Existential Locatives and Possessives in Japanese and Korean*

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1 Introduction

Japanese and Korean use an existential predicate not only to express existence but also to convey possession and location (Lee 2008, Park 2009, Kim 2016, Tomioka 2007, Kishimoto 2016, among others). Korean uses the predicate *iss-* 'be', and Japanese uses *aru*/*iru* 'be', as shown in (1) and (2), respectively. The fact that these patterns often coincide crosslinguistically has prompted earlier studies to propose a unified analysis for both constructions (e.g. Freeze 1992). Upon closer examination, however, it becomes clear that the two constructions do not exhibit the same patterns. In this paper, I propose an analysis that encompasses Japanese and Korean, arguing that locative and possessive constructions have distinct argument structures based on their distinct syntactic behaviors. The present study aims to provide a more systematic explanation of the complexities and differences inherent in each construction.

* This study builds on my previous work, which was presented at CLS 60. I am grateful to John Whitman for his insightful discussions and feedback throughout the development of this project. I also appreciate Young-Hoon Kim and Hitomi Minamida for their help in providing judgments on Korean and Japanese. Additionally, I would like to thank Cornell Syntax Circle and the anonymous reviewers of JK 31 for their valuable comments. Any remaining errors are my own.

Japanese/Korean Linguistics 31.
Edited by William Giang, Lucien Brown, Shimako Iwasaki, Satoshi Nambu, and Daniel Pieper.

(1) Korean[1]
a. Locatives
Hakkyo-ey sensayngnim-i iss-ta.
school-LOC teacher-NOM be-DECL
'The teacher is at school.'
b. Possessives
Sensayngnim-eykey ai-ka iss-ta.
teacher-DAT child-NOM be-DECL
'The teacher has a child.'

(2) Japanese[2]
a. Locatives
Gakkō-ni sensei-ga iru.
school-LOC teacher-NOM be.ANM.PRS
'The teacher is at school.'
b. Possessives
Sensei-ni kodomo-ga iru.
teacher-DAT child-NOM be.ANM.PRS
'The teacher has a child.'

The organization of this paper is as follows: Section 2 presents observational data on existential locatives and possessives, focusing on their different behaviors. In Section 3, I propose distinct argument structures for the two constructions and show how the proposed analysis accounts for the data provided in Section 2. Section 4 concludes the discussion.[3]

2 The Empirical Scope

2.1 Subjecthood: Which Argument Serves as a Syntactic Subject?

Although the two constructions have similar surface forms consisting of one nominative and one dative (or location) argument, the empirical data given below demonstrate that which of the two arguments serves as a subject differs between the two constructions. There exist several diagnostics in the literature to test the subjecthood of an argument. Here, I capitalize on three diagnostics: subject honorification, PRO control, and arbitrary PRO. First, let us consider locative constructions in Korean.

(3) Korean Locatives
a. Hakkyo-ey sensayngnim-i kyeysi-ta. *Subject honorification*
school-LOC teacher-NOM be.HON-DECL
'The teacher is at school.'

[1] In Korean, the locative postposition and the dative case marker are homophonous, both represented by *-ey/-eykey*. Due to this, its grammatical category has not been established in the literature yet. In the present study, I will treat *-ey/-eykey* in locatives as a location postposition but *-ey/-eykey* in possessives as a dative case marker. Accordingly, I also assume that in Japanese, *-ni* in locatives is a location postposition but *-ni* in possessives is a dative case marker. Details will be discussed in Section 3. Note that the choice between the two forms *-ey* and *-eykey* depends on the animacy of the nominal phrase they are attached to: *-ey* is attached to inanimate nouns while *-eykey* is attached to animate nouns.

[2] In Japanese, *iru* is used when the nominative argument is animate, as shown in (2). When the nominative argument is inanimate, *aru* is used. However, there exists some exceptions: In possessives, *aru* can also be used with an animate nominative argument, as shown below:

(i) Sensei-ni {okane/kodomo}-ga ar-u.
teacher-DAT {money/child}-NOM be.INAN-PRS
'The teacher has {money/child}.' (adapted from Kishimoto 2016: 575)

[3] Non-Leipzig abbreviations used here include: ADN = adnominal; ANM = animate; CONJ = conjunction; GER = gerundive; HON = honorific; INANM = inanimate; MOD = modal; NMZ = nominalizer

b. [$PRO_{j/*k}$ telewu-myense] sensayngnim-i_j hakkyo-ey$_k$ iss-ta. *PRO control*
dirty-although teacher-NOM school-LOC be-DECL
'Although being dirty, the teacher is at school.'

