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ARTICLE

Syntax and Semantics of Bound Variable Anaphora in Quirky Binding

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ABSTRACT

This paper demonstrates that the Korean reflexives *caki* 'self' and *caki-casin* 'self-self' exhibit distinct semantic behaviors across eight analytical contexts, which can be systematically explained by LF (Logical Form) movement of the relevant quantificational phrases (QPs). Crucially, *caki* is interpreted via intended coreference, relying on contextual cues to link with its antecedent, whereas *caki-casin* is strictly anaphoric, bound to a syntactically accessible antecedent. Semantically, *caki* acts as a free variable, allowing flexible reference depending on context, while *caki-casin* is tightly bound to a specific linguistic antecedent. This difference extends to variable binding: *caki* induces bound-variable readings only in non-local contexts, whereas *caki-casin* supports bound-variable interpretations in both local and non-local domains. They also differ in semantic interpretations: *caki* permits both covariant and invariant readings, reflecting interpretive flexibility, while *caki-casin* allows only covariant readings, indicating a more rigid interaction with quantificational structures. Diagnostic tests reinforce this asymmetry. The even test shows distinct presuppositional effects for each reflexive, highlighting their semantic divergence. The only test reveals different truth-conditional outcomes when a quantificational NP headed by *only* serves as an antecedent, supporting their non-equivalence. Regarding thought attribution, *caki* typically induces direct thought interpretations, aligning with the subject's internal perspective, while *caki-casin* favors indirect thought, implying mediated or reported perspective. Finally, *caki* can carry its own reference in discourse, functioning autonomously, whereas *caki-casin* requires anchoring to an explicit antecedent. This further underscores their semantic non-parallelism.

Keywords: Quirky Binding; Bound Variable Anaphora; Semantics; Syntax; Bound Variable; Free Variable

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1. Introduction

This paper presents a comprehensive and theoretically grounded investigation into the behavior of Korean reflexive expressions—specifically *caki* 'self' and *caki-casin* 'self-self'-within the domain of bound-variable anaphora and, more precisely, within what has come to be known as "quirky binding" configurations. The central objective of this study is to demonstrate that *caki* and *caki-casin*, though often treated as reflexive variants in Korean, exhibit non-identical semantic profiles that diverge systematically across a range of diagnostic environments. The study is guided by the hypothesis that the apparent asymmetries between these two reflexives can be formally accounted for by invoking LF (Logical Form) movement, particularly the movement of relevant quantificational phrases (QPs), which in turn gives rise to distinctive interpretive outcomes. In making this argument, the paper not only sheds light on the internal dynamics of Korean reflexivization but also contributes to broader theoretical debates concerning the interface between syntax, semantics, and discourse. The paper addresses eight key empirical phenomena, each of which provides evidence for the semantic divergence of *caki* and *caki-casin*. First, it is shown that in so-called "quirky" binding contexts—where the antecedent fails to meet the standard syntactic condition of c-command—both reflexives nonetheless permit anaphoric interpretation. This challenges the assumptions of traditional Binding Theory (e.g., Chomsky 1981), where reflexive pronouns are expected to be locally bound within a c-commanding domain. The Korean data demonstrate that these reflexives can appear in environments that violate these syntactic constraints, motivating the classification of such cases as instances of "quirky binding," and suggesting the need for a semantically oriented explanatory framework. Second, the reflexives differ fundamentally in their interpretive mechanisms. *Caki* 'self' is best characterized as a logophoric reflexive whose reference is resolved through speaker intention and contextual cues. It functions as a free variable whose value is pragmatically supplied, making it sensitive to discourse structure. In contrast, *caki-casin* 'self-self' is interpreted through strict anaphoric dependency, functioning as a bound variable whose reference is determined by structural binding relations, independent of speaker intention. This distinction underlies much of the observed semantic behavior across contexts. Third, in bound-variable readings, *caki-casin* exhibits robust binding behavior with quantificational antecedents, including universal quantifiers and wh-expressions, regardless of locality. It reliably yields bound-variable interpretations in these contexts. *Caki*, on the other hand, generally resists such readings unless specific pragmatic or discourse conditions override its default logophoric usage. Even in such cases, the bound-variable reading of *caki* remains weaker, often contingent upon speaker intention rather than syntactic binding. Fourth, the paper explores the variable status of these reflexives. *Caki* behaves like a discourse variable whose reference is assigned via pragmatic processes rather than structural binding, reinforcing its logophoric character. By contrast, *caki-casin* operates as a syntactically constrained bound variable, whose interpretation is compositionally derived and structurally predictable. This distinction is key to understanding why these forms differ in semantic rigidity and interpretive scope. Fifth, the study investigates covariation patterns and finds that *caki* permits both covariant and invariant readings. In contrast, *caki-casin* allows only covariant readings, revealing its semantically bound nature and resistance to pragmatic flexibility. This rigidity further supports the conclusion that *caki-casin* is structurally bound, whereas *caki* remains context-sensitive. Sixth, the use of the "even" test—an established diagnostic in the analysis of bound-variable anaphora—reinforces this distinction. *Caki-casin* behaves predictably as a canonical anaphor, with its interpretation constrained by syntactic dependencies. *Caki*, however, shows interpretive flexibility, suggesting that it is not strictly subject to structural constraints and instead draws from broader discourse and perspective-based cues. Seventh, the "only" test, which examines reflexive interpretation in sentences with only-quantified antecedents, further distinguishes the two forms. The reflexives produce divergent truth conditions depending on which one is used, highlighting their semantic non-equivalence. *Caki-casin* yields readings that are consistent with structural binding, whereas *caki* produces interpretations that are more variable and context-dependent. Eighth and finally, the study considers the role of perspective and logophoricity. *Caki* is closely associated with direct thought attribution and internal perspective-taking, aligning it with logophoric pronouns found in other languages. It serves to express the subject's inner voice or consciousness. *Caki-casin*, by contrast, lacks these logophoric properties and aligns with indirect thought or structurally based reference, thereby

