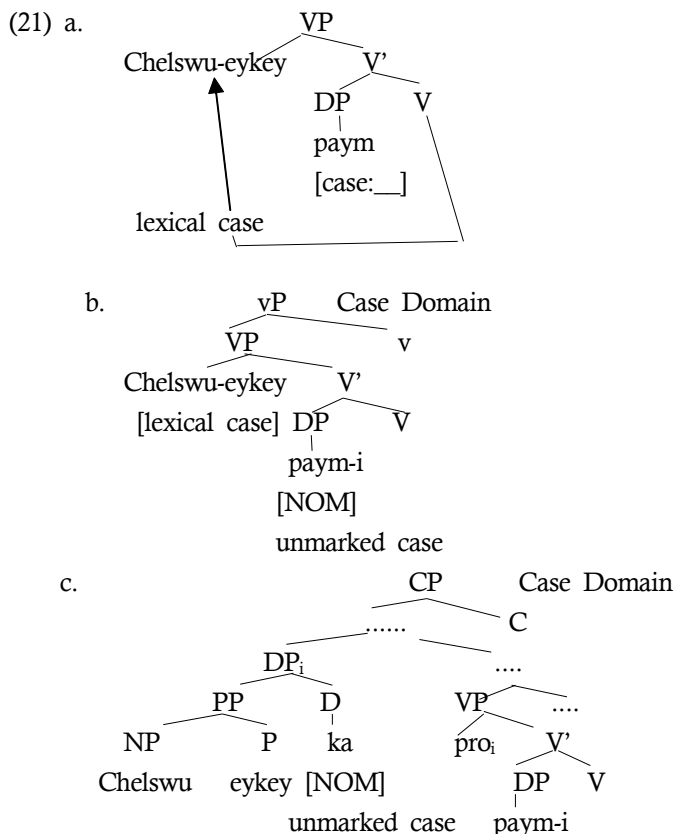
In this example, the nominal *sensayngnim* ‘teachers’ bears both the honorific nominative marker *-kkeyse* and the canonical nominative marker *-i/-ka*, the realization of which is phonologically conditioned.

10) A reviewer raises the question of how the case on the boldfaced nominals in (i) is licensed under the dependent case theory.

(i) a. *Chelswu-ka* *Yenghi-lul* ***seyphen-ul*** *mannassta*.
 C.-NOM Y.-ACC three.time-ACC met.
 ‘Chelswu met Yenghi three times.’
 b. *Nwun-i* *hayahkey* *nalylin* ***kes-i*** *kyengchi-ka* *cham cohta*.
 snow-NOM white fallen thing-NOM scenery-NOM truly beautiful
 ‘The white snow has fallen, which makes the scenery truly beautiful.’
 c. *Nay-ka* *chamul* ***kes-ul***, *kwaynhi* *kulayssta*.
 I-NOM patient thing-NOM pointlessly do.that
 ‘I should have been patient and it was pointless to do that.’
 d. ***Chelswu-ka*** *apeci-ka* *tolakasyessta*.
 C.-NOM father-NOM passed.away
 ‘Cheswu’s father has passed away.’
 e. *Chelswu-ka* *kenkang-i* ***cohci-ka*** *anhsta*.
 C.-NOM health-NOM good-NOM not
 ‘Chelswu’s health is not good.’

As the reviewer has pointed out, addressing these examples using the dependent case approach would highlight the theory’s explanatory superiority. However, due to space constraints, we will not attempt to analyze these cases in this work. We look forward to providing a detailed analysis of these constructions in our future research.

11) A reviewer has raised an important issue regarding the positioning of the lexical case constituent *Chelswu-eykey* above the structural case constituent *paym-i* in examples (21a) and (21c). This observation aligns with the predictions of the dependent case Model, which does not require that lexical case be assigned to the constituent closest to the syntactic head. Crucially, in this model, structural case is not assigned directly by syntactic heads such as T or v. Instead, structural case is assigned configurationally,



In (21a), *Chelswu-eykey* receives lexical case from the verb (V) and is not considered a case competitor for the noun *paym* ‘snake’. Consequently, as shown in (21b),

determined by the relative positioning of constituents within the syntactic structure. This distinction highlights the importance of carefully examining the interaction between lexical and structural case assignment mechanisms in these examples.

Another reviewer has questioned the use of *-eykey* in *Chelswu-eykey* in (21c). Specifically, the reviewer notes that the entire PP is dislocated and appears to be base-generated outside the domain where lexical case is typically licensed. To address this, we propose that the PP is thematically related to the verb via argument sharing with *pro*. Additionally, we assume that *-eykey* functions as a category postposition (P), *l*-selected by the verb. This analysis parallels the behavior of selected prepositions in English, which are also determined by *l*-selection. However, further exploration of the argument structure and *l*-selection processes falls beyond the scope of this paper.