c. [Hakkyo-ey PRO_{arb} iss]-nun kes-un coh-un il-i-ta. *Arbitrary PRO*
school-LOC be-ADN thing-TOP good-ADN thing-COP-DECL
'It is a good thing to be at school.' (adapted from Kishimoto 2016)

In (3a), *sensayngnim* 'teacher' is the only possible candidate for honorification. Given that only the subject can exhibit honorific agreement in Korean (e.g. Kim 2016), this suggests that the nominative argument functions as a subject. (3b) contains a PRO in the nonfinite adjunct subordinate *-myense* 'although' clause, which can only be coindexed with *sensayngnim* 'teacher' in the matrix clause. As shown by O'Grady (1991), control of the missing subject in a *-myense* 'although' clause is possible only by the subject of the matrix clause. For example in (4), the missing subject PRO can only be construed as 'John', not 'Harry'.

(4) [$PRO_{j/*k}$ haksayng-i-myense] John-i_j Harry-lul$_k$ piphanhay-ss-ta.
student-COP-although John-NOM Harry-ACC criticize-PST-DECL
'Although being a student, John criticized Harry.' (adapted from O'Grady 1991)

In (3b), PRO can only be controlled by the nominative argument *sensayngnim* 'teacher', although the adjective *delewu-* 'dirty' is semantically compatible both with animate and inanimate entities. Similar to the controlled PRO, an arbitrary PRO can only occur in subject position. This is illustrated in (3c). These diagnostics suggest that the subject of a locative construction is the nominative argument, not the location argument. (5) shows that Japanese exhibits the same pattern.

(5) Japanese Locatives

a. Gakkō-ni sensei-ga irassharu. *Subject honorification*
school-LOC teacher-NOM be.ANM.HON.PRS
'The teacher is at school.'

b. [$PRO_{j/*k}$ kitanai-nagara] sensei-ga$_j$ gakkō-ni$_k$ iru.[4] *PRO control*
dirty-although teacher-NOM school-LOC be.ANM.PRS

[4] In Kishimoto 2016, the author uses a different example for PRO control diagnostics, as shown in (ia).

(i) a. Sensei-wa Ken-ni$_j$ [koko-ni PRO_j i-te] hoshikat-ta
teacher-TOP Ken-DAT here-LOC be.ANM-GER want-PST
'The teacher wanted Ken to be here.'

b. Koko-ni Ken-ga iru
Here-LOC Ken-NOM be.ANM.PRS
'Ken is here.'

However, the Korean counterpart of (ia), shown in (ii), is not adequate to test for PRO control, as it is hard to diagnose whether the nominative argument *Ken* is really in the matrix clause and controls PRO in the embedded clause. I thus employ another PRO control diagnostic, an adjunct nonfinite subordinate clause, to show the parallels between two languages.

(ii) Sensayngnim-un Ken-i yeki-ey iss-ki-lul pala-ss-ta.
Teacher-TOP Ken-NOM here-LOC be-NMZ-ACC want-PST-DECL
'The teacher wanted Ken to be here.'

'Although being sick, the teacher is at school.'

c. [Gakkō-ni PRO_{arb} iru] koto-wa ii koto-da. *Arbitrary PRO*
school-LOC be.ANM thing-TOP good thing-COP
'It is a good thing to be at school.' (adapted from Kishimoto 2016)

In contrast, the same subjecthood diagnostics pick out the dative argument as the subject in possessive constructions.

(6) Korean Possessives

a. Sensayngnim-eykey ai-ka iss-usi-ta. *Subject honorification*
teacher-DAT child-NOM be-HON-DECL
'The teacher has a child.'

b. [$PRO_{j/*k}$ eli-myense] sensayngnim-eykey$_j$ ai-ka$_k$ iss-ta. *PRO control*
young-although teacher-DAT child-NOM be-DECL
'Although being young, the teacher has a child.'

c. [PRO_{arb} ai-ka iss]-nun kes-un coh-un il-i-ta. *Arbitrary PRO*
child-NOM be-ADN thing-TOP good-ADN thing-COP-DECL
'It is a good thing to have a child.'

(7) Japanese Possessives

a. Sensei-ni kodomo-ga irassharu. *Subject honorification*
teacher-DAT child-NOM be.ANM.HON.PRS
'The teacher has a child.'

b. [$PRO_{j/*k}$ wakai-nagara] sensei-ni$_j$ kodomo-ga$_k$ iru. *PRO control*
young-although teacher-DAT child-NOM be.ANM.PRS
'Although being young, the teacher has a child.'

c. [PRO_{arb} kodomo-ga iru] koto-wa ii koto-da. *Arbitrary PRO*
child-NOM be.ANM thing-TOP good thing-COP
'It is a good thing to have a child.'