reinforcing its status as a non-logophoric anaphor. Taken together, the evidence presented across these eight diagnostic contexts supports a clear and robust distinction between the two reflexives. *Caki* 'self' should be analyzed as a logophoric, pragmatically governed reflexive whose interpretation is context-sensitive and not subject to syntactic binding constraints. *Caki-casin* 'self-self', on the other hand, is a structurally bound, semantically rigid reflexive that obeys canonical anaphoric binding principles. The analysis put forth in this paper not only deepens our understanding of reflexivity in Korean but also informs broader cross-linguistic theories of anaphora, logophoricity, and the syntax-semantics interface. The findings demonstrate how subtle morphological distinctions in reflexive forms can correspond to significant underlying differences in semantic behavior and theoretical classification. While these findings underscore clear semantic distinctions between *caki* and *caki-casin*, this research remains limited in scope, as the uses of *caki* 'self' and *caki-casin* 'self-self' are restricted to specific contexts.

2. Data Collection and Materials

To substantiate the claim that the Korean reflexive *caki* 'self' cannot be treated as equivalent to the more complex reflexive form *caki-casin* 'self-self', we constructed a series of Korean sentences featuring both reflexives in a range of syntactic environments. These examples were carefully crafted to mirror natural and attested usage patterns, ensuring that the reflexives were situated within linguistically plausible contexts. Our goal was to create a robust empirical basis for distinguishing between the two forms. To this end, we developed and analyzed eight distinct sets of data, each designed to highlight how *caki* 'self' and *caki-casin* 'self-self' diverge semantically—even when embedded in otherwise identical syntactic frames. The analyses demonstrate that these two reflexives are not interchangeable and, in fact, encode different interpretive properties, revealing a systematic semantic distinction that challenges any assumption of their functional equivalence in Korean syntax and semantics.

2.1. Intended Coreference and Anaphoric Reference

In what follows, we aim to elucidate the problem of traditional binding, which depends on the c-command condition. Chomsky's (1981, 1995) binding theory requires anaphors to be c-commanded by their antecedent, as indicated in (1):

(1) *John$_i$'s sister criticized himself$_i$.

The ungrammaticality of sentence (1) arises because the English reflexive *himself* is not c-commanded by its antecedent. According to Chomsky's Binding Theory, an element X can only "bind" another element Y if X c-commands Y. Therefore, for a reflexive to be grammatical, its antecedent must c-command it. The ungrammaticality observed in (1) thus provides evidence for the necessity of the c-command condition in binding.

(2) Caki-uy emeni-lul nwukwuna salanghanta.
(His mother everyone loves.)