The reviewer highlights two key assumptions: (i) lexical case does not require adjacency to the head, and (ii) there is a hierarchy between lexical case assignment and structural case assignment, with lexical case being assigned first. The reviewer raises the question of whether these two assumptions are contradictory. We argue that they are not. Notably, the case hierarchy applies within each distinct case domain. In (21c), *Chelswu-eykey* inherits lexical case from *pro* because it is the first element within that case domain, thereby receiving the case according to the established order. Crucially, since “order” and “adjacency” are distinct concepts, the two assumptions remain compatible.

paym receives the unmarked nominative case. We propose that the focused phrase *Chelswu-eykey* ‘Chelswu-DAT’ in (21c) is projected as a DP. Furthermore, we argue that the focused DP *Chelswu-eykey* is base-generated outside of the vP, consistent with a major subject analysis of nominative case stacking in DPs, as proposed by Yoon (2004: 27-28). According to Yoon, the major subject is not an argument of the predicate, and it must satisfy an ‘aboutness’ condition (Kuno, 1973), in which the remainder of the sentence expresses a characteristic property of the major subject. In this configuration, the DP *Chelswu-eykey* is assigned the unmarked nominative case, as no c-commanding case competitor exists within the relevant case-assignment domain. Note that the unfocused *Chelswu-eykey* in (21a) is a PP, not a DP; otherwise, it would not be able to host an additional case (either dependent or unmarked) when focused, as two D heads cannot co-exist within a single nominal in Korean (see Ahn. 1988).¹²⁾

It is worth noting that the unpronounced *Chelswu-eykey*, represented as *pro* within the vP, cannot be considered a c-commanding case competitor of *paym* in (21c). If it were, *paym* would incorrectly receive accusative case. We argue that *pro* in this context, not being a DP (as it is not focused), receives lexical case from the verb *mwusepta* ‘be afraid’. Consequently, it cannot function as a case competitor for *paym*.

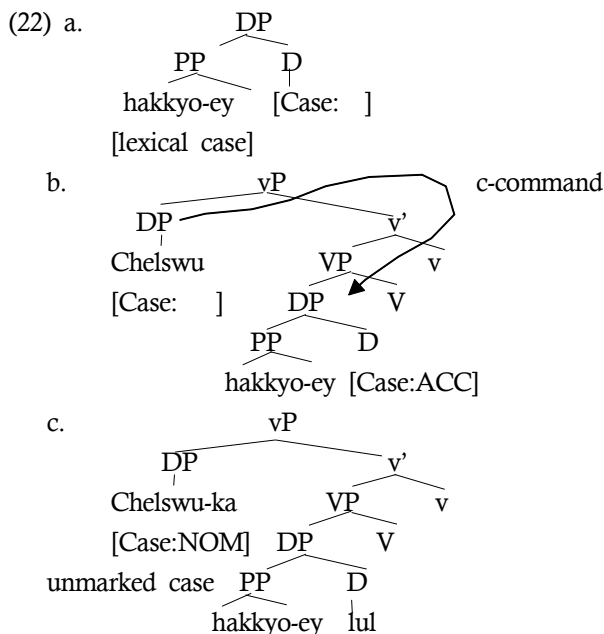
Now, let us consider (19b).¹³⁾

12) Lee and Nie (submitted) attempt to derive the templatic ordering and restrictions of morphemes in Korean nominals through syntactic processes. They propose that while the inner markers spell out case via a lower Voice head, the outer markers spell out a bundle of structural case and discourse features through C-to-T inheritance (Chomsky, 2008; Miyagawa, 2009). These features are then spelled out by a single Vocabulary Item, which accounts for the fact that two D heads cannot co-occur (e.g., TOP never co-occurs with NOM and ACC).

13) As noted by a reviewer, the following question may arise: why is case stacking impossible in (i)?

- (i) a. A-ka B-wa(-*lul) pisushata/taluta/talmassta.
 A-NOM B-to-ACC similar
 ‘A is similar to B.’ ‘A is different from B.’ ‘A resembles B.’
- b. Mwul-i elum-ulo(-*lul) pyenhaysta/toyessta.
 water-NOM ice-into-ACC turned/became
 ‘Water turned into/became ice.’
- c. Kangto-ka Yenghi-lul khal-lo(-*lul) ccillessta/wihyephayssa.
 robber-NOM Y.-ACC knife-with-ACC stabbed/threatened
 ‘The robber stabbed/threatened Yenghi with a knife.’
- d. I sikmwul-un sem-eyse(-*lul) nanta/calanta.
 this plant-Top island-at/-ACC grow/grow
 ‘This plant on the island.’
- e. I il-un Yenghi-eykey(-*lul) cekhaphata/macta.
 this job-TOP Y.-for-ACC suits/suits
 ‘This job is suitable for Yenghi.’