In both (6a) and (7a), the only possible candidate for subject honorification is a dative argument 'teacher', and the predicate contains an honorific form either expressed via affixation (e.g. (6a)) or suppletion (e.g. (7a)). (6b) and (7b) show that the missing subject in an adjunct subordinate clause is controlled by the dative argument in the matrix clause. What (6c) and (7c) demonstrate is that an arbitrary PRO can occur in the place of a dative argument. All these diagnostics indicate that the dative possessor argument qualifies as a subject in possessive constructions. This contrast sharply with locative constructions, where the nominative theme argument functions as a subject.

2.2 Case Alternation in Possessive Constructions

Here I demonstrate an intriguing pattern with respect to case markers. In the case of possessives, both Japanese and Korean allow the possessor argument to occur with nominative case instead of dative case. In other words, case alternation between dative and nominative case is possible in possessives, without affecting the meaning of a sentence. It should be noted that this alternation is disallowed in locatives. To illustrate, see below:

(8) Korean
a. Locatives
*Hakkyo-ka Cheli-ka iss-ta.
school-NOM Cheli-NOM be-DECL
Intended: 'Cheli is at school.'
b. Possessives
Cheli-ka ai-ka iss-ta.
Cheli-NOM child-NOM be-DECL
'Cheli has a child.'

(9) Japanese
a. Locatives
*Gakkō-ga Tarō-ga iru.
school-NOM Taro-NOM be.ANM.PRS
Intended: 'Taro is at school.'
b. Possessives
Tarō-ga kodomo-ga iru.
Taro-NOM child-NOM be.ANM.PRS
'Taro has a child.'

In locative constructions, the location argument cannot have nominative case instead of a location postposition, as shown in (8a) and (9a). In contrast, the possessor argument, *Cheli* in (8b) and *Tarō* in (9b) can have nominative case. If locatives and possessives share identical syntactic structures with the same predicate, we would expect them to exhibit the same case pattern—a prediction that contradicts the observed facts.

So far, we have observed that locative and possessive constructions exhibit markedly different behaviors, despite their surface similarity. The evidence suggests that in locatives, the nominative argument functions as the subject, whereas in possessives, the dative argument qualifies as this role. Additionally, locatives and possessives differ with respect to case alternation: Case alternation between dative and nominative is allowed only in possessive constructions, meaning that possessives can have two nominative arguments. These findings suggest that the two constructions require distinct structural analyses rather than a unified approach.

3 My Analysis

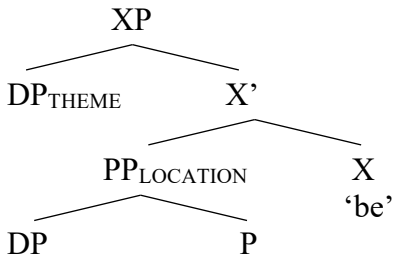
I argue for distinct argument structures for locatives and possessives. Building on Cho's (to appear) analysis of Korean, I will show that Japanese existential locatives and possessives also differ in their argument structures. In developing the argument, I will briefly introduce previous recent analyses on Japanese (e.g. Kishimoto 2016) and Korean (e.g. Park 2009, Kim 2016) and discuss the challenges they present. I then show how case alternation can be accounted for under the Dependent Case model (e.g. Marantz 1991, Levin 2017).

3.1 Locatives

I propose an argument structure for locatives in Korean and Japanese as illustrated in (10). Two phrases (i.e. DP and PP) in locatives are arguments, and the theme argument is base-generated higher than the location argument. The theme DP asymmetrically c-commands the location PP and raises to Spec, TP to satisfy EPP. This structure readily accounts for the fact that the theme arguments functions as subjects in locative constructions, as discussed above. (Note that details of the tree structure are omitted to highlight the similarity between Japanese and Korean.)[5]

[5] In Cho (to appear), I demonstrate that Korean *iss-* 'be' in locatives is categorially ambiguous between an adjective and a verb based on observations including the compatibility with a non-past marker *-n/nun* and certain sentential endings. It is argued that *iss-* is an adjective underlyingly, to which the verbalizer *v* can be merged for agentive locative constructions. An example of the agentive locative is given in (i).

(10) Argument structure of locatives



(where X = adjective in Korean, verb in Japanese)

This analysis contrasts with Park (2009) and Kim (2016) in that the location argument c-commands the theme argument in their analyses. Kishimoto (2016) argues that the Japanese existential predicate in locatives takes a theme as its sole argument and that the location phrase is an adjunct.

I provide two independent pieces of evidence that demonstrate that both the theme and the location phrases are arguments in locatives. One piece of evidence comes from argument ellipsis, which suggests that the location phrase is also an argument. Under the argument ellipsis analysis, only arguments can be elided but not adjuncts (Oku 1998, Kim 1999, Saito 2007).