In example (2), the quantifier *nwukwuna* 'everyone' does not c-command the Korean reflexive *caki* 'self', yet it still binds *caki*, resulting in an interpretation where each individual (e.g., John, Tom, Mary, Bill, etc.) loves his or her mother. This suggests that *caki* 'self' is interpreted through variable binding with *nwukwuna*, despite the lack of c-command. This observation presents a challenge to Chomsky's standard analysis, which does not account for the phenomenon of Korean quirky binding. How, then, can we explain Korean quirky binding? We resolve this issue by assuming that Korean allows object-subject constructions, which means that, following quantifier raising at LF, the operator *nwukwuna* 'everyone' c-commands its dependent term *caki* 'self'. In other words, the c-command condition is satisfied at LF after the relevant quantificational phrase (QP) undergoes movement. Alternatively, we could account for this by positing that the topicalized NP *caki-uy emeni* 'his mother' in (2) can be reconstructed to its original position, thereby ensuring that the c-command condition is met. Next, we turn to the distinction between intended coreference and anaphoric reference. Interestingly, the Korean reflexive *caki* 'self' is interpreted through *intended coreference*, meaning that the reflexive is related to its antecedent based on the speaker's intention. This is in contrast to *caki-casin* 'self-self', which is interpreted through *anaphoric reference*—i.e., the reflexive is bound to its antecedent through a strictly syntactic relationship, independent of the speaker's intention. In the case of *intended coreference*, the co-reference between *caki* and its antecedent is established pragmatically by the

speaker, rather than purely syntactically.

(3) Caki (points to Tom) uy emeni-lul nwukwuna salanghanta.
(Tom's mother everyone loves.)

As shown in example (3), when the speaker designates Tom as the referent of *caki* 'self', the reflexive cannot be interpreted as bound by the quantifier *everyone* through variable binding. Instead, the referent of *caki* is determined by the speaker's intention. This type of reference is referred to as *intended coreference*. In contrast, *caki-casin* 'self-self' is always interpreted in relation to its linguistic antecedent, independently of the speaker's intention.

(4) Caki-casin (points to Tom) uy emeni-lul nwukwuna salanghanta.
(His mother everyone loves.)

As shown in example (4), the pointing effect does not apply in this case, and the Korean reflexive *caki-casin* 'self-self' is interpreted through variable binding with the quantifier *everyone*. The resulting interpretation is as follows: John loves his own mother, Tom loves his own mother, Bill loves his own mother, Mary loves her own mother, etc. This type of reference is referred to as *anaphoric reference*. Notably, anaphoric reference is automatically assigned to *caki-casin* 'self-self' without any involvement of the speaker's intention. In contrast, *caki* 'self' is influenced by the type of antecedent, as demonstrated in example (5).

(5) a. Caki-lul Mary-ka piphanhayssta.
(Mary criticized himself.)
b. ??/*Caki$_i$-lul Nwukwuna$_i$ piphanhayssta.
(Everyone criticized himself.)
c. Caki (the hearer)-lul Nwukwuna piphanhassta.
(You everyone criticized.)

As illustrated in (5a), *caki* 'self' refers to its antecedent, *Mary*, and is not associated with the quantifier *everyone*. Interestingly, the hearer is favored as the referent of *caki* over the quantifier *everyone*. In other words, *caki* is sensitive to the type of its antecedent. As shown in (5b), *caki* is not interpreted as bound by the quantifier *everyone* through variable binding. In contrast, *caki-casin* 'self-self' is unaffected by the type of its antecedent, as demonstrated in example (6).

(6) a. Caki-casin-ul Mary-ka piphanhayssta.
(Mary criticized herself.)
b. Caki-casin-ul Nwukwuna piphanhayssta.
(Everyone criticized himself.)

In (6b), *caki-casin* 'self-self' is interpreted as bound to its linguistic antecedent through variable binding, yielding the following interpretation: John criticized himself, Bill criticized himself, Mary criticized herself, etc. This supports the conclusion that the Korean reflexive *caki* 'self' cannot be treated on par with *caki-casin* 'self-self', as they exhibit distinct semantic behaviors.

2.2. A Free Variable

This section compares *caki* 'self' and *caki-casin* 'self-self' within the context of quirky binding, where the relevant operator c-commands its dependent term at LF after quantifier raising. Semantically, the Korean reflexive *caki* 'self' differs from *caki-casin* 'self-self' in that the former behaves as a free variable, while the latter does not. To illustrate this distinction, consider the following examples:

(7) Caki (points to Bill)-ka ttokttokhata-ko nwukwuna sayngkakhanta.
(Everyone thinks that Bill is intelligent.)
(8) Caki (points to Tom)-ka ttokttokhata-ko nwukwuna sayngkakhanta.
(Everyone thinks that Bill is intelligent.)
(9) Caki (points to Mary)-ka ttokttokhata-ko nwukwuna sayngkakhanta.
(Everyone thinks that Bill is intelligent.)
(10) Caki-ka ttokttokhata-ko nwukwuna sayngkakhanta.
(Everyone thinks that he himself is or you are intelligent.)