These examples do not involve “lexical” cases but rather instances of “inherent” case assignment. Nouns that receive inherent cases appear to be subject to a constraint similar to that of predicate nominals in



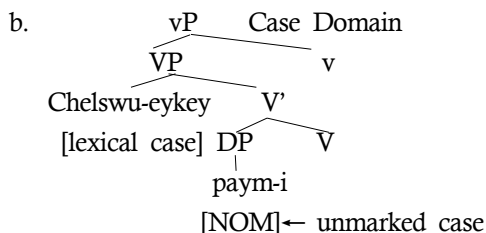
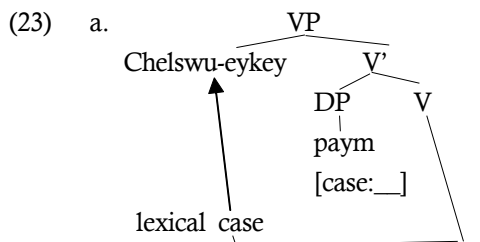
In (22a), verb (*kata* ‘go’) assigns lexical case to the PP *hakkyo-ey* ‘to school’. In (22b), the “focused” DP *hakkyo-ey* ‘school-LOC’ is base-generated within VP and is c-commanded by its case competitor, the DP *Chelswu*. Consequently, *hakkyo-ey* receives accusative case. Finally, in (22c), the DP *Chelswu* lacks a c-commanding case competitor and therefore receives unmarked nominative case.

Now, let us examine case licensing mechanism in non-stacked counterparts.

- (20) a. Chelswu-eykey paym-i mwusewessta.
 C.-DAT snake-NOM afraid.was
 ‘Chelswu was afraid of snakes.’
 b. Chelswu-ka hakkyo-ey kassta.
 C.-NOM school-LOC went
 ‘Chelswu went to school.’

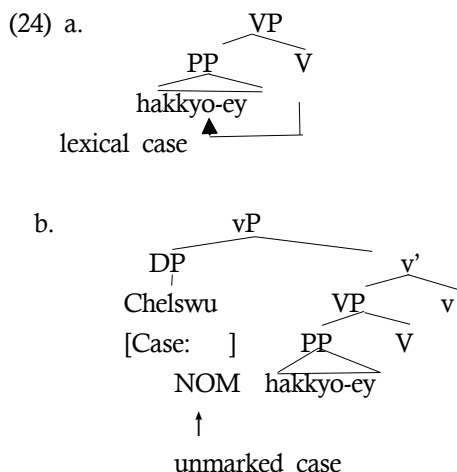
We assume that (20a) has the structure like (23).

that they cannot receive structural cases. Whether this constraint is syntactic or lexico-semantic in nature remains an open question, requiring further in-depth investigation in future research.



In (23a), *Chelswu-eykey* receives lexical case from the verb (V), and therefore, it is no longer a case competitor for *paym* ‘snake’. Consequently, as shown in (23b), *paym* (‘snake’) is not c-commanded by any case competitor, allowing it to receive unmarked nominative case.

Now, let us consider (20b).



As illustrated in (24a), the verb (V) assigns lexical case to the PP *hakkyo-ey* ‘to school’, rendering it ineligible as a case competitor. Consequently, in (24b), the DP *Chelswu* receives unmarked nominative case.

It is important to note that case stacking is only one possible option in certain contexts, as illustrated in (25).¹⁴

- (25) a. Pang-an-ulo-*(ka) macnun panghyang ita.
 room-in-to-*(NOM) right direction is
 'Into the room is the right direction.'
 (Schütze, 2001:222)
- b. Cengwen-eyse-*(ka) Swunhi-ka cemsim-ul mek-un kos ita.
 garden-LOC-*(NOM) S.-NOM lunch-ACC eat-REL place be
 'In the garden is the place where Swunhi ate lunch.'
 (Schütze, 2001:222)
- c. Cikum-pwuthe-*(ka) mwuncey-lul yaki hanta.
 now-from-*(NOM) problem-ACC cause does
 'From now on causes a problem.'
 (D.-W. Yang, 1999:636)
- d. Keki-lul kanuntey-nun, Sewul-lopwuthe-*(ka) cohayo.
 there-ACC go-TOP S-from-*(NOM) good
 'In order to go there, (it is) good (to go) from Seoul.'
 (Urushibara, 1997:538)

As illustrated in (25a), when *pang-an-ulo* 'into the room' appears without the nominative marker *-ka*, the sentence becomes ill-formed. Similarly, in (25b-d), the omission of the nominative case marker renders the sentences ungrammatical.

Note that the omission of the nominative case marker in a canonical subject is not permissible, even with non-case-stacked nominals, as demonstrated in (26).

- (26) Yenghi-*(ka) haksayng ita.
 Y.-NOM student be
 'Yenghi is a student.'

Under the dependent case approach, the DP *Yenghi* in (26) receives unmarked nominative case. We propose that the seemingly PP subjects in (25) are, in fact, DPs, each receiving unmarked nominative case. This similarity in the case licensing mechanism explains the parallel behavior in nominative case omission observed in

14) Levin (2017) did not address why case stacking is only one possible option in contexts such as (25).

both (25) and (26).

Interestingly, there are instances where stacked nominative case can be omitted, as demonstrated in (27).