(11) Korean

a. Cheli-ka coyonghi chayk-ul pal-ass-ko, Mina-to ____ pal-ass-ta.
Cheli-NOM quietly book-ACC sell-PST-CONJ Mina-also sell-PST-DECL
'Cheli sold books quietly, and Mina did (sell books) too.'

b. Cheli-ka coyonghi hakkyo-ey iss-ess-ko, Mina-to ____ iss-ess-ta.
Cheli-NOM quietly school-LOC be-PST-CONJ Mina-also be-PST-DECL
'Cheli was at school quietly, and Mina was (at school) too.'

In (11a), the second conjunct lacks an adverb and an accusative argument compared to the first conjunct. Notably, the meaning of the second conjunct, 'Mina did too', is interpreted as 'Mina also sold books' rather than 'Mina also sold books quietly'. This observation is used to support the claim that (11a) is an instance of an argument ellipsis, where the object *chayk* 'book' is elided from the full sentence 'Mina also sold books'. Now consider a locative construction (11b). The second conjunct of (11b) can only be interpreted as 'Mina was also at school', not 'Mina was also at school quietly'. If the location *hakkyo* 'school' were an adjunct just like *coyonghi* 'quietly', the second conjunct should be construed as 'Mina existed'. However, this is not the case. This suggests that the location phrase is indeed an argument. Japanese exhibits the same pattern:

(i) Nay-ka hakkyo-ey iss-nun-ta
I-NOM school-LOC be-NUN-DECL
'I am at school by choice.'

Here, the volition of the subject is implied by the presence of a morpheme *-nun*. The relevant discussion is beyond the scope of this paper. For this reason, I have abstracted away structure (10) by using XP instead of *a*P or *v*P. For a detailed discussion, see Cho's (to appear) work.

(12) Japanese

a. Tarō-ga shizuka-ni hon-o ut-te, Mina-mo ____ ut-ta.
Taro-NOM quietly book-ACC sell-GER Mina-also sell-PST
'Taro sold books quietly, and Mina did (sell books) too.'

b. Tarō-ga shizuka-ni gakkō-ni i-te, Mina-mo ____ i-ta.
Taro-NOM quietly school-LOC be-GER Mina-also be.ANM-PST
'Taro was at school quietly, and Mina was (at school) too.'

The second piece of evidence that supports the argumenthood of a location phrase comes from long distance scrambling. It has been argued that the long distance scrambling of an adjunct is not allowed while that of an argument is permitted without changing the meaning of the original sentence (Saito 1985, Yamashita 2013). To illustrate, see the Japanese examples below:

(13) Japanese argument long distance scrambling

a. Tarō-wa [Mina-ga ringo-o tabe-ta to] omotte-iru (koto).
Taro-TOP Mina-NOM apple-ACC eat-PST COMP think-PRS fact
'Taro thinks that Mina ate an apple.'

b. Ringo-o$_j$ Tarō-wa [Mina-ga t_j tabe-ta to] omotte-iru (koto).
apple-ACC Taro-TOP Mina-NOM eat-PST COMP think-PRS fact
'Taro thinks that Mina ate an apple.'

(14) Japanese adjunct long distance scrambling

a. Ken-wa [Mari-ga yukkuri-to bōru-o nage-ta to] it-ta.
Ken- TOP Mari-NOM slowly ball-ACC throw-PST COMP say-PST
'Ken said that Mari threw the ball slowly.'

b. Yukkuri-to$_j$ Ken-wa [Mari-ga t_j bōru-o nage-ta to] it-ta.
slowly Ken-TOP Mari-NOM ball-ACC throw-PST COMP say-PST
'Ken said slowly that Mari threw the ball.'
Intended: 'Ken said that Mari threw the ball slowly.' (adapted from Yamashita 2013)

(13b) is an instance of long distance scrambling of an argument. The embedded object *ringo* 'apple' is scrambled across the embedded clause; still, the sentence meaning remains the same as in (13a). In contrast, (14b) shows that when an adjunct *yukkuri-to* 'slowly' undergoes long distance scrambling, the meaning of the original sentence, (14a), does not hold.[6] The data including the long

[6] Korean exhibits the same pattern as Japanese with respect to long-distance scrambling of an argument and an adjunct. The long-distance scrambling of an argument is given in (i). (ii) shows the long-distance scrambling of an adjunct.