It is important to note that in example (7), the Korean reflexive *caki* 'self' is interpreted as referring to Bill, as the speaker's intention determines the interpretation. In example (8), however, the referent of *caki* shifts to Tom when the speaker points to him, demonstrating the flexibility of *caki* as a free variable. In other words, the referent of *caki* depends on the speaker's intention. Example (9) further confirms that *caki* behaves as a free variable. Here, *caki* refers to Mary, as the speaker again uses the pointing effect to establish the referent. Most notably, example (10) is ambiguous, allowing for

both a bound variable reading and a free reading. The bound variable interpretation is as follows: "John thinks that he is intelligent, Tom thinks that he is intelligent, Bill thinks that he is intelligent." The free reading is: "Everyone thinks that you are intelligent." This ambiguity resolves when the speaker's intention, through the pointing effect, is made explicit. For further clarification, consider example (11):

(11) Caki (points to the hearer)-ka ttokttokhata-ko nwukwuna sayngkakhanta.
(Everyone thinks that you are intelligent.)

It is interesting to note that in example (11), the referent of *caki* 'self' becomes the hearer, as the speaker points to the hearer. In this context, *caki* cannot be interpreted as a bound variable, which is clearly demonstrated by this example. On the other hand, the pointing effect does not apply to the Korean reflexive *caki-casin* 'self-self', as shown in examples (12) and (13).

(12) Caki-casin (points to Bill)-i ttokttokhata-ko nwukwuna sayngkakhanta.
(Everyone thinks that he himself is intelligent.)
(13) Caki-casin (points to Bill)-i ttokttokhata-ko nwukwuna sayngkakhanta.
(Everyone thinks that he himself is intelligent.)

It is important to note that in example (12), *caki-casin* 'self-self' is interpreted through variable binding with the quantifier *everyone*. In other words, *caki-casin* is associated with the QP for *everyone*, resulting in the following interpretation: "John thinks that he himself is intelligent, Bill thinks that he himself is intelligent, Mary thinks that she herself is intelligent," and so on. The same interpretation holds for example (13). In this case, *caki-casin* 'self-self' does not behave as a free variable. Specifically, in (13), *caki-casin* cannot refer to Bill, despite the fact that the speaker points to him. Thus, it is reasonable to conclude that the Korean reflexive *caki* 'self' is semantically distinct from *caki-casin* 'self-self', with the former behaving as a free variable, while the latter does not.

2.3. A Bound Variable

This section compares the Korean reflexives *caki* 'self' and *caki-casin* 'self-self' in the context of quirky binding. Notably, *caki* 'self' does not allow a bound variable reading in local contexts but does induce a bound variable reading in non-local contexts. In contrast, *caki-casin* 'self-self' allows a bound variable reading in both local and non-local contexts. Interestingly, when QPs and Wh-words are associated with a dependent term, the only way for the dependent term to be linked to them is through a bound variable reading. Consider example (14):

(14) Caki-lul nwukwuna cohahanta.
(Everyone likes you.)
(15) Caki-uy aitul-ul nwukwuna cohahanta.
(Everyone likes his children.)
(16) Caki-lul nwuka cohahay?
(Who likes you?)
(17) Caki-uy chinkwu-lul nwuka cohahay?
(Who likes his friend or Who likes your friend?)

It is important to note that the Korean reflexive *caki* 'self' does not induce a bound variable reading in local contexts, as shown in example (14). In this case, *caki* is not interpreted as a bound variable. That is, the following reading does not arise: "John likes himself, Tom likes himself, Bill likes himself," etc. This suggests that in local contexts, *caki* is not linked to the quantifier phrase (QP) through variable binding. However, *caki* can be interpreted as related to the QP through variable binding in non-local contexts, as illustrated in example (15). Here, *caki* induces a bound variable reading, with the interpretation: "John likes his children, Tom likes his children, Bill likes his children," etc. Interestingly, *caki* also cannot be associated with the Wh-word *nwuka* in local contexts, thus failing to yield a bound variable interpretation. In contrast, in non-local contexts, *caki* can be bound to the Wh-word, resulting in a bound variable reading with the interpretation: "Does John like his friend? Does Tom like his friend? Does Bill like his friend?" and so on. It is also worth noting that example (17) is ambiguous. The reflexive *caki* can refer to the hearer, yielding a free reading. From these observations, it is clear that the Korean reflexive *caki* induces a bound variable reading in non-local contexts, but not in local contexts.