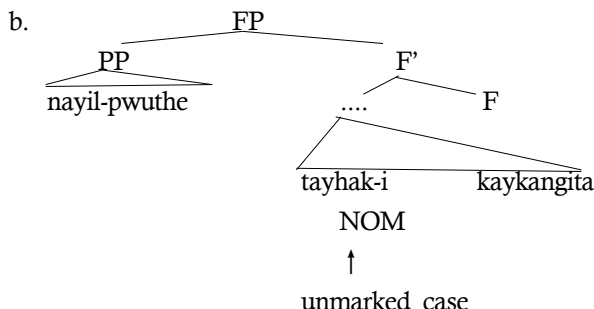
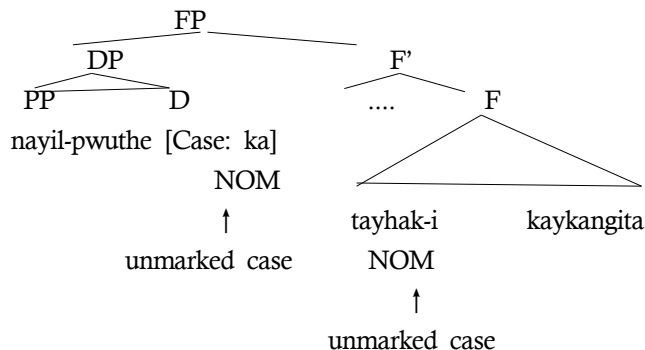
- (27) a. *nayil-pwuthe-(ka) tayhak-i kaykang ita.*
 tomorrow-from-(NOM) university-NOM the.beginning.of.the.semester be
 ‘The university classes start from tomorrow.’
- b. *cikum-pwuthe-(ka) i il-i mwuncey-lul yakihanta.*
 now-from-(NOM) this issue-NOM problem-ACC cause
 ‘From now on, this issue will cause problems.’
- c. *cengpwu-lopwuthe-(ka) Chelswu-ka cichim-ul hatalpatassta.*
 government-from-(NOM) C.-NOM instruction-ACC received
 ‘Chelswu received instructions from the government.’
- d. *apenim-ccokeyse-(ka) nwukunka-ka na-eykey sakwa-lul*
 father.hon-side-(NOM) someone-NOM I-DAT apology-ACC
 mence ha-si-ess-ta.
 first do-HON-PST-DEC
 ‘Someone from my father’s side apologized to me first.’
 (cf. Yoon, 2004 fn. 31)

Unlike the nominative case-marked nominals in (25), the sentence-initial elements in (27) can occur without nominative case markers. What accounts for the difference between (25) and (27)?

The nominative case-marked nominals in (25) function as grammatical subjects, whereas the sentence-initial nominative case-marked nominals in (27) do not. Therefore, we propose that the nominative case-marked nominals in the sentence-initial position in (27) should be analyzed in parallel with (19a) and (20a), repeated here as (28a-b), respectively.

- (28) a. *Chelswu-eykey-ka paym-i mwusewessta.*
 C.-DAT-NOM snake-NOM afraid.was
 ‘Chelswu was afraid of snakes.’
- b. *Chelswu-eykey paym-i mwusewessta.*
 C.-DAT snake-NOM afraid.was
 ‘Chelswu was afraid of snakes.’

(29) a.



As illustrated in (29a), the DP *nayil-pwuthe* ‘tomorrow-from’ is base-generated in a different case domain from the DP *tayhak-i* ‘university-NOM’. Therefore, there is no case competition between *nayil-pwuthe* and *tayhak*. Each DP receives an unmarked nominative case within its respective case domain. In (29b), the PP *nayil-pwuthe* ‘tomorrow-from’ is also base-generated in a separate case domain from the DP *tayhak-i*.¹⁶ Since PPs do not receive case, *nayil-pwuthe* occurs without a

16) As noted by a reviewer, another possibility arises: the sentence-initial PP without a nominative case marker may not be a major subject but rather an adjunct. This analysis can account for the contrast between A1 and A2:

Q: Cengpwu-lopwuthe nwuka cichim-ul hatalpatass-ni?
government-from who instructions-ACC received-Q

case marker, while the DP *tayhak* receives an unmarked nominative case within its case domain.

At this point, one might question why the putative grammatical subjects in (25) cannot be treated as major subjects, as illustrated in (29).

- (25) a. Pang-an-ulo-*(ka) macnun panghyang ita.
 room-in-to-*(NOM) right direction is
 'Into the room is the right direction.'
- b. Cengwen-eyse-*(ka) Swunhi-ka cemsim-ul mek-un kos ita.
 garden-LOC-*(NOM) S.-NOM lunch-ACC eat-REL place be
 'In the garden is the place where Swunhi ate lunch.'

'Who received instructions from the government?'