(i) Korean argument long-distance scrambling

a. Cheli-nun [Mina-ka sakwa-lul mek-ess-ta-ko] sayngkakha-n-ta
Cheli-TOP Mina-NOM apple-ACC eat-PST-DECL-COMP think-PRS-DECL

b. Sakwa-lul$_j$ Cheli-nun [Mina-ka t_j mek-ess-ta-ko] sayngkakha-n-ta
apple-ACC Cheli-TOP Mina-NOM eat-PST-DECL-COMP think-PRS-DECL
'Cheli thinks that Mina ate an apple.'

distance scrambling of a location phrase exhibits the same pattern as in (13), suggesting that the location phrase counts as an argument. See (15) and (16).

(15) Japanese

a. Tarō-wa [Mina-ka gakkō-ni i-ta to] it-ta.
Taro-TOP Mina-NOM school-LOC be-PST COMP say-PST
'Taro said that Mina was at school.'

b. Gakkō-ni$_j$ Tarō-wa [Mina-ka t_j i-ta to] it-ta.
school-LOC Taro-TOP Mina-NOM be-PST COMP say-PST
'Taro said that Mina was at school.'

(16) Korean

a. Cheli-nun [Mina-ka hakkyo-ey iss-ess-ta-ko] malhay-ss-ta.
Cheli-TOP Mina-NOM school-LOC be-PST-DECL-COMP say-PST-DECL
'Cheli said that Mina was at school.'

b. Hakkyo-ey Cheli-nun [Mina-ka t_j iss-ess-ta-ko] malhay-ss-ta.
school-LOC Cheli-TOP Mina-NOM be-PST-DECL-COMP say-PST-DECL
'Cheli said that Mina was at school.'

The fact that the location phrase can undergo long distance scrambling without changing the meaning indicates that it is an argument, rather than an adjunct.

As already mentioned above, Park (2009) and Kim (2016) propose that the location argument is base-generated higher than the theme in the structure. Park (2009) assumes that the theme, which is structurally lower than the location in its base-generated position, raises to Spec, TP and functions as a subject. However, there needs to be an explanation for how the lower argument undergoes raising over the higher argument in locatives, violating the Relativized Minimality condition (Rizzi 1990) or Shortest Move (Chomsky 1993). Kim (2016) assumes that the higher argument always raises to Spec, TP, the location argument in her analysis. However, this analysis wrongly predicts that the location argument counts as a subject, contradicting the subjecthood diagnostics discussed in Section 2. In addition, the proposed structure in (10) can be substantiated by examples including a reflexive anaphor.

(17) a. Cheli-ka$_i$ caki-uy$_i$ cip-ey iss-ta.
Cheli-NOM self-GEN home-LOC be-DECL

(ii) Korean adjunct long-distance scrambling

a. Cheli-nun [Mina-ka chenchenhi kong-ul tenci-ess-ta-ko] malhay-ss-ta.
Cheli-TOP Mina-NOM slowly ball-ACC throw-PST-DECL-COMP say-PST-DECL
'Cheli said that Mina threw the ball slowly.'

b. Chenchenhi$_j$ Cheli-nun [Mina-ka t_j kong-ul tenci-ess-ta-ko] malhay-ss-ta.
slowly Cheli-TOP Mina-NOM ball-ACC throw-PST-DECL-COMP say-PST-DECL
'Cheli said slowly that Mina threw the ball.'
Intended: 'Cheli said that Mina threw the ball slowly.'

b. [caki-uy$_i$ cip-ey]$_j$ Cheli-ka$_i$ t_j iss-ta.
self-GEN home-LOC Cheli-NOM be-DECL
'Cheli is at his home' (Lit. 'Cheli is at self's home.')

(17a) is the base word order for locatives, as the higher argument, the nominative theme DP, raises to Spec, TP. The reflexive anaphor *caki* 'self' is c-commanded by its antecedent *Cheli*, as expected. The fact that (17b), where *caki* 'self' is scrambled over its antecedent, is grammatical indicates that *caki* 'self' is c-commanded by *Cheli* before the scrambling, supporting m proposed structure.

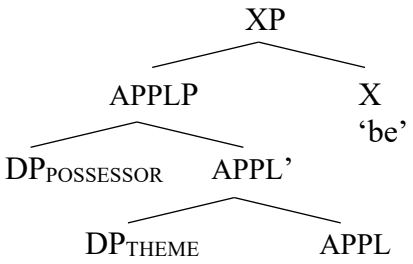
Throughout the paper, *-ey/-eykey* in Korean and *-ni* in Japanese are analyzed as locative postpositions in locative constructions, whereas in possessive constructions, they are treated as dative case. The Korean examples in (18) demonstrate that *-ey* in locatives can be replaced with the pure locative postposition *-eyse* 'at, in', while *-ey* in possessives cannot. Based on this contrast, I propose that *-ey* functions as a locative postposition rather than a dative case marker in locative constructions, as represented by P in (10). Japanese *-ni* does not show such a contrast; however, I suggest that *-ni* in Japanese should also be treated distinctively: It is a locative postposition in locatives, while it is a dative case in possessives (see also Kishimoto 2016).