Next, we turn our attention to the Korean reflexive *caki-casin* 'self-self' in quirky binding. Consider examples (18), (19), (20), and (21):

(18) Caki-casin-ul nwukwuna cohahanta.
(Everyone likes himself.)
(19) Caki-casin-uy aitul-ul nwukwuna cohahanta.
(Everyone likes his children.)
(20) Caki-casin-ul nwuka cohahay?
(Who likes himself?)
(21) Caki-casin-uy chinkwu-lul nwuka cohahay?
(Who likes his friend?)

Interestingly, the Korean reflexive *caki-casin* 'self-self' can consistently be interpreted as a bound variable, as demonstrated in examples (18), (19), (20), and (21). Specifically, the bound variable reading of *caki-casin* is unaffected by the domain, whether local or non-local context. For instance, in (18), *caki-casin* is construed as a bound variable, with the interpretation: "John likes himself, Bill likes himself, Mary likes herself," and so on. Similarly, in (19), *caki-casin* induces a bound variable reading: "John likes his children, Mary likes her children, Bill likes his children," etc. In (20), *caki-casin* can be associated with the Wh-word *nwuka* through variable binding, yielding the interpretation: "Does John like himself? Does Mary like herself? Does Bill like himself?" Similarly, in (21), *caki-casin* can again be associated with the Wh-word *nwuka* via variable binding, resulting in: "Does John like his friend? Does Bill like his friend? Does Mary like her friend?" From these examples, it is clear that the Korean reflexive *caki-casin* consistently induces a bound variable reading, regardless of context. In contrast, the Korean reflexive *caki* 'self' only induces a bound variable reading in non-local contexts.

2.4. A Covariant Interpretation and an Invariant Interpretation

A related phenomenon governed by the same restrictions as quantified NP anaphora is the Sloppy Identity interpretation. First introduced by Ross (1967), Sloppy Identity refers to a bound variable interpretation in contexts where the antecedent is non-quantificational, most commonly observed in VP-deletion constructions (see Sag 1976, Reinhart 1983, Higginbotham 1992, among others)[1–4]. It is important to note that the following sentence is ambiguous, allowing for both (a) and (b) readings:

(22) John respected his supervisor and so did Bill
(a) Covariant Interpretation
John respected his supervisor, and Bill respected Bill's supervisor.
John ((λx (x respected x's supervisor)) &
Bill ((λx (x respected x's supervisor))
(b) Invariant Interpretation
John respected his supervisor, and Bill respected John's supervisor.
John ((λx (x respected John's supervisor)) &
Bill ((λx (x respected John's supervisor))

In example (22), the second conjunct introduces ambiguity in the coreference interpretation. Specifically, (22) is ambiguous between the (a) and (b) readings. Similarly, the Korean reflexive *caki* 'self' also induces ambiguity in coreference interpretations, as illustrated in examples (23a) and (23b):

(23) Caki-uy citokyosu-lul John-un conkyeonghayssko Bill-to kulehayssta.
John respected his supervisor and so did Bill
(a) Covariant Interpretation
John respected his (John's) supervisor, and Bill respected Bill's supervisor.
John ((λx (x respected x's supervisor)) &
Bill ((λx (x respected x's supervisor))
(b) Invariant Interpretation
John respected his (John's) supervisor, and Bill respected John's supervisor.
John ((λx (x respected John's supervisor)) &
Bill ((λx (x respected John's supervisor))

As shown in examples (23a) and (23b), the second conjunct introduces ambiguity in the coreference interpretation of (23). Notably, the Korean reflexive *caki* 'self' allows for both a covariant and an invariant interpretation in the second conjunct. In contrast, the Korean reflexive *caki-casin* 'self-self' results in only a covariant interpretation, as demonstrated in example (24):

(24) Caki-cain uy citokyosu-lul John-un conkyeonghayssko Bill-to kulehhayssta.
John respected his supervisor and so did Bill
Covariant Interpretation
John respected his (John's) supervisor, and Bill respected Bill's supervisor.
John ((λx (x respected x's supervisor)) &

Bill ((λx (x respected x's supervisor))

Interestingly, the Korean reflexive *caki-casin* 'self-self' induces only a covariant interpretation in the second conjunct. This leads to the conclusion that the Korean reflexive *caki* 'self' is semantically distinct from *caki-casin* 'self-self.' Specifically, *caki* allows for both covariant and invariant interpretations, whereas *caki-casin* gives rise exclusively to a covariant interpretation.

2.5. Even Test

This section focuses on comparing *caki* 'self' and *caki-casin* 'self-self' in the context of quirky binding. The *even* test reveals a clear semantic distinction between the two reflexives. Consider the following sentence:

(25) Caki-uy yeca chinkwu-lul simcie Tom cocha cohhahyssta.
(Even Tom liked his girlfriend.)