- A1: #Cengpwu-lopwuthe-ka CHELSWU-KA cichim-ul hatalpatassta.
 government-from-NOM C.-NOM instruction-ACC received
- A2: Cengpwu-lopwuthe CHELSWU-KA cichim-ul hatalpatassta.
 government-from C.-NOM instruction-ACC received

As the reviewer points out, A2 appears more natural than A1, likely because the sentence-initial PP in A2 is processed as an adjunct. The reason for the reduced acceptability of A1 seems to be pragmatic in nature. From a semantic-pragmatic perspective, the "major subject" can be understood as a type of peripheral subject, distinct from the grammatical subject. Pragmatically, it can encompass both exhaustive contrastive focus arguments and topic arguments. In Korean, exhaustive contrastive focus is typically marked by case markers like *-ka* or *-lul*, whereas topic arguments are marked by the delimiter *-nun* or are accompanied by a pause. Therefore, the unacceptability of A1 is due to the presence of the exhaustive marker *-ka* in the response, despite the absence of a clearly defined comparison set in the discourse.

With respect to A1, it can be analyzed as involving either PP preposing or a base-generated PP in the sentence-initial position. In this case, the initial PP can be interpreted as focus-fronted for emphasis. The reviewer further highlights that the two sentence-initial elements behave similarly under wh-focus.

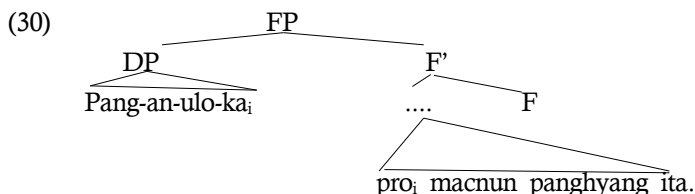
(ii) wh-focus on the major subject

- Q: Eti-lopwuthe Chelswu-ka cichim-ul hatalpatass-ni?
 where-from C.-NOM instruction-ACC received-Q
 'Where did Chelswu receive instructions from?'
- A1: CENGFWU-LOPWUTHE-KA Chelswu-ka cichim-ul hatalpatassta.
 government-from-NOM C.-NOM instruction-ACC received
- A2: CENGFWU-LOPWUTHE Chelswu-ka cichim-ul hatalpatassta.
 government-from C.-NOM instruction-ACC received

The contrast between (i)A1 and (ii)A1 is also expected under the hypothesis that the nominative PP functions as a major subject, following Yoon (2004) and Levin (2017), who treat major subjects as focused or semantically prominent. The difference between (i)A1 and (ii)A1 is related to the existence of alternative sets. In the context of wh-questions, the Question Under Discussion (QUD) refers to the implicit or explicit questions that guide a conversation. Wh-questions (who, what, where, when, why, and how) inherently suggest a set of possible answers, often referred to as an "alternative set." On this view, in (ii)A2, the exhaustive marker *-ka* appears in the response, accompanied by a clearly defined comparison set in the discourse, thereby increasing its acceptability.

- c. Cikum-pwuthe-*(ka) mwuncey-lul yaki hanta.
 now-from-*(NOM) problem-ACC cause does
 'From now on causes a problem.'
- d. Keki-lul kanuntey-nun, Sewul-lopwuthe-*(ka) cohayo.
 there-ACC go-TOP S-from-*(NOM) good
 'In order to go there, (it is) good (to go) from Seoul.'

If that were the case, (25a), for example, might exhibit a structure similar to (30).



It is unclear why a structure like (30) is excluded for (25a). However, evidence from ECM constructions in Korean suggests that (30) is not viable. According to Yoon's (2007) analysis, major subjects can undergo raising-to-object operations.

- (31) a. Na-nun nayil-pwuthe-lul tayhak-i kaykang ila-ko sayngkakhanta.
 I-TOP tomorrow-from-ACC university-NOM commencement be-C think
 'I think the university classes start from tomorrow.'
- b. Na-nun cikum-pwuthe-lul i il-i mwuncey-lul yakihanta-ko
 I-TOP now-from-ACC this issue-NOM problem-ACC cause-C
 sayngkakhanta.
 think
 'I think that from now on, this issue will cause problems.'
- c. Na-nun cengpwu-lopwuthe-lul Chelswu-ka cichim-ul hatalpatassta-ko
 I-TOP government-from-ACC C.-NOM instruction-ACC received-C
 sayngkakhanta.
 think
 'I think Chelswu received instructions from the government.'
- d. Na-nun apenim-ccokeyse-lul nwukunka-ka na-eykey sakwa-lul mence
 I-TOP father.hon-side-ACC someone-NOM I-DAT apology-ACC first
 hayssta-ko sayngkakhanta.
 did-C think

'I think someone from my father's side apologized to me first.'

Interestingly, the subjects in (25) cannot undergo raising-to-object.

- (32) a. *Na-nun pang-an-ulo-lul macnun panghyang ila-ko sayngkakhanta.
I-TOP room-in-to-ACC right direction be-C think
'I think that Into the room is the right direction.'
- b. *Na-nun cengwen-eyse-lul Swunhi-ka cemsim-ul mek-un kos
I-TOP garden-LOC-ACC S.-NOM lunch-ACC eat-REL place
ila-ko sayngkakhanta.
be-C think
'I think that in the garden is the place where Swunhi ate lunch.'
- c. *Na-nun cikum-pwuthe-lul mwuncey-lul yaki hanta-ko
I-TOP now-from-*(NOM) problem-ACC cause does
sayngkakhanta.
think
'I think that from now on causes a problem.'
- d. *Na-nun keki-lul kanuntay-nun, Sewul-lopwuthe-lul cohta-ko.
I-TOP there-ACC go-TOP S-from-ACC good-C
sayngkakhanta.
think
'I think that in order to go there, (it is) good (to go) from Seoul.'