(18) a. Cheli-ka$_i$ cip-ey/-eyse iss-ess-ta.
Cheli-NOM home-LOC be-PST-DECL
'Cheli was at home.'
b. Cha-ey/*-eyse eyncin-i iss-ess-ta.
car-DAT/LOC engine-NOM be-PST-DECL
'The car had an engine.'

3.2 Possessives

I propose that the argument structure of possessives includes a low applicative projection, building on Cho's (to appear) analysis.

(19) Argument structure of possessives



(where X = adjective in Korean, verb in Japanese)

The applicative head *APPL* introduces an applied argument (e.g., the possessor) in its Spec position, which asymmetrically c-commands the theme argument. This applied argument receives inherent dative case from *APPL* (Cuervo 2003, McFadden 2004, Kim 2016). Semantically, *APPL* encodes the possession relation between the two arguments. More specifically, I adopt Cuervo's (2003) *LowAPPL*$_{AT}$ for the semantics of *APPL*, as shown in (19), which represents a nondynamic possession relation—in contrast to Pylkkänen's (2008) transfer-of-possession analysis of the low

applicative head. This approach effectively accounts for the static possession relation observed in existential possessive constructions.

(20) *APPL*: $\lambda x.\lambda y.\lambda f_{\langle e,\langle s,t\rangle\rangle}.\lambda e.$ f(e, x) & Theme(e, x) & in-the-possession(x, y)

In parallel with the locative construction, the higher argument raises to Spec, TP and functions as a syntactic subject. Under the current proposal, the subjecthood of the dative possessor argument is readily explained.

The proposed analysis is analogous to Kim's (2016) analysis in that the possessor argument is an applied argument. Park (2009) argues that the possessor argument and the possessee argument are associated with the control PRO based on the claim that the possession relationship in Korean existential possessives is always inalienable. However, the possession relationship can be alienable in both Korean and Japanese, as shown in (21a) and (21b) respectively.

(21) a. Sensayngnim-eykey ton-i iss-ta.
teacher-DAT money-NOM be-DECL
'The teacher has money.'

b. Sensei-ni okane-ga ar-u.
teacher-DAT money-NOM be.INAN-PRS
'The teacher has money.'

The possession relation between the teacher and money is not inalienable. My analysis does not assume the inalienable possession relation, which is desirable. For Japanese, Kishimoto (2016) argues that the existential possessive construction has an argument structure analogous to a regular transitive verb, where the possessor originates in Spec, *v*P. In terms of the structural configuration or the relative hierarchy between the possessor and possessee argument, my proposal in (19) is similar to Kishimoto's (2016). However, since the possessor argument in possessives cannot be construed as an agent, it needs to be explained how its argument structure presents such a property.[7] Moreover, the case assignment of dative case needs an explanation in his analysis. My account can be viewed as a more refined articulation of the challenges found in Kishimoto's (2016) analysis.

3.3 Case Alternation in Possessives

I will demonstrate that the difference between locatives and possessives with respect to case alternation can be accounted for under the current proposal in tandem with Dependent Case model (Marantz 1991, Levin 2017). As shown in Section 2, possessives allow for case alternation between dative and nominative case while locatives do not.

[7] Refer to Cho (to appear) and Park (2009) for more discussion on the non-agentive characteristics of possessives.

(22) Korean

a. Locatives

Hakkyo-ey/*-ka Cheli-ka iss-ta.
school-LOC/-NOM Cheli-NOM be-DECL
Intended: 'Cheli is at school.'

b. Possessives

Cheli-eykey/-ka ai-ka iss-ta.
Cheli-DAT/-NOM child-NOM be-DECL
'Cheli has a child.'

(23) Japanese

a. Locatives

Gakkō-ni/-ga Tarō-ga iru.
school-LOC/-NOM Taro-NOM be.ANM.PRS
Intended: 'Taro is at school.'

b. Possessives

Tarō-ni/-ga kodomo-ga iru.
Taro-DAT/-NOM child-NOM be.ANM.PRS
'Taro has a child.'

In Cho (to appear), I claim that case alternation in possessives is associated with case stacking in that the former is a reduced phonological realization of the latter, following Levin (2017). The dative possessor argument in possessives allows case stacking of a nominative (Gerdts & Youn 1990, Yoon 2004), as shown in (24a), while the locative counterpart does not, as shown in (24b).