Interpretation of (25): For most students x, x liked Tom's girlfriend, and Tom is the last person who liked Tom's girlfriend.

Sentence (25) has different truth conditions depending on the type of interpretation assigned to *caki* 'self'. Now, consider sentence (26):

(26) Out of 10 students, 8 students liked Tom's girlfriend.

The presupposition in (25) is compatible with (26). However, *caki-casin* 'self-self' behaves differently semantically:

(27) Caki-casin-uy yeca chinkwu-lul simcie Tom cocha cohhahyssta.
(Even Tom liked his girlfriend.)

Interpretation of (27): For most students x, x liked x's girlfriend, and Tom is the last person who liked Tom's girlfriend.

Now let us consider the following:

(28) Out of 10 students, 8 students liked Tom's girlfriend.

In contrast, the situation described in (28) makes sentence (27) false under the interpretation of (28). As demonstrated, the *even* test reveals a semantic distinction between *caki* 'self' and *caki-casin* 'self-self' in quirky binding. Therefore, it is reasonable to argue that *caki* 'self' cannot be treated on par with *caki-casin* 'self-self' in this context.

2.6. Only Test

The *only* NP test further clarifies the semantic distinction between *caki* 'self' and *caki-casin* 'self-self' in quirky binding. When a reflexive has only an NP as its antecedent, the truth condition of the sentence changes. Let us consider the following scenario:

(29) Caki-lul John mani cohahayssta.
(Only John liked himself.)

Now let us assume that his friends, Bill, Tom, Henry, and Mary liked him, but they didn't like themselves.

(30) John's friends, Bill, Tom, Henry, and Mary liked him, but they didn't like themselves.

The situation described in (30) makes sentence (29) false. In (29), John is not the only person who liked himself; as shown in (30), Bill, Tom, Henry, and Mary also liked him. Therefore, the state of affairs in (30) renders (29) false. Now, let us consider the following scenario:

(31) Caki-casin-ul John mani cohahayssta.
(Only John liked himself.)

In contrast, (31) should be true, as nobody but John liked himself, as illustrated in (30). As demonstrated in (29), (30), and (31), the *only* test reveals the semantic distinction between *caki* 'self' and *caki-casin* 'self-self' in quirky binding. Therefore, it is reasonable to conclude that *caki* 'self' and *caki-casin* 'self-self' behave differently semantically.

2.7. Direct Thoughts and Indirect Thoughts

This section focuses on the semantic distinction between direct and indirect thoughts, as discussed by Higginbotham (1989b, 1992, 1999)[5,6]. We will show that the Korean reflexive *caki* 'self' conveys direct thoughts, while *caki-casin* 'self-self' conveys indirect thoughts. Let us now consider the following examples:

(32) a. Caki-ka ikilkessila-ko John-un kitayhanta.
(John expects that he will win.)

b. Caki-casin-i ikilkessila-ko John-un kitayhanta.
(John expects that he will win.)

In (32b), most speakers interpret the sentence as "John expects that JOHN (but other alternative individuals under consideration) will win." In this context, the nominative *caki-casin* 'self-self' in the embedded clause behaves similarly to the English expression "he himself." However, the Korean reflexive *caki-casin* in (32b) carries a presupposition: there are individuals who could potentially win, and JOHN is the only one among them who is expected to do so. In contrast, for direct thoughts, the Korean reflexive *caki* 'self' can be replaced with the null subject *e*, conveying the same thoughts:

(33) e ikilkessila-ko John-un kitayhanta.
(John expects that he will win.)

It is important to note that in (32a) and (33) above, most speakers do not interpret the sentence as "John expects that JOHN will win." Furthermore, in these examples, there is no presupposition like the following: "There are individuals who could potentially win, and JOHN is the only one expected to do so." This distinction suggests that *caki* 'self' and *caki-casin* 'self-self' behave differently semantically.

2.8. A Logophor

Reflexives are by nature non-referential. NPs without their reference have no meaning. There is a case where reflexives themselves carry references. One such case is illustrated in (34). Again, there are cases in which *caki* 'self' and *caki-casin* 'self-self' behave semantically differently. As pointed out by R&R (1993), the English reflexive *myself* functions as a logophor[7]:

(34) A picture of myself would be nice on that wall.

As shown in (34), *myself* lacks an explicit antecedent in the sentence, which suggests that it carries its own reference. Consequently, the sentence is judged to be grammatically correct. The same can be said for the Korean reflexive *caki* 'self.' Interestingly, *caki* 'self' also carries its own reference, as demonstrated in (35):

(35) Caki kathun naykwauysatul-un tumwulta.
(Physicians like you are rare.)