(32) may indirectly indicate that the nominative case-marked subjects in (25) cannot function as major subjects and instead serve solely as grammatical subjects.

3.2. Two Types of PPs in English

Two types of case-stacking constructions in Korean are reminiscent of the two types of locative inversion in English: PP Topics and PP Subjects.¹⁷⁾ PP Topics

17) Kim (2000) argues that PPs denoting location or time can function as subjects. However, directional PPs cannot serve as subjects, as shown in (i).

- (i) a. Between eleven and midnight suits me alright. (Kim, 2000:40)
b. *Down the hill seemed to roll John. (Kim, 2000:41)

Kim further suggests that non-DP elements can act as subjects if they function as arguments with case, regardless of their syntactic category. However, the analysis presented here posits that the distinction


exhibit canonical topicalized properties, belonging to the syntactic category of PPs. In contrast, PP Subjects function as genuine grammatical subjects, aligning more closely with the properties of NPs, effectively allowing them to be treated as NPs in disguise. The examples below illustrate this contrast, where (a) sentences involve PP Topics and (b) sentences involve PP Subjects.

- (33) a. In the ocean are whales, aren't there? (Bowers, 1976:237)
 b. Under the bed is a good place to hide, isn't it?
 (34) a. *In the garden is a beautiful statue, isn't it? (Chung, 2001:125)
 b. On Wednesday and on Friday will be fine, won't they?
 (Iwasaki, 2007:111)

In (33a), the PP subject *in the ocean* requires the tag question to align with the locative pronoun *there*, whereas the NP (or DP) subject *under the bed* permits the use of the pronoun *it* in the tag question.¹⁸⁾ The ungrammaticality in (34a) indicates that the PP *in the garden* functions as the subject (and topic) of the sentence, rather than the NP *a beautiful statue*, thereby excluding the NP tag *it*. In contrast, (34a) further demonstrates that the tag *they* correctly refers to the coordinated NP subject *on Wednesday and on Friday*, which constitutes NP coordination, not PP coordination.

between grammatical subjects and major subjects is crucial, and that only DPs can fulfill the role of grammatical subjects.

18) Williams (1984) posits that PPs in subject positions, such as in (ia), are analyzed as NPs, as illustrated in (ib).

- (i) a. Under the chair is a nice place for the cat to sleep. (Stowell, 1981:268)
 b. 

As Williams acknowledges, the structure in (ib) assumes the rule $XP \rightarrow YP$, representing an instance of exocentricity. This structure is incompatible with the X-bar theory, as the NP lacks a clear head. Bresnan (1991, 1994), in contrast, argues that PP subjects function syntactically as NPs, not PPs, suggesting that they represent place or time NPs with elided nominal heads, which are contextually recovered. This analysis is illustrated in (ii):

- (ii) a. [_{NP} (a place) [_{PP} under the bed]]
 b. [_{NP} (a time) [_{PP} between six and seven]]

According to Bresnan (1991:64), these PPs exhibit ellipsis and are preferred in contexts where a place or time argument is semantically required or presupposed by the discourse.

Building on the foundational insights of Williams (1984), Bresnan (1991), and Kim (2000), we propose an alternative structure for case-stacked nominals in Korean that adheres more strictly to the principle of endocentricity.

The contrast between sentences (35a) and (36b) can be explained in terms of the different syntactic roles and constraints governing PP-topics versus genuine grammatical subjects.

- (35) a. *Was among the ruins found a skeleton? (Bresnan, 1994:108)
b. Is under the bed a good place to hide? (Matsubara, 2009:137)

The ungrammaticality of (35a) arises because the PP subject *among the ruins* occupies a topic position, which blocks subject-auxiliary inversion. In contrast, *under the bed* in (35b) serves as a genuine grammatical subject rather than a topicalized PP, and its canonical subject properties allow it to be properly integrated into the sentence structure, directly interacting with subject-auxiliary inversion.

Additionally, the behavior of ‘is’ contraction highlights a further contrast between these two types of subjects.

- (36) a. *In San Joes’s a great restaurant. (Kaisse, 1985:40)
b. Under the rug’s the safest spot. (Matsubara, 2003:137)

(36a) is ungrammatical because the trace left by the topicalized subject ‘in San Jose’ blocks the contraction of ‘is’. In contrast, nothing prevents the contraction of ‘is’ in (36b), as the grammatical subject ‘under the rug’ remains in situ.¹⁹⁾

In sum, the above facts highlight the similarity between Korean case stacking and English PP subjects. In Korean, a single noun phrase can receive multiple case markers (e.g., dative with nominative or accusative), challenging the traditional one-to-one case assignment rule. Similarly, in English, PPs can function as subjects (e.g., “Under the bed is a good place to hide”) despite typically being non-nominal elements.