(24) a. Possessives

Cheli-eykey-ka ai-ka iss-ta.
Cheli-DAT-NOM child-NOM be-DECL
'Cheli has a child.'

b. Locatives

*Hakkyo-ey-ka Cheli-ka iss-ta.
school-LOC/-NOM Cheli-NOM be-DECL
Intended: 'Cheli is at school.'

Levin (2017) argues that Dependent Case is calculated successive-cyclically by phase, following the case assignment rules in (25). The case calculation of DPs is applied upon the spell-out of every phase (i.e. *v*P and CP).

(25) Korean case assignment rules

a. If a DP is (c-)selected by a functional head (F°) which specifies idiosyncratic case morphology, assign that morphology to the DP.
b. If there are two distinct DPs in the same phase such that DP_1 (asymmetrically) c-commands DP_2, assign accusative morphology to DP_2 if and only if DP_1 is caseless.
c. If a DP does not receive lexical or dependent case, it is caseless (realized as nominative case). (Levin 2017: 453)

In the current proposal, I assume that XP (e.g. *a*P in Korean and *v*P in Japanese) is equivalent to defective *v*P, wherein there is no external argument licensed by the functional head (Chomsky 2000). I also assume that an entire phase is spelled out when the next head is merged (Bobaljik & Wurmbrand 2005, den Dikken, 2007). Given this, let us see how case stacking in (24a) is realized.

(26) [$_{CP}$ [$_{TP}$ $DP_{POSSESSOR_i}$ [$_{aP}$ [$_{APPLP}$ t_i [DP_{THEME} APPL]]]]]
phase *phase*

The possessor DP *Cheli* gets inherent dative case from the *Appl* head. Upon merger of head T, the entire lower phase (i.e. *a*P) undergoes spell-out, and dependent case is calculated. Since the possessor DP is already case marked, the theme DP gets unmarked nominative case. When the next

phase CP undergoes spell-out, the dative possessor DP, which has moved to Spec, TP, gets an additional unmarked nominative, resulting in the case stacking of nominative upon dative case.

I assume that Japanese also allows case stacking in syntax. It is some constraint at PF that prohibits the stacked cases to be pronounced together, especially when the two cases are adjacent to each other.[8] In fact, there exist some cases in Japanese where case stacking seems to occur, as shown in (27).[9]

(27) ?Tarō-ni-dake-ga okane-ga aru.
Taro-DAT-only-NOM money-NOM be.INANM.PRS
'Only Taro has money.'

Here, the possessor argument has two cases, dative and nominative, similar to the Korean data in (24a). Even though case stacking is relatively rare in Japanese, it seems to be allowed in certain contexts. In contrast, case stacking cannot be achieved with the locative argument in locative constructions, as the case assignment rules only target DP, not PP.[10]

Before closing the discussion, it is worth highlighting one more striking contrast between locatives and possessives. The two constructions differ in the possible word order of arguments. In locatives, the relative order between the two arguments is not fixed. (28) and (29) show that the location argument and the nominative argument can appear in either order.

(28) Korean locatives
a. LOC-NOM
Hakkyo-ey sensayngnim-i iss-ta.
school-LOC teacher-NOM be-DECL
'The teacher is at school.'
b. NOM-LOC
Sensayngnim-i hakkyo-ey iss-ta.
teacher-NOM school-LOC be-DECL
'The teacher is at school.'

(29) Japanese locatives
a. LOC-NOM
Gakkō-ni sensei-ga iru.
school-LOC teacher-NOM be.ANM.PRS
'The teacher is at school.'
b. NOM-LOC
Sensei-ga gakkō-ni iru.
teacher-NOM school-LOC be.ANM.PRS
'The teacher is at school.'

By contrast, possessive constructions hold only when the dative argument precedes the nominative argument, as shown in (30a) and (31a). When the nominative argument precedes the dative argu-

[8] This type of assumption is not new. A similar approach has been discussed by Hiraiwa (2010) for double accusative case in Japanese. Hiraiwa (2010) argues that the so-called 'Double-*o* Constraint', which restricts the cooccurrence of two adjacent accusatives in Japanese, applies at PF after spell-out cyclically phase-by-phase, not in narrow syntax. In other words, the assignment of two accusative cases occurs in narrow syntax, but their realization is determined after spell-out by a syntax-PF interface condition.

[9] See Shimamura and Akimoto (2023) for discussion about case stacking involving the accusative case in Japanese.