(36) *Caki-casin kathun naykwauysatul-un tumwulta.
(Physicians like you are rare.)

It is important to note that the Korean reflexive *caki* 'self' carries its own reference, whereas the Korean reflexive *caki-casin* 'self-self' does not. This difference leads to the ungrammaticality of (36). Such cases have been observed in the literature (Reuland 2000 and R&R 1993)[8]. R&R argue that SELF anaphors, in addition to serving as reflexivizers, can also function as logophors. Based on these observations, it is clear that the Korean reflexives *caki* 'self' and *caki-casin* 'self-self' exhibit distinct semantic behaviors.

3. Discussion

In this paper, we have argued that the Korean reflexives *caki* 'self' and *caki-casin* 'self-self' exhibit distinct semantic behaviors, as demonstrated through eight separate analyses. These differences can be accounted for by LF (Logical Form) movement of the relevant Quantifier Phrases (QPs), which ensures that the two reflexives receive different interpretations depending on the context. This LF movement allows for variations in the binding relationship and interpretation of these reflexives across different syntactic environments. Overall, the data reveal that *caki* 'self' and *caki-casin* 'self-self' differ in their semantic properties in systematic ways, offering new insight into the mechanisms of reflexive interpretation in Korean. This study contributes to a deeper understanding of reflexivity in Korean and enriches the broader theoretical discussions on how syntax, semantics, and discourse interact. A primary distinction between the two reflexives concerns their relationship to antecedents. *Caki* 'self' is interpreted through intended coreference, with its referent determined by the speaker's intention. It can co-refer to an individual the speaker has in mind, regardless of a strict grammatical link or local syntactic binding. This makes *caki* a context-sensitive, pragmatically governed form, with its reference potentially shifting in line with the discourse or the speaker's perspective. In contrast, *caki-casin* 'self-self' is interpreted anaphorically, automatically linking to its linguistic antecedent independent of the speaker's intention. The referent of *caki-casin* is syntactically bound, and its interpretation is determined by the structure of the sentence, not by discourse context or speaker intention. The reflexives also differ in terms of variable status. *Caki* 'self' functions

as a free variable, allowing its reference to shift with the discourse context. This flexible nature makes *caki* a more dynamic and context-dependent reflexive. In contrast, *caki-casin* 'self-self' is fixed in reference, always referring to its grammatical antecedent. It behaves as a syntactically bound anaphor, meaning its interpretation is rigidly determined by its antecedent and not influenced by extrinsic factors like discourse. Binding behavior further separates the two reflexives. *Caki* 'self' does not allow a bound-variable reading in local contexts but can yield such a reading in non-local ones, such as when it links to a quantifier phrase. This suggests that *caki* can function as a variable that is loosely bound in broader discourse contexts. *Caki-casin* 'self-self', however, consistently yields a bound-variable reading in both local and non-local contexts. This bound-variable interpretation is most evident in constructions with quantificational NPs or Wh-words, where the dependent term must be linked via a bound-variable interpretation. Another key difference lies in the semantic flexibility of the two reflexives. *Caki* 'self' can produce both covariant and invariant interpretations depending on the syntactic environment and the type of antecedent it is co-indexed with. For example, in some cases, it can allow covariation with a quantifier, while in other contexts, it may retain a fixed reference. In contrast, *caki-casin* 'self-self' is limited to covariant readings, reflecting a greater degree of semantic rigidity. This rigidity can be explained by its stronger syntactic constraints, which bind its reference to a specific antecedent, limiting its interpretive range. The "even" test confirms this contrast: while *caki-casin* 'self-self' behaves strictly as a canonical anaphor, *caki* 'self' displays a broader interpretive range, allowing for more flexible interpretations in various contexts. The "only" test also reveals that the type of quantifying antecedent shifts the truth conditions differently for each reflexive. When an antecedent is quantified by an "only" phrase, the truth conditions for sentences involving *caki* and *caki-casin* are distinct, further highlighting their different semantic behaviors. This difference in truth conditions underscores the contrast between a pragmatically governed reflexive like *caki* and a syntactically constrained one like *caki-casin*. Cognitively, *caki* 'self' can express direct thoughts and inner states of the subject, often functioning in a logophoric capacity, as seen in languages like English with forms such as "myself". This makes *caki* particularly well-suited for expressing internal perspective and thought attribution. In contrast, *caki-casin* 'self-self' tends to express indirect thoughts and is less likely to carry a logophoric interpretation. This difference in perspective-taking reflects the broader contrast between the two reflexives: while *caki* aligns more closely with the subject's inner voice, *caki-casin* is restricted to more conventional anaphoric uses. While these findings underscore clear semantic distinctions between *caki* and *caki-casin*, this study remains limited in scope, as the observed uses of *caki* and *caki-casin* are restricted to specific contexts. Future research could explore additional contexts to further clarify the boundaries of their usage and examine whether these reflexives exhibit different behaviors in other syntactic configurations or across other syntactic constructions. Additionally, a cross-linguistic comparison with reflexives in other languages may yield further insights into the universal and language-specific factors that govern reflexive interpretation. Nevertheless, this study provides a detailed and comprehensive account of the semantic behavior of Korean reflexives, offering valuable insights into the intricate relationship between syntax, semantics, and discourse in the interpretation of anaphora. For more binding phenomena, refer to Brown (2006), Büring (2005), Chomsky (1981, 1995), Cohen & Zribi-Hertz (2014), Frank & Petty (2020), Gelderen (2011), Grimshaw (1982, 1990), Grimshaw & Rosen (1990), Hestvik (1991, 1995), Lidz (2001), König & Gast (2008), Pollard & Sag (1992), Maling (1984), Roncador (1992), and Van Gelderen (2000)[9–26].