19) In PP topic constructions, the verb appears to agree with the thematic subject rather than the inverted PP itself.

- (i) In the swamp were/*was found two children. (Bresnan 1994:95)

In contrast, the following NP subject, ‘under the bed and under the table,’ clearly triggers plural agreement with the verb, which requires a plural form exclusively.

- (ii) Under the bed and under the table are/*is good for sleeping. (Arimura, 1987:22)

Both phenomena show that non-standard syntactic elements, like PPs in English and stacked case markers in Korean, can assume subject roles. In both languages, these elements behave similarly to noun phrases, suggesting broader syntactic parallels in how subject roles are assigned.

4. Concluding Remarks

This paper has analyzed the syntactic mechanisms underlying case stacking and case alternation in Korean within the minimalist framework, contrasting the case-by-agreement approach with the dependent case model. Through an examination of phenomena such as accusative-marked embedded subjects and case stacking, it highlights the limitations of case-by-agreement theories and demonstrates the broader applicability of the dependent case approach.

The findings indicate that while the case-by-agreement approach offers insights into feature matching and case assignment via syntactic heads, it struggles to account for unexpected case marking, such as accusative-marked subjects in Korean and Sakha. In contrast, the dependent case model provides a more robust explanation, positing that case assignment arises from the interaction of nominals within the local domain, emphasizing its relational nature.

The study of case stacking further illustrates the flexibility of Korean morphosyntactic structure, showing how a noun phrase can bear multiple case markers consistent with dependent case principles. This behavior parallels locative inversion in English, revealing cross-linguistic similarities in subject behavior, with Korean's major/grammatical subjects corresponding to English PP/NP subjects. These parallels suggest shared syntactic processes governing these phenomena cross-linguistically.

In conclusion, this paper advocates for the dependent case approach as a more comprehensive and unified framework for analyzing complex case phenomena. By aligning with minimalist principles of economy and simplicity, this model provides deeper insights into universal case marking principles. Future research should further investigate case competition and the interaction between lexical and dependent case in diverse languages to refine these theoretical models.

References

- Ahn, H.-D. (1988). Preliminary remarks on Korean NP. In E.-J. Baek (Ed.), *Papers from the sixth international conference on Korean linguistics*, 1-15. Seoul: Hanshin Publishing Co.

- Ahn, H.-D. (1992). Reconstruction effects in Korean. *New directions in linguistics for the 21st century. Proceedings of the 1992 Seoul International Conference on Linguistics*, 219-227.
- Arimura, K. (1987). Zenchishi syugo koubun ni tsutite [A study on the prepositional subject constructions]. *Raising Generation*, 4, 22.
- Baker, M. (2015). *Case: Its principles and its parameters*. Cambridge: Cambridge University Press.
- Baker, Mark C., & Vinokurova, Nadya. (2010). Two modalities of case assignment: case in Sakha. *Natural Language & Linguistic Theory*, 28(3), 593-642.
- Bowers, J. S. (1976). On surface structure grammatical relations and the structure-preserving Hypothesis. *Linguistic Analysis*, 2, 225-242.
- Bresnan, J. (1991). Locative Case vs. Locative Gender. *BLS* 17, 53-68.
- Bresnan, J. (1994). Locative inversion and the architecture of universal grammar. *Language*, 70, 72-131.
- Chen, T. (2018). *Multiple case assignment: An Amis case study*. Doctoral Dissertation, MIT.
- Choi, K. (2009). *Hankuke kyekkwa cosaury sayngsengthongsalon* [Generative syntax of Korean case and case particles]. Hankwuk Mwunhwasa.
- Chomsky, N. (2008). On phases. In R. Freidin, C. P. Otero, & M. L. Zubizarreta (Eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, 133-166, Cambridge, MA: MIT Press.
- Chung, C. (2001). Mixed functional properties in English stylistic inversion. *Proceedings of International HIPSG Conference*, 8, 121-136.
- Fong, S. (2020). *Introduction to Syntax*. Lecture Notes.
- Gerdts, D., and Youn, C. (1988). Korean psych constructions: Advancement or retreat? *Chicago Linguistics Society*, 24, 155-175.
- Gerdts, D., and Youn, C. (1990). Non-nominative subjects in Korean. *Harvard Studies in Korean Linguistics*, 3, 235-248. Seoul: Hanshin.
- Gerdts, D., and Youn, C. (1999). Case stacking and focus in Korean. *Harvard Studies in Korean Linguistics*, 8, 325-339.
- Hong, K. (1997). *Yengewa kwukey insang kwumwu pikyopwnsek* [Comparative Analysis of Raising Constructions in English and Korean]. *Language Research*, 33, 409-434.
- Iwasaki, H. (2007). On the prepositional subject construction. *Tsukuba English Studies*, 26, 109-126.
- Kaisse, E. M. (1985). *Connected speech: The interaction of syntax and phonology*. Orlando: Academic Press.
- Kim, K. (2000). Pihancengsa (Non-DP) cwueey kwanhan yennkwu (A study on Non-DP subject). *Studies in Generative Grammar*, 10, 37-69.
- Kim, D., and Kim, Y. (2003). Korean ECM constructions and the theory of phase. *Studies in Modern Grammar*, 33, 47-78.
- Kuno, S. (1973). *The structure of the Japanese language*. Cambridge: MIT Press.
- Lee, J. (1991). Case minimality: Case alternation in Korean ECM constructions. *Harvard*