[10] I suppose that the Agree case model (e.g. Hiraiwa's (2002) covert multiple agree mechanism) can also account for the case alternation. Hiraiwa (2002) claims that Agree can take place between the probe and all matched goals simultaneously at the same accessible domain (i.e. phase). If we assume that inherent case assignment can be optional (at least under certain configurations), a probe phi-feature of T can Agree with all matched goals in possessives, namely the possessor DP and the theme DP. This results in both arguments having nominative case. This cannot occur with PPs, as the realization of postpositions is not optional. I leave a detailed account for future work.

ment, as shown in (30b) and (31b), the sentence becomes highly degraded. The possession meaning is now barely available, and the only viable meaning one can get is the locative meaning—'The child is with the teacher (temporarily).'[11]

(30) Korean possessives
a. DAT-NOM
Sensayngnim-eykey ai-ka iss-ta.
teacher-DAT child-NOM be-DECL
'The teacher has a child.'
b. NOM-DAT
??Ai-ka sensayngnim-eykey iss-ta.
child-NOM teacher-DAT be-DECL
Intended: 'The teacher has a child.'

(31) Japanese possessives
a. DAT-NOM
Sensei-ni kodomo-ga iru.
teacher-DAT child-NOM be.ANM.PRS
'The teacher has a child.'
b. DAT-NOM
??Kodomo-ga sensei-ni iru.
child-NOM teacher-DAT be.ANM.PRS
Intended: 'The teacher has a child.'

Additionally, we have seen that in possessives, the possessor argument can appear with nominative instead of dative case. However, in such cases, reversing the order of the two arguments leads to a sentence that is highly degraded, nearly to the point of unacceptability, as in (32) and (33).[12]

(32) Korean possessives
*?Ai-ka sensayngnim-i iss-ta.
child-NOM teacher-NOM be-DECL
Intended: 'The teacher has a child.'

(33) Japanese possessives
*?Kodomo-ga sensei-ga iru.
child-NOM teacher- NOM be.ANM.PRS
Intended: 'The teacher has a child.'

It has been argued that the scrambling of a DP over a DP with the same morphological case is generally not allowed in Korean (Kim 1990, Lee 1993, Lee 2007) since it yields a meaning difference. For instance, in (32) and (33), the scrambling of the second nominative argument 'child' over the first, 'teacher', changes the meaning: The only plausible interpretation now is 'The child has a teacher', not 'The teacher has a child.' Cho (to appear) argues that the same constraint applies in (30), as the possessor argument also bears (stacked) nominative case in narrow syntax. However, Tomioka (2007) demonstrates that in Japanese, word order restrictions in possessives disappear in certain embedded contexts. While Korean data was not explicitly examined, he suggests a similar effect may be at play. Consider below:

(34) a. Japanese
Kodomo-ga mō hitori Mina-ni i-tara shigoto-o yamete-iru-darō.
child-NOM more one Mina-DAT be-if job-ACC quit-PROG-MOD
'If Mina had one more child, she would have quit her job.'

[11] Park (2009) marks examples in Korean like (30b) ungrammatical and provides a syntactic account. Tomioka (2007) marks examples in Japanese like (31b) highly degraded, arguing that they are infelicitous for pragmatic reasons.

[12] Lee (1993), focusing on psych-predicates, argues that the word order restriction plays a role only when both arguments have nominative case. She claims that the sentence is not degraded when the dative argument precedes the nominative argument. See Chapter 4 in Lee (1993) for further details.

b. Korean
Ai-ka hana te Mina-eykey iss-ess-ta-myen il-ul kumantu-ess-ul.kes-i-ta.
child-NOM one more Mina-DAT be-PST-DECL-if job-ACC quit-PST-MOD-COP-DECL
'If Mina had one more child, she would have quit her job.'

(34a), adapted from Tomioka (2007), maintains the possession relationship between Mina and her child, even though the nominative possessee precedes the dative possessor. The same holds in Korean, as in (34b). This contrasts with (30b) and (31b). The reverse argument order seems to be allowed when adequate contextual information is provided. Tomioka (2007) proposes a pragmatic analysis that highlights information structure (see also Lee's 1993 anti-ambiguity constraint for a similar proposal, building on Kuno 1980) to account for the contrast. The question of whether word order restrictions require a syntactic account or a semantico-pragmatic one explanation falls beyond the scope of this paper. I leave further exploration of this issue for future research.

4 Conclusion

In this paper I have shown that existential predicates in Japanese and Korean serve to express location and possession meanings, and the two constructions present distinct syntactic behaviors with respect to the subjecthood of a sentence and case alternation. While Japanese and Korean share some similarities in these patterns, there has been limited comparative analysis between the two languages. The current proposal aims to provide an analysis that encompasses both languages. Based on these observations, I propose distinct argument structures, where only the possessive construction involves an applicative projection. My analysis accounts for the observed data and addresses challenges found in previous studies. This study not only contributes to a more refined analysis of the argument structures in each language but also highlights the systematic parallelism between Japanese and Korean.

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