4. Conclusion

To summarize, we have maintained that *caki* 'self' and *caki-casin* 'self-self' exhibit distinct semantic behaviors in eight separate analyses, and that this linguistic phenomenon can be captured by the LF (Logical Form) movement of the relevant Quantifier Phrases (QPs). It is important to note that the Korean reflexive *caki* 'self' is interpreted in relation to its antecedent through intended coreference, meaning its referent is determined by the speaker's intention. In contrast, the reflexive *caki-casin* 'self-self' is always interpreted anaphorically, where its referent is strictly bound to its linguistic antecedent, independent of the speaker's intention. The term intended coreference, as applied to *caki*, highlights the role of speaker intention in establishing co-reference between the reflexive and its antecedent, a characteristic

not found with *caki-casin*, which consistently relies on syntactic binding. It is also significant to note that *caki* 'self' behaves as a free variable, which allows its reference to shift according to the context, while *caki-casin* 'self-self' remains fixed in its reference, always linking back to its antecedent. Furthermore, *caki* does not permit a bound-variable reading in local contexts but can induce one in non-local contexts, where its reference is determined by a quantificational phrase. On the other hand, *caki-casin* consistently induces a bound-variable reading in both local and non-local contexts, showing greater syntactic rigidity. Interestingly, when Quantifier Phrases (QPs) and Wh-words are associated with a dependent term, the only way for the dependent term to be linked is via bound-variable interpretation, further supporting this structural difference between the two reflexives. Moreover, *caki* 'self' is capable of inducing both covariant and invariant interpretations depending on the syntactic environment, while *caki-casin* 'self-self' allows only covariant readings, indicating its more rigid semantic nature. The "even" test also serves as a diagnostic tool, revealing further semantic differences between the two reflexives. This analysis helps us understand that *caki-casin* 'self-self' behaves as a true anaphor, whereas *caki* 'self' allows for broader interpretive flexibility. Additionally, the "only" test clarifies the distinction between the two reflexives by showing that when the antecedent is quantified by an "only" NP, the truth conditions of the sentence vary, depending on which reflexive is used. Another intriguing difference is that *caki* 'self' is typically associated with direct thoughts, reflecting its capacity to express the speaker's internal perspective, while *caki-casin* 'self-self' tends to give rise to indirect thoughts, often linked to other characters' perspectives. Finally, it is important to observe that *caki* 'self' can carry its own reference, behaving similarly to logophoric pronouns in other languages (e.g., English *myself*), whereas *caki-casin* 'self-self' does not carry its own reference, further contributing to the semantic distinction between the two reflexives. In conclusion, this analysis highlights the unique semantic properties of *caki* 'self' and *caki-casin* 'self-self' and provides valuable insight into the linguistic mechanisms governing reflexivity in Korean. While these reflexives share certain surface similarities, their different syntactic and semantic behaviors reveal distinct underlying structures, contributing to a broader understanding of reflexive interpretation and the interaction between syntax, semantics, and discourse in Korean.

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Data Availability Statement

To substantiate the claim that the Korean reflexive *caki* 'self' cannot be treated as equivalent to the more complex reflexive form *caki-casin* 'self-self', I constructed a series of Korean sentences featuring both reflexives in a range of syntactic environments. There is no new source for the data.

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Conflicts of Interest

The author declares no conflict of interest.

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