- Studies in Korean Linguistics*, 4, 317-328.
- Lee, J. (1995). The role of case in exceptional case marking. *Studies in Generative Grammar*, 5, 265-318.
- Lee, K. (1988). *Kwuke kyekcosa ul/luluy yenkwu* [A study on Korean particles ul/lul] Top Publication.
- Lee, S. and Nie, Y. (submitted). Korean case stacking: Case, discourse and the nominal template.
- Levin, T. (2017). Successive-cyclic case assignment: Korean nominative-nominative case-stacking. *Natural Language and Linguistic Theory*, 35, 447-498.
- Levin, T., and Preminger, O. (2015). Case in Sakha: Are two modalities really necessary? *Natural Language and Linguistic Theory*, 33, 231-250.
- Marantz, A. (1991). Case and licensing. *Eastern States Conference on Linguistics*, 8, 234-253. Ithaca: CLC.
- Matsubara, N. (2003). Zenchishi syugo no tougoteki imiteki zyoken ni tsuite (A study on syntactic and semantic conditions on prepositional subject sentence.). *Eigo Gohou Bunkou Kenkyu*, 15, 138-14.
- Miyagawa, S. (2009). *Why agree? Why move?: Unifying agreement-Based and discourse-configurational languages*. Cambridge, MA: MIT Press.
- Park, H. (2001). Object raising and theticity. *Harvard Studies in Korean Linguistics*, 4, 630-639.
- Park, M.-K. (1994). An event structure analysis of the stative/non-stative distinction in periphrastic causative and *mit*-type verb constructions in Korean. In Y. Kim-Renaud (Ed.), *Theoretical Issues in Korean Linguistics*, 343-366, CSLI publication.
- Schütze, C. (1996). Korean “case stacking” isn’t: Unifying noncase uses of case particles. *North East Linguistic Society (NELS)*, 26, 351-365. Amherst: GLSA.
- Schütze, C. (2001). On Korean ‘case stacking’: The varied functions of the particles *-ka* and *-lul*. *The Linguistic Review*, 18, 193-232.
- Sells, P. (1995). Korean and Japanese morphology from a lexical perspective. *Linguistic Inquiry*, 26, 277-325.
- Stowell, T. (1981). *The origin of phrase structure*. Doctoral Dissertation, MIT.
- Urushibara, S. (1997). Korean accusative case and the morphological structure. *Harvard Studies in Korean Linguistics*, 7, 528-543.
- Vinokurova, N. (2005). *Lexical categories and argument structure: A study with reference to Sakha*. Doctoral Dissertation, University of Utrecht.
- Williams, E. (1984). Grammatical relations. *Linguistic Inquiry*, 15, 639-673.
- Yang, D.-W. (1999). Case features and case particles. *WCCFL*, 18, 626-639.
- Yoon, J. H.-S. (1996). Ambiguity of government and the chain condition. *Natural Language and Linguistic Theory*, 14, 105-162.
- Yoon, J. H.-S. (2004). Non-nominative (major) subjects and case stacking in Korean. In P. Bhoskaravao and K. V. Subbarao (Eds.), *Non-nominative subjects* 2, 265-314. Amsterdam: Benjamins.

- Yoon, J. H.-S. (2007). Raising of major arguments in Korean and Japanese. *Natural Language and Linguistic Theory*, 25, 615–653.
- Yoon, J. M. (1989). ECM and multiple subject constructions in Korean. *Harvard Studies in Korean Linguistics*, 3, 369-382.
- Yoon, J. M. (1991). *The syntax of A-chains: A typological study of ECM and scrambling*. Doctoral dissertation. Cornell University, Ithaca, N. Y.
- Yoon, J. M. (1993). Non-clause-bounded A-movement: A cross-linguistic study of ECM constructions in Korean. *Language Research*, 33, 231-265.
- Yoon, J. M. (1998). A critical survey of GB/Minimalist research on case and A-chains in Korean. *Language Research*, 34, 73-126.
- Youn, C. (1990). *A relational analysis of Korean multiple nominative constructions*. Seoul: Hanshin.
- Youn, C. (1998). Case stacking revisited. *Studies in Modern Grammar*, 14, 125–149.

Hee-Don Ahn

Professor

Department of English

Konkuk University

120 Neungdong-ro, Gwangjin-gu, Seoul 05029, Korea

E-mail: hdahn@konkuk.ac.kr

Sungeun Cho

Professor

Department of English Education

Yeungnam University

280 Daehak-ro, Gyeongsan, Gyeongbuk 38541, Korea

E-mail: scho1007@ynu.ac.kr

Received: October 14, 2024

Revised version received: December 16, 2024

Accepted: December 23, 